COUNTY OF SAN MATEO
EMERGENCY MANAGEMENT

Local Hazard Mitigation Plan

San Mateo County, California

San Mateo County Annex

2026

DRAFT

smcgov.org/dem/multijurisdictional-local-hazard-mitigation-plan

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This Annex details the hazard mitigation elements specific to San Mateo County, a participating jurisdiction of the 2026 San Mateo County Local Hazard Mitigation Plan (LHMP or the Plan) update. This Annex is not intended to be a standalone document but supplements the information contained in **Volume 1 (Countywide Planning Elements)**. Therefore, all sections of **Volume 1**, including the planning process, hazard identification and risk assessment, mitigation strategy (includes mitigation goals and objectives), and plan maintenance, apply to and were met by San Mateo County. This Annex provides additional information specific to San Mateo County, with a focus on providing further details on the hazard risk assessment and mitigation strategy (i.e., mitigation actions) for this community.

1. HAZARD MITIGATION LOCAL PLANNING TEAM

The following individuals have been identified as the San Mateo County Local Planning Team for the 2026 LHMP. These individuals participated in all aspects of the planning process and developed a risk and vulnerability assessment, capability assessment, and mitigation strategy (including mitigation actions) specific to the jurisdiction.

Name	Title	Department
Dr. Shruti Dhapodkar	Director	Department of Emergency Management
Ryan Reynolds	Assistant Director	Department of Emergency Management
David Passey	Program Services Manager II	Department of Emergency Management
Alina Haddad	Emergency Management Coordinator	Department of Emergency Management
Austin Covey	Emergency Management Coordinator (Technology/GIS)	Department of Emergency Management
Christopher Ragland	Director/Chief Building Official	Planning and Building Department
Ann Stillman	Director	Department of Public Works
Krzysztof Lisaj	Assistant Director	Department of Public Works
Khoa Vo	Deputy Director	Public Works
Bharat Singh	Planning Services Manager	Planning and Building
Katie Faulkner	Planner III	Planning and Building
Jasneet Sharma	Director	Sustainability Department
Zoe Van Duivenbode	Senior Sustainability Specialist	Sustainability Department

2. JURISDICTION PROFILE

San Mateo County, situated along the Central California coastline, encompasses the major portion of the San Francisco Peninsula. The County covers approximately 554 square miles, with land accounting for approximately 448 square miles and inland waters, and San Francisco Bay tidal areas accounting for the remainder. The County is roughly 42 miles in length and varies from 7 to 20 miles in width. Approximately 55 miles of the County's western border is Pacific shoreline, and roughly 34 miles of the eastern border

is Bay shoreline. The County is bounded on the north by the City and County of San Francisco and on the south and southeast by Santa Cruz and Santa Clara counties.

The County's unincorporated areas include urban pockets east of Interstate 280 and most of the rural area south and west of Interstate 280. The unincorporated County consists of approximately 309 square miles (68% of the total County area), and there is a wide variation in the size, location, and economic and social characteristics of the various unincorporated areas.

The following is a list of the unincorporated communities in San Mateo County.

- Brisbane Quarry
- Broadmoor
- Burlingame Hills
- Butano Falls Tract
- California Golf Club
- Country Club Park
- Dearborn Park
- Devonshire
- El Granada
- Emerald Lake Hills
- Harbor/Industrial
- Kensington Square
- La Honda
- Ladera
- Loma Mar
- Los Trancos Woods
- Menlo Oaks
- Miramar
- Mobile Home Parks
- Montara
- Moss Beach
- North Fair Oaks
- North San Gregorio
- North Skyline
- Olympic Country Club
- Palomar Park
- Peninsula Golf and Country Club
- Pescadero East
- Pescadero West
- Pillar Point Harbor
- Princeton
- Rural Midcoast
- San Bruno Mountain Park
- San Francisco International Airport
- San Francisco Jail
- San Francisco Watershed Lands
- San Gregorio
- San Mateo Highlands
- Sequoia Tract
- South Skyline
- Stanford Lands
- Unincorporated Colma
- Weekend Acres
- West Menlo Park

Urban Bayside Communities

North Fair Oaks: The largest unincorporated community in the County is located adjacent to Redwood City. This area is fully urbanized, with moderate to high population density. North Fair Oaks has over 13,000 residents and more than 4,000 housing units.[1] Additionally, the North Fair Oaks community has a relatively high concentration of low- and moderate-income households, a wide variety of housing types, and a range of land uses, including significant commercial and industrial uses.

Unincorporated Colma: Unincorporated Colma is a small, urbanized pocket in the northern part of the County, adjoining the incorporated Town of Colma and Daly City. Colma has experienced significant,

[1] United States Census Bureau. (2025). DP05: ACS Demographics and Housing Estimates (2024: ACS 5-Year Estimates Data Profiles). Retrieved from https://data.census.gov/table/ACSDP5Y2024.DP05?g=160XX00US0651840.

relatively high-density residential development over the past decade, including several mixed-income multifamily apartment and condominium projects, a senior housing project, and other developments, all located around the redeveloped Colma Bay Area Rapid Transit (BART) station.

Emerald Lake Hills: Emerald Lake Hills is a relatively low-density suburban area of the County, characterized primarily by single-family homes. While Emerald Lake Hills has extensive development, its predominantly residential character and lack of commercial and other uses distinguish it from the more highly urbanized areas of the unincorporated County, such as North Fair Oaks.

Other: Other unincorporated urban bayside communities include Burlingame Hills, Devonshire, Broadmoor, San Mateo Highlands, and Ladera. These communities are primarily small pockets of unincorporated jurisdictions, largely characterized by single-family residential development, although Devonshire and Broadmoor both have areas of higher development density and mixed uses.

Urban Coastal Communities

There are several unincorporated coastal communities north of the City of Half Moon Bay, within the urban area of the County's urban/rural boundary. These communities include Montara, Moss Beach, El Granada, Princeton, and Miramar. These communities are an exception to the predominantly rural character of the coastal unincorporated areas and face housing and development challenges, including infrastructure constraints and other coastal-specific issues.

Rural Areas and Communities

The vast majority of the Unincorporated County consists of the Rural Midcoast, Rural South Coast, and Rural Skyline areas. In contrast to the urbanized communities, the rural areas tend to be sparsely developed, with very low housing densities on relatively large lots. These areas include La Honda, Pescadero, San Gregorio, Kings Mountain, and the remaining large, primarily undeveloped areas of the Midcoast and South Coast. The rural South Coast has relatively few, widely dispersed households. These areas are primarily used for agricultural purposes or as open space. The rural portion of the Midcoast area is characterized by large, minimally developed areas with large lots and low housing density, though there are a few small, higher-density areas.

Dry, mild summers and moist, cool winters characterize San Mateo County's overall climate. Temperatures are strongly influenced by large saltwater bodies on the east and west, and the Santa Cruz Mountains. This combination of features has resulted in a variety of microclimates throughout the County, with hill and ridgetop areas, valley floors, and coastal areas each experiencing different temperatures and precipitation patterns.

The Coastside area experiences a marine climate, characterized by cool, foggy summers and relatively wet winters. Fog, the result of condensation over the ocean near the coast, provides moisture and cool air for the coastal terraces. These elements are largely responsible for the Coastside region's emergence as an agricultural area, with a range of specialty crops. Bayside climates are generally warm and sunny, particularly in the summer months, when hot air from the valleys moving east warms the prevailing cool ocean breezes.

The majority of annual precipitation in San Mateo County occurs between December and March. During this wet season, precipitation averages 3 to 4.5 inches per month. One of the key influences upon

precipitation is elevation. The Bayside generally receives less precipitation than the same elevation on the Coastside, because the Santa Cruz Mountain Range acts as a rain shield, causing moisture-laden air moving in from the Coastside to condense and deposit much of its moisture in the form of rain or fog as it reaches the higher, colder mountains.

2.1. Brief History

San Mateo County was formed in 1856, after the establishment of San Francisco County. Later, in 1868, San Mateo County annexed part of northern Santa Cruz County. Redwood City, the County seat, was incorporated in 1867. The next to incorporate was the City of San Mateo in 1894. The outbreak of World War II fueled a new wave of growth along the Peninsula. After the war, thousands of new homes were built as the County's population swelled from 115,000 in 1940 to 235,000 in 1950. The County's population grew to 556,000 by 1970, a gain of 112,000 during the 1960s. The County continued to grow in the 1980s and 1990s, driven by the growth of software, internet, gaming, and biotechnology companies. Population growth in the County slowed in the early 2000s and then picked up again in the 2010s, reaching approximately 743,568 by 2025.

The vast majority of unincorporated areas within the County are located in rural areas. These areas developed slowly due to limited accessibility and difficult terrain. Furthermore, these areas were never incorporated because most rural lands are far from city boundaries, making the provision of urban services both physically difficult and economically infeasible. For a few urban unincorporated areas, cities have sometimes chosen not to annex them because the type and standard of development in those areas may have been below city standards or otherwise incompatible. Because of the costs of bringing unincorporated urban areas up to City requirements, many cities have been hesitant to add these lands. Some property owners also prefer to remain in unincorporated areas due to lower property taxes.

*For further information on San Mateo County's history, refer to Chapter 3 (Community Profile) in **Volume 1** of this Plan.*

2.2. Governing Body Format

San Mateo County is governed by a five (5) member Board of Supervisors. Each member represents a geographic district covering both incorporated and unincorporated areas in the County. Board members represent 1 of 5 districts of roughly equal population within the County and are elected only by voters in their own district. Most unincorporated areas fall under District 3, which contains the majority of the western and southern lands in the County.

The San Mateo County Board of Supervisors assumes responsibility for adopting this Plan, and the County Department of Emergency Management will oversee its implementation.

2.3. Population

In 2024, San Mateo County had a population of 742,893, a 2.8% decrease from the estimated 2020 population of 764,442. **Table 1** summarizes population distribution between 2010 and 2024, and the

percentage of the 2024 population that is under five (5) years old, over 65 years old, and living below the poverty level.[2]

Table 1. Population Trends

Population				Underserved Population		
2010	***2020***	***2024***	***Population Change*** *(2020 – 2024)*	***Youth*** *(Under 5 years old)*	***Elderly*** *(Over 65 years old)*	***Below Poverty Level***
718,451	764,442	742,893	-2.8%	5.0%	18.8%	7.2%

3. CHANGES IN DEVELOPMENT

California Law requires counties and cities to prepare and adopt a General Plan, a comprehensive long-range plan to guide community development. The General Plan must contain seven (7) state-mandated elements – land use, circulation, housing, conservation, open space, noise, and safety – and may contain additional elements as a jurisdiction sees fit. Counties and cities that have identified disadvantaged communities must also address environmental justice in their general plans, including air quality. Additionally, the General Plan must comprise an integrated and internally consistent set of goals, policies, and implementation measures. San Mateo County adopted its General Plan under this law and has updated various elements several times over the years, most recently the Housing Element in 2025. At the time of this Hazard Mitigation Plan update, the Safety Element was being updated, and the Environmental Justice Element was being developed.

According to the County's General Plan (Housing Element), the data indicate that while employment has not increased significantly in the unincorporated County over the past decade, increases in population, jobs, and incomes throughout San Mateo County and the region as a whole, has continued to outpace housing production. These trends have exacerbated housing shortages and increased affordability challenges across all areas, including the Unincorporated County. Both ownership and rental housing continue to be unaffordable for all but the highest-income households, and housing challenges are particularly significant for lower-income groups and special needs populations. These trends highlighted the need for increased overall housing production, more dedicated housing for lower-income households, greater rental housing production, additional farm labor housing, and continued housing for special needs groups.

In recent years, housing production in the unincorporated County has increased steadily. In particular, accessory dwelling unit (ADU) production has increased significantly, driven by changes to ADU regulations at the State and local levels. The number of multi-family projects has also increased, driven largely by the adoption of new, higher-density mixed-use residential districts in the North Fair Oaks community.

Table 2 summarizes development trends during the performance period since the previous LHMP was developed (i.e., past five (5) years), as well as expected future development trends (i.e., the next five (5) years).

[2] United States Census Bureau. (2025). Quick Facts: San Mateo County, California. Retrieved from https://www.census.gov/quickfacts/fact/table/sanmateocountycalifornia/.

Table 2. Recent and Expected Development Trends

Criteria	Description
Has your jurisdiction annexed any land since the development of the previous Local Hazard Mitigation Plan? *If yes, give the estimated area annexed and the estimated number of parcels or structures.*	No
Is your jurisdiction expected to annex any areas during the performance period of this Plan?	No
Has your jurisdiction had any significant changes in development over the past five (5) years that have occurred in hazard-prone areas? *If yes, briefly describe.*	North Fair Oaks has had the most recent major development changes; an example is Middlefield Junction (2700 Middlefield, Redwood City, CA), with 179 new units. North Fair Oaks is vulnerable to hazards including dam failure, liquefaction, future sea level rise, emergent groundwater, and extreme heat. Another recent development project currently under construction in Princeton, set to open in June 2026, is the Big Wave project. This project includes 38 apartments and space for continuing education. This location could be vulnerable to emergent groundwater in the future and is within the tsunami inundation area for evacuation planning. Other unincorporated areas have experienced slow and steady growth. Many new units across the County are Accessory Dwelling Units. In some parts of the County, such as West Menlo Park, there are numerous replacement units where new homes replace demolished older homes.

Criteria	Description
Are there any areas targeted for development or major redevelopment in the next five (5) years that will occur in hazard-prone areas? *If yes, briefly describe.*	North Fair Oaks has been upzoned in recent years and has several multifamily projects in the construction pipeline. The Cypress Point project in Moss Beach recently received a building permit to build 71 new housing units. The Cypress Point project has some earthquake risk, like most of San Mateo County. There is currently a proposal to move the Pescadero Fire Station (Station 59) to the Pescadero High School property. The existing Station 59 is located within a floodplain and is annually threatened by interior flooding, resulting in mold and plumbing backups at the facility. Seasonal flooding of the adjacent Butano Creek also prevents fire personnel from gaining direct access to the Pescadero Community. The new site at the High School is outside the FEMA Special Flood Hazard Area (SFHA) but within an area of high liquefaction susceptibility. The Midcoast (Moss Beach, Montara, El Granada, Miramar) and San Mateo Highlands have several vacant single-family residential lots. Parts of the Midcoast are at risk from coastal/bluff erosion, sea level rise, emergent groundwater, tsunamis, and wildfires. The current Housing Element is proposing rezoning in Unincorporated Colma, the Harbor Industrial area, El Granada, and Broadmoor. A portion of Unincorporated Colma is moderately susceptible to liquefaction and flooding. The Harbor Industrial area is vulnerable to sea level rise, emergent groundwater, flooding, extreme heat, and liquefaction.
Provide the number of permits for each hazard area or provide a qualitative description of where development has occurred.	*Refer to the previous sections of this table.*

3.1. Changes in Priority

A community's mitigation priorities may change over time for a number of reasons. Addressing these changes allows a community to redirect actions that reflect current conditions, including financial and political realities, as well as changes in conditions or priorities following disaster events. Changes in the priority of a hazard mitigation plan are often dynamic and reflect evolving risk understanding, resource availability, and community needs. This helps ensure that the Plan remains relevant and effective in reducing the community's vulnerability to the hazards identified in the Plan. San Mateo County has identified the following changes in priorities for the 2026 LHMP:

- All mitigation actions from the previous Plan iteration were updated, and a more concerted effort to achieve equitable outcomes for all communities, including underserved communities and socially vulnerable populations, has been implemented.
- San Mateo County is creating an Environmental Justice Element for the County's General Plan. State law requires counties and cities with disadvantaged communities that have recently revised

two (2) or more general plan elements to create an environmental justice element. This project is part of the Environmental Justice Elements Planning Initiative, which is a collaborative effort between San Mateo County and the cities of Burlingame and East Palo Alto.

- The County's Safety Element for the General Plan is being updated to include updated information and policies related to flooding, wildfires, evacuations, climate adaptation, and resilience, evacuation planning and wildfire preparedness that reflects changing severe weather patterns and changing State laws.

4. CAPABILITY ASSESSMENT

Federal regulations require hazard mitigation plans to identify goals for reducing long-term vulnerabilities to the identified hazards in the planning area (Section 201.6(c)(3)(i)). A critical step in developing specific hazard mitigation actions and projects is assessing existing authorities, policies, programs, and resources and capabilities, and using or modifying local tools to reduce losses and vulnerability from profiled hazards.

A capability assessment was conducted for San Mateo County's authorities, policies, programs, and resources. Goals and mitigation actions were developed using input from this assessment. Information regarding the County's implementation of and continued participation in the National Flood Insurance Program (NFIP) can be found in Section 5 of this Annex.

The Local Planning Team assessed the County's capabilities that can contribute to the reduction of long-term vulnerabilities to hazards. The capabilities include the following categories:

- Planning and Regulatory Capabilities
- Administrative and Technical Capabilities
- Fiscal Capabilities
- Education and Outreach Capabilities

Additionally, ways to expand and improve these existing policies and programs to integrate hazard mitigation into the County's day-to-day activities were considered.

4.1. Planning and Regulatory Capabilities

Table 3 includes local ordinances, policies, and laws to manage growth and development (e.g., land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes, and zoning ordinances).

Table 3. Planning and Regulatory Capabilities

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Planning Capacity				
Comprehensive Plan / General Plan	Yes	State, Local	Planning and Building Department	The General Plan, first adopted in November 1986, has been periodically updated
Capital Improvement Plan	Yes	Local	County Executive's Office	Updated annually in September
Floodplain Management / Basin Plan	No	n/a	n/a	n/a
Stormwater Management Plan	Yes	State, Local	Planning and Building Department, and Department of Public Works	Stormwater Resource Plan (February 2017) Green Infrastructure Plan (September 2019) Stormwater Ordinance adopted 11/04/2025 Drainage Manual (March 2023)
Open Space Plan	Yes	State, Local	Planning and Building Department, Parks Department	Open Space Element of the General Plan
Stream Corridor Management Plan	No	n/a	n/a	n/a
Watershed Management or Protection Plan	Yes	Local	San Mateo County Flood and Sea Level Rise Resiliency District, San Mateo Resource Conservation District	San Mateo County Stormwater Resource Plan Belmont Creek Watershed Management Plan Colma Creek Watershed Plan San Gregorio Creek Watershed Management Plan
Economic Development Plan	Yes	Local	San Mateo County Economic Development Association	Updated annually
Comprehensive Emergency Management Plan	No	n/a	n/a	n/a
Emergency Operations Plan	Yes	State, Local	Department of Emergency Management	Undergoing its 2026 update
Evacuation Plan	No	n/a	n/a	n/a
Transportation Plan	Yes	Local	Transit District, Public Works Department, Planning & Building	San Mateo County Transit District's 10-Year Strategic Plan (November 2024) Active Transportation Plan (2021) Connect the Coastside (2022)
Strategic Recovery Planning Report	No	n/a	n/a	n/a

Capability Category	Yes/No	Authority *(local, county, state, federal)*	Responsible Department/ Agency	Code Citation and Comments *(e.g., Code Chapter, name of plan, explanation of authority, etc.)*
Climate Adaptation Plan	Yes	Local	Department of Sustainability, Planning and Building Department	Community Climate Action Plan (2022) Climate Element of the General Plan (2022)
Resilience Plan	No	n/a	n/a	Safety Element Update (pending adoption in late 2026)
Community Wildfire Protection Plan	Yes	State	San Mateo Consolidated Fire Department	San Mateo-Santa Cruz Community Wildfire Protection Plan (October 2022)
Shoreline Management Plan	Yes	Local	Planning and Building Department	Local Coastal Program Policies (September 2021)
Regulatory Capability				
Building Code	Yes	State, Local	Planning and Building Department	Title 10 of the County Code of Ordinances
Zoning Code	Yes	Local	Planning and Building Department	Title 8 of the County Code of Ordinances
Subdivision Code	Yes	Local	Planning and Building Department	Title 9 of the County Code of Ordinances
Flood Damage Prevention Ordinance	Yes	Local	Planning and Building Department	Title 8, Chapter 8.300 of the County Code of Ordinances
Cumulative Substantial Damage Ordinance	No	n/a	n/a	n/a
Freeboard	No	n/a	n/a	n/a
Growth Management Ordinance	Yes	State, Local	Planning and Building Department	Titles 8, 9, and 10 of the County Code of Ordinances
Site Plan Review	Yes	Local	Planning and Building Department	Title 8 of the County Code of Ordinances
Stormwater Management Ordinance	Yes	Local	Department of Public Works, Planning and Building Department	Stormwater Pollution Prevention Ordinance No. 4913
Municipal Separate Storm Sewer System (MS4)	No	n/a	n/a	n/a
Natural Hazard Ordinance	No	n/a	n/a	n/a
Post-Disaster Recovery Ordinance	No	n/a	n/a	n/a
Real Estate Disclosure Requirement	Yes	State	California Department of Real Estate	California Civil Code Section 1102

4.2. Administrative and Technical Capabilities

The administrative and technical capabilities listed in **Table 4** include community (i.e., public and private) staff, their skills, and tools that can be used for mitigation planning and implementation. These capabilities include engineers, planners, emergency managers, Geographic Information System (GIS) analysts, building inspectors, grant writers, and floodplain managers. Small communities may rely on other government entities, such as counties or special districts, for resources.

Table 4. Administration and Technical Capabilities

Capability	Yes/No	Comments *(e.g., position, department, agency, explanation)*
Administrative Capabilities		
Planning Board	Yes	Planning Commission is led by the Planning and Building Department
Mitigation Planning Committee	Yes	The Department of Emergency Management is responsible for coordinating the LHMP
Environmental Board/Commission	Yes	The Department of Sustainability is the lead on environmental initiatives
Open Space Board/Committee	Yes	Parks and Recreation Commission The Midpeninsula Regional Open Space District manages much of the open space in the County
Economic Development Commission/Committee	Yes	San Mateo County Economic Development Association
Maintenance programs to reduce risk	Yes	Parks Department (Wildfire) Department of Public Works (Flood) OneShoreline (Flood, Sea Level Rise) San Mateo Resource and Conservation District
Mutual Aid Agreements	Yes	
Technical/Staffing Capabilities		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Planning and Building Department
Engineer(s) or professional(s) trained in building or infrastructure construction practices	Yes	Planning and Building Department Department of Public Works
Planners or engineers with an understanding of natural hazards	Yes	Planning and Building Department Department of Public Works OneShoreline
NFIP Floodplain Administrator	Yes	Planning and Building Department
Surveyor(s)	Yes	Department of Public Works Surveying Unit
Personnel skilled or trained in GIS applications	Yes	Technology Services Department Planning and Building Department Department of Emergency Management
A scientist familiar with natural hazards	Yes	Department of Public Works (Biologist) Consulting Firms
Warning systems/services	Yes	SMCAlert, managed by the Department of Emergency Management

Capability	Yes/No	Comments *(e.g., position, department, agency, explanation)*
Emergency manager	Yes	Department of Emergency Management
Grantwriter(s)	Yes	Multiple county departments
Staff with expertise or training in benefit cost analysis	Yes	County Executive's Office County Controller's Office
Professionals trained in conducting damage assessments	Yes	Department of Public Works

4.3. Fiscal Capabilities

Table 5 lists fiscal capabilities available to the County that may be used to implement mitigation activities to reduce risk and enhance resiliency. This capability includes available funding sources from local budgets, state and federal grants, potential cost-sharing arrangements with private entities, existing insurance policies, and the ability to generate additional revenue through mitigation-related fees and bonds.

Table 5. Financial Capabilities

Capability	Accessible or Eligible to Use
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Federal Hazard Mitigation Assistance Program *(i.e., Hazard Mitigation Grant Program (HMGP), HMGP Post Fire, Flood Mitigation Assistance (FMA) Program)*	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open space acquisition funding programs	Yes

4.4. Education and Outreach Capabilities

Table 6 lists the County's education and public outreach capabilities that can be used to inform residents about potential hazards, educate on mitigation strategies, and encourage proactive actions to reduce the community's impacts to disasters. These capabilities include fire safety programs, hazard awareness campaigns, public information, and communications offices.

Table 6. Education and Outreach Capabilities

Capability	Yes/No	Comments *(e.g., position, department, agency, explanation)*
Public Information Officer	Yes	Sheriff's Office County Executive's Office
Personnel skilled or trained in website development	Yes	Technology Services Department
Hazard mitigation information is available on the jurisdiction's website	Yes	Information is posted on the Department of Emergency Management website
Utilize social media for hazard mitigation education and outreach	Yes	**Facebook:** Facebook.com/CountyofSanMateo **Instagram:** Instagram.com/sanmateocounty **X:** X.com/sanmateoco **YouTube:** Youtube.com/@sanmateocounty
Citizen boards or commissions that address issues related to hazard mitigation	No	Community Councils
Other programs already in place that could be used to communicate hazard-related information	Yes	Department of Emergency Management
An established warning system for hazard events	Yes	SMC Alert, managed by the Department of Emergency Management

4.5. Community Classifications

The community classification relates to the community's ability to provide effective services to reduce its vulnerability to the identified hazards. These classifications can be viewed as indicators of the community's capabilities across all phases of emergency management (i.e., preparedness, response, recovery, and mitigation) and are used as underwriting parameters to determine the costs of various forms of insurance. **Table 7** summarizes the classifications of community programs available to San Mateo County.

Table 7. Community Classifications

Program	Yes/No	Classification *(if applicable)*	Date Classified *(if applicable)*
Community Rating System (CRS)	Yes	8	10/1/2022
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	2	7/9/2015
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4 – 10	n/a
NWS StormReady®	Yes	n/a	2022
NWS TsunamiReady®	Yes	n/a	2022
Firewise USA®	Yes	n/a	n/a

4.6. Needs to Expand/Improve Capabilities

San Mateo County identified existing authorities, policies, programs, funding, and/or resources that need to be expanded and/or improved to support the implementation of the hazard mitigation initiatives identified in this Plan (e.g., mitigation actions).

- Expand educational outreach to ensure developers and the public value rigorous code enforcement and zoning, and establish permanent, dedicated funding mechanisms for ongoing mitigation initiatives.
- County codes and ordinances (e.g., building, zoning, land use, fire) should be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
- Increase the County's capability to identify and apply for hazard mitigation grants and fund the local match for hazard mitigation grants. The County needs to expand its grant-writing capabilities by potentially hiring more grant writers. This includes mitigation projects related to San Mateo County's infrastructure.
- Strengthening collaboration among County Departments, Cities, and Special Districts to address specific natural hazards.

5. NATIONAL FLOOD INSURANCE PROGRAM

San Mateo County is a member of the National Flood Insurance Program (NFIP) and has chosen to participate in the NFIP Community Rating System (CRS) Program. The County is in good standing with the NFIP through adoption and enforcement of floodplain management requirements (e.g., regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. The County's NFIP participation information is listed in **Table 8**.

Table 8. NFIP Participation Information

Community ID	NFIP Participation Date	Current Effective FIRM Date	CRS Entry Date	CRS Current Effective Date	CRS Class
060311	11/1/1974	4/5/2019	10/2/2010	10/1/2022	8

5.1. NFIP Floodplain Administrator

All NFIP participating jurisdictions have a designated Floodplain Administrator who is charged with enforcing floodplain regulations, routinely monitoring the floodplains, and providing community assistance, such as encouraging owners to maintain flood insurance. The San Mateo County Floodplain Administrator information is listed in **Table 9**.

Table 9. Floodplain Administrator

Name	Title	Department	Phone Number
Christopher Ragland	Deputy Director/Chief Building Official	Planning and Building Department	(628) 258-3194

5.2. Repetitive Loss and Severe Repetitive Loss Property

FEMA defines a Repetitive Loss property as an NFIP-insured property meeting at least one (1) of the following paid loss criteria since 1978, regardless of any changes in ownership:

- Four or more separate claims payments greater than $5,000 each (including building and contents payment).
- Two or more separate flood insurance claims payments (building payments only), where the total of the payments is greater than the property's current value.

Additionally, to receive a designation, at least two of the claim payments must occur within 10 years of one another.[3]

A Severe Repetitive Loss property is defined by FEMA as any NFIP-insured single-family or multi-family residential building meeting at least one of the following paid loss criteria since 1978 or from a building constructed after 1978, regardless of any changes in ownership:[4]

- That has incurred flood-related damage for which four or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000.
- For which at least two separate claims payments (building payments only) have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the building.

Table 10 summarizes FEMA Repetitive Loss and Severe Repetitive Loss properties within San Mateo County (Unincorporated County only).

Table 10. Repetitive Loss and Severe Repetitive Loss Properties

Repetitive Loss Properties		Severe Repetitive Loss Properties	
Total	***Occupancy***	***Total***	***Occupancy***
5	**3** Single Family **1** Non-Residential Business **1** Single Family Residential Building	2	**1** Single Family Residential Building **1** Non-Residential Business
Occupancy Type: *Single Family = Single family residence • Two (2)-Four (4) Unit Residential Building = Two (2)-four (4) unit residential building • More Than Four (4) Units Residential Building = Residential building with more than four (4) units • Non-Residential Building = Non-residential building • Non-Residential Business = Non-residential business • Single Family Residential Building = Single-family residential building with the exception of a mobile home or a single residential unit within a multi-unit building • Residential (2, 3, or 4 units) Non-Condo Building = Residential non-condo building with two (2), three (3), or four (4) units seeking insurance on all units • Residential (5 or more units) Non-Condo Building = Residential non-condo building with 5 or more units seeking insurance on all units • Residential Mobile/Manufactured Home = Residential mobile/manufactured home • Residential Condo Association = Residential condo association seeking coverage on a building with one (1) or more units • Single Residential Unit = Single residential unit within a multi-unit building • Non-Residential Mobile/manufactured Home = Non-residential mobile/manufactured home • Non-Residential Building = Non-residential building • Non-Residential Unit = Non-residential unit within a multi-unit building*			

[3] Federal Emergency Management Agency, National Flood Insurance Program. (2023). A Policyholder's Guide to Severe Repetitive Loss. Retrieved from https://agents.floodsmart.gov/sites/default/files/fema_nfip-policyholders-guide-severe-repetitive-loss_brochure_07-2023.pdf.

[4] Federal Emergency Management Agency, National Flood Insurance Program. (2021). National Flood Insurance Program: Flood Insurance Manual. Retrieved from https://www.fema.gov/sites/default/files/documents/fema_nfip-all-flood-insurance-manual-apr-2021.pdf.

Table 11 summarizes NFIP active policies and coverage in force data for San Mateo County (Unincorporated County only).

Table 11. NFIP Policies

NFIP Policies	Insurance in Force	Total Claims Paid	Sum of Claims Paid
55	$19,784,000	26	$1,306,320

5.3. Participation Activities

San Mateo County's NFIP participation over the last five (5) years includes the following:

- Community staff provide the following services - permit reviews, GIS, inspections, and engineering capability.
- The community's Floodplain Administrator is a Certified Floodplain Manager (CFM).
- The community teaches property owners or other stakeholders about the importance of flood insurance through public outreach events, workshops, and/or seminars.
- The community enforces local floodplain regulations and monitors compliance.
- The community's floodplain development regulations meet or exceed Federal Emergency Management Agency (FEMA) or State minimum requirements.
- The community participates in the Community Rating System (CRS) Program.

5.3.1. Substantial Damage

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred. *(Title 8, Chapter 8.300 of the County Code of Ordinance)*

San Mateo County also defines “destroyed” in the NON CONFORMING USES, STRUCTURES, PARCELS, SITUATIONS, & EXCEPTIONS section of the zoning code. Section 8.388.020 “Destroyed. The state when reconstruction, repair or replacement of a building or structure, required because of an act of nature or other event unintended by the property owner, e.g., fire or earthquake, amounts to 50% or more of its value, as determined by the most current Building Valuation Data published by the International Conference of Building Officials.”

5.3.2. Substantial Improvement

Substantial improvement means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the replacement value of the structure as the structure existed either before the improvement or repair is started, or before the damage occurred. For the purposes of this definition, *substantial improvement* is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not the alteration affects the external dimensions of the structure.

Substantial improvement does not include either any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications, which are solely necessary to

assure safe living conditions, or any alteration of a structure listed on the National Register of Historic Places, the California Historical Landmarks Program, the Inventory of Historic Resources contained in the Resource Management Volume of the County General Plan, County Historic Landmarks or structures located in Historic Districts as established by the County Historic Preservation Ordinance, or any combination of the foregoing. *(Title 8, Chapter 8.300 of the County Code of Ordinance)*

5.3.3. Substantial Damage/Substantial Improvement Determination Process

Substantial Alteration means the renovation of any structure and/or when combined with any additions to the structure, affects a gross floor area which exceeds fifty percent (50%) of the existing floor area of the structure. For the purpose of this Section, when determining the affected gross floor area of an existing structure, whenever more than 50% of the wall or ceiling coverings (e.g., wallboard, plaster, etc.) have been removed from within a room or space bounded by three or more walls within the structure, the entire gross floor area of the room or space shall be counted towards the total affected gross floor area of the existing structure. This definition is also in the Fire Code for Sprinkler systems for existing homes.

6. HAZARD MITIGATION PLAN INTEGRATION

For a community to successfully reduce long-term risk, hazard mitigation must be integrated into day-to-day planning mechanisms and initiatives. Plan integration is the process by which communities critically assess the existing planning framework and align efforts to reduce long-term risks and build a more resilient community. It involves a two-way exchange of information and incorporation of ideas and concepts between hazard mitigation plans and other community plans. In particular, plan integration involves incorporating hazard mitigation principles and actions into other plans and integrating planning mechanisms into hazard mitigation plans. Plan integration involves community plans, policies, codes, and programs that guide development and define roles and responsibilities for implementing these capabilities. Additionally, plan integration is achieved through the involvement of key staff and community officials in collaborative hazard mitigation planning.

6.1. Existing Plan Integration

A hazard mitigation plan must explain how the jurisdiction incorporated the previous Plan update over the last five years to demonstrate progress in local mitigation efforts. During the performance period since the adoption of the previous LHMP, San Mateo County has made progress in integrating components of the hazard mitigation strategy (e.g., goals, objectives, and actions) into planning initiatives and mechanisms. **Table 12** highlights the planning mechanisms/initiatives in which the previous Plan was integrated and the information integrated.

Table 12. Existing Plan Integration

Planning Initiative	Current Integration Description
General Plan	The LHMP is formally integrated via the General Plan Policy 15.17 (Support Research Programs, Efforts for Disaster Prediction and Emergency Preparedness). This policy mandates that the Safety Element is updated periodically based on the technical risk assessment and mitigation strategies defined in the most current LHMP.

Planning Initiative	Current Integration Description
Capital Improvement Plan	The LHMP's hazard vulnerability and risk assessment is used to prioritize infrastructure investments. Projects considered a high priority in the LHMP are integrated into the CIP to ensure funding aligns with disaster risk reduction.
Local Coastal Program	The Local Coastal Program (LCP) includes a hazards component with policies regulating development in hazard areas within the Coastal Zone. These hazard areas include fault zones, land subject to dangers from liquefaction and other severe seismic impacts, unstable slopes, landslides, coastal cliff instability, flooding, tsunamis, fire, and steep slopes (over 30%).
Building and Zoning Standards	The County's Building Regulations (Title 10), updated in 2024, enforces strict construction standards to minimize property loss and ensure life safety. This includes flood-resistant construction requirements, a specialized Fire Code with local amendments, and regulations for excavating, grading, filling, and clearing to reduce geological hazards (e.g., landslides). Complementing the Building Regulations, the Zoning and Development Regulations (Title 10) contain a number of regulations related to hazards such as Geologic Hazard Districts; Flood Hazard Areas; development review criteria for the Resource Management District, Resource Management Coastal Zone District, and the Planned Agricultural District with regulations for flooding, tsunami, earthquakes, and landslides; and development design criteria for the Timberland Preserve Zone with regulations for flooding, earthquake, and landslides.
Subdivision Regulations	The County's Subdivision Regulations (Title 9), updated in 2024, require a comprehensive Development Footprint Analysis. This process evaluates site-specific constraints, including steep slopes, fault traces, and flood-prone areas, to help delineate non-development areas where construction is prohibited. Tentative maps are now required to account for sea level rise projections and potential landward erosion over the project's lifespan. This is meant to address evolving climate risks. Hazard mitigation is achieved by modifying the number, size, and/or configuration of proposed new lots, utility corridors, and access ways within the subdivision to avoid or minimize the intrusion of buildings, roadways, and utility infrastructure into the non-development areas.
Environmental Protection	The County Planning and Building Department ensures all projects comply with the California Environmental Quality Act (CEQA) by using the Initial Study Environmental Evaluation Checklist. This checklist includes hazard-related questions on topics of climate change, geology/soils, hazards and hazardous materials, hydrology/water quality, and wildfire. It enables hazard mitigation to be implemented at the earliest stages of development by identifying how a project will impact the aforementioned hazard-related categories.
Climate Action Plan	Hazard mitigation is integrated into the County's climate resilience framework through the Community Climate Action Plan (CCAP), updated in 2022. The CCAP is a strategic roadmap that outlines priority actions for greenhouse gas reduction and the implementation of adaptation strategies to reduce vulnerability to and the impacts of climate-related hazards (e.g., flooding, sea level rise, drought). Associated with the CCAP, the Climate Element of the General Plan sets a path to exceed State targets to reduce vulnerability and impacts from climate change.
Community Wildfire Protection Plan	The San Mateo-Santa Cruz Community Wildfire Protection Plan (CWPP), updated in October 2022, serves as the primary strategic framework for reducing wildfire vulnerability and impacts, and mitigating risks. Furthermore, the CWPP serves as a critical tool for securing state and federal funding to implement wildfire prevention programs. Also, the CWPP helps identify mitigation actions that are included in the LHMP.

Planning Initiative	Current Integration Description
Emergency Operations Plan	The Emergency Operations Plan (EOP) integrates mitigation considerations into its response actions to reduce the community's risk exposure. The LHMP remains an essential tool for updating the County EOP.
Water Efficient Landscape Ordinance	The County requires new and retrofitted landscape projects to comply with the Water Efficient Landscape Ordinance in the California Code of Regulations, which promotes efficient water use and water retention and helps mitigate drought and flooding hazards.
Stormwater Resource Plan	The San Mateo County Stormwater Resource Plan (SRP) is a comprehensive document that represents a significant transformation in watershed resource planning and stormwater runoff management. This SRP recognizes the need for watershed-based planning and the incorporation of green infrastructure in response to extended drought conditions and climate change. Furthermore, the SRP supports the identification of mitigation projects and initiatives in the LHMP to reduce vulnerability to and the impacts of drought conditions, and to enhance regional resilience by managing stormwater as a vital resource for water supply, flood control, and reducing urban runoff.
Coastside Resilience Infrastructure Strategic Plan (CRISP)	The Coastside Resilience Infrastructure Strategic Plan (CRISP) develops a comprehensive understanding of the existing coastside infrastructure associated projects, enabling County leaders and the SMC EM to collectively prioritize and advocate for critical infrastructure projects that are crucial for the resilience and sustainability of the coast. The CRISP project fosters collaborative efforts among public agencies, emphasizing the crucial importance of coastal resilience. This strategic approach not only mitigates risks, but also fosters innovation and collaboration, harnessing the collective strength of public agencies, stakeholders, and residents alike. As the journey continues, all are welcome to participate in this crucial effort. Together we're building a resilient Coastside for generations to come.

6.2. Potential Future Integration

A hazard mitigation plan must explain how the jurisdiction intends to incorporate this Plan update into planning mechanisms over the next five years. The capability assessment presented in Section 4 of this Annex identifies codes, plans, and programs that provide opportunities for integration. **Table 13** outlines planning mechanisms/initiatives that do not currently integrate the goals and recommendations of this Plan but provide opportunities to do so in the future.

Table 13. Potential Future Integration

Planning Initiative	Current Integration Description
General Plan	The County is updating the Safety Element of the General Plan to ensure it continues to align with LHMP's most recent hazard data and mitigation strategies. Additionally, future updates of the General Plan and its elements will continue to integrate the LHMP, as appropriate, to ensure alignment with hazard mitigation.
Emergency Operations Plan	The Emergency Operations Plan (EOP) integrates emergency mitigation considerations into its response actions to reduce the community's risk exposure. Additionally, the EOP will be updated to include the latest hazard information and relevant mitigation actions from this LHMP.

Planning Initiative	Current Integration Description
Building and Zoning Regulations	Mitigation actions and the risk assessment in this LHMP can also inform updates and revisions to the County's building and zoning regulations. Portions of this LHMP will be reviewed to consider any future improvements to the regulations, if appropriate
Local Coastal Program	Mitigation actions and the risk assessment in this LHMP can also inform updates and revisions to the Coastal Hazard Program. Portions of this LHMP will be reviewed to consider any future improvements to the Program, if appropriate
Habitat Conservation Plan	The San Bruno Mountain Habitat Conservation Plan provides a management and monitoring plan for protecting and managing the habitats of the mission blue, callippe, silverspot, San Bruno elfin, and bay checkerspot butterflies, as well as the overall native ecosystem of San Bruno Mountain. The Habitat Conservation Plan includes discussions of wildfires and prescribed burns, and future updates could further incorporate hazard mitigation.
Economic Development	The San Mateo County Economic Development Association (SMCEDA) promotes policies and initiatives that enhance and sustain the economic prosperity of the region and local communities. SMCEDA developed a report on "Trends Affecting Workforce Development in San Mateo County and the San Francisco Peninsula" in May 2014. Any future Economic Development Plans for San Mateo County should incorporate hazard mitigation.
Other County Departments Coordination	There are a number of efforts underway by various County departments, including the Department of Sustainability, the Department of Public Works, the Planning and Building Department, and the Department of Emergency Management. The actions listed in the LHMP should be incorporated into these efforts when appropriate and conducive to reducing hazards and risk.
Fire Safe Council	The San Mateo County Fire Safe Council supports countywide wildfire mitigation, preparedness, and resilience efforts through coordinated vegetation management, public education, defensible space programs, and regional partnership development. Working collaboratively with local fire agencies, CAL FIRE, public land managers, utilities, and community organizations, the Council implements projects that reduce hazardous fuels, improve evacuation readiness, and increase community awareness in wildfire-prone areas. Core activities include fuel reduction and shaded fuel break projects, community chipping and defensible space assistance programs, wildfire preparedness outreach, and support for Community Wildfire Protection Plan (CWPP) implementation. The Council also administers grant-funded initiatives that strengthen local capacity for wildfire prevention and emergency preparedness while promoting long-term resilience through home hardening, risk reduction planning, and interagency coordination.

The County's Local Planning Team will identify all relevant planning initiatives scheduled for update in the next year and during the progress tracking of the LHMP. Additionally, the Local Planning Team will identify opportunities to integrate key elements of the LHMP, specifically relevant strategies, into the planning initiatives. Mitigation actions were identified to promote plan integration in future revisions of this Plan.

7. SIGNIFICANT PAST EVENTS

A complete risk assessment, including past incidents, for each identified hazard of concern, can be found in **Volume 1** of this Plan. A summary of past events is provided under each hazard profile and includes a chronology of events that have affected San Mateo County.

8. HAZARD VULNERABILITY AND IMPACT ASSESSMENT

Exposure and vulnerability to certain hazards affect the entire County, and others are geographically defined. Although the entire County may be vulnerable to these hazards, their impacts may vary depending on existing community conditions (e.g., underserved populations or those with access and functional needs may be more susceptible under certain conditions). This section outlines the vulnerabilities and impacts associated with each hazard identified in the 2026 LHMP by the Local Planning Team for San Mateo County. A complete risk assessment for each identified hazard of concern is in **Volume 1** of this Plan.

Note: Severe weather and flood are profiled as the two (2) hazards. However, to conduct a more thorough risk assessment, the sub-hazards (i.e., heavy rainfall, heat wave/extreme heat, fog, severe thunderstorms, tornadoes, strong winds, riverine flooding, urban/flash flooding, and coastal flooding) were ranked individually. The hazard risk assessment methodology is found in Chapter 4 of **Volume 1** of this Plan.

Dam Failure

Dam failures are often triggered by heavy rainfall that overwhelms stormwater management infrastructure or causes erosion or landslides, especially when the infrastructure has structural deficiencies or insufficient capacity. Dam failures can range from minor to catastrophic and can harm human life and property downstream. In addition, ecosystems and habitats can be destroyed by fast-moving floodwaters, debris, and sedimentation from the inundation. There are 24 dams in San Mateo County, 12 of which could endanger lives and property if a failure occurred.

The Lower Crystal Springs Dam is the largest dam in San Mateo County and therefore has the largest potential inundation area, making it a higher priority for regulation and preventive maintenance by County, State, and federal officials. It is located directly on the San Andreas Fault and impounds water to form the Lower Crystal Springs Reservoir, which serves as a water supply for San Francisco and most municipalities in the County. According to California's Division of Safety of Dams, the Lower Crystal Springs Dam has a low probability of failure in the event of an earthquake. Despite this low probability, the County and the San Francisco Public Utilities Commission (SFPUC), which owns the dam, have taken action to enhance safety and quality of the dam through significant seismic upgrades, including doubling the width of the main spillway and raising the height of the parapet wall by nine (9) feet as part of the Lower Crystal Springs Dam Improvement Project.[5]

[5] San Francisco Public Utilities Commission. (2010). Lower Crystal Springs Dam Improvement Project. Retrieved from https://ceqanet.lci.ca.gov/2007012002/2.

Drought

Droughts in California do not typically cause direct loss of life or structural damage, but they can lead to critical environmental and economic harm, including crop loss, increased water costs, habitat degradation, and heightened wildfire risks. Increasing water demand, driven by population growth and greater use of irrigation for agriculture and landscaping, exacerbates these impacts, complicating water allocation and potentially leading to restrictions and quality issues.

During a drought, groundwater reserves deplete faster due to increased pumping and reduced replenishment from precipitation. This can lower groundwater levels and diminish pumping capacity, resulting in fewer households receiving water and greater challenges in meeting community water needs. Decreased groundwater levels negatively impact stream flows, particularly in the summer, reducing water availability for ecosystems and wildlife that depend on them. Prolonged drought conditions also increase wildfire susceptibility due to dried vegetation and pest vulnerability.

Many municipalities, water districts, and private utilities in San Mateo County rely on the SFPUC Hetch Hetchy Regional Water System for their water supplies. Many of the Coastside agricultural lands and the more rural and remote communities in the County, especially on the South Coast, rely on groundwater wells.

California regularly experiences droughts, but climate change will likely lead to more frequent and more severe droughts across the State. Overall, precipitation levels are expected to stay similar or increase slightly across San Mateo County. However, more years with extreme precipitation levels, both high and low, are likely a result of climate change. More intense droughts are expected to harden soil and cause aquifer levels to decrease due to reduced groundwater recharge. Additionally, when rainfall returns, more water will run off rather than infiltrate into soils, potentially causing downstream flooding. Higher temperatures will further increase evaporation, worsening drought conditions.

Since San Mateo County receives most of its water from outside the region, it is also vulnerable to drought conditions in the Sierra Nevada. In years with lower-than-average winter precipitation and warmer temperatures, the Sierra Nevada snowpack declines significantly, which in turn reduces the amount of fresh water available to communities throughout California, including those that receive water from the Hetch Hetchy Regional Water System. For example, the recent 2012–2016 drought led to the most severe moisture deficits in the last 1,200 years and a 1-in-500-year low in Sierra snowpack levels.[6] State projections show that in the second half of the 21st century, snowpack levels in the Hetch Hetchy watershed may, on average, be 60% lower than historical norms, with even lower snowpack levels during extreme years.

Earthquake

San Mateo County is considered a seismically active region because of the presence of the San Andreas Fault that bisects the County, the Hayward Fault across the Bay to the east, and the San Gregorio Fault to the west. The primary seismic hazard for the County is potential ground shaking from these three (3) large faults; smaller faults in the region can also cause earthquakes. It is estimated that 38.6% of San Mateo County's population resides in areas considered susceptible to ground shaking from earthquakes.

[6] Cal-Adapt. (2024). Extreme Heat Days and Warm Nights. Retrieved from https://cal-adapt.org/tools/extreme-heat.

In addition to shaking and surface rupture, seismic hazards can also include liquefaction, tsunamis, and landslides.

Soil liquefaction occurs when water-saturated sands, silts, or gravelly soils are shaken so violently that the individual grains lose contact with one another and float freely in the water, turning the ground into a liquid. Buildings and foundations lose load-bearing strength and may sink into what was previously solid ground. Unless properly secured, hazardous materials can be released, causing significant damage to the environment and people. Furthermore, sea level rise resulting from climate change can increase the risk of liquefaction by raising groundwater tables and increasing soil saturation.

Critical infrastructure throughout the County is susceptible to several known faults, including dams, roads, tunnels, bridges, water and wastewater treatment facilities, and health, school, and government facilities. Additionally, there are hundreds of soft-story residential structures.

Roads/Bridges: Many County-maintained roadways are built along steep slopes or coastal bluffs that are inherently unstable. Strong ground shaking could trigger slope failures that directly affect access to unincorporated communities such as La Honda, Loma Mar, Pescadero, Montara, and Moss Beach. In several of these areas, access depends on a single primary route. Entrada Way, for example, functions as the primary and widest evacuation and emergency access route for much of La Honda. Seismic damage to this corridor could isolate residents and delay emergency response. Earthquakes can result in widespread roadway failures, slip-outs, and embankment collapses, retaining wall failure, and culvert drainage structure damage.

Several bridges were built before modern seismic standards were established, and they are scattered throughout the unincorporated areas of San Mateo County. In particular, Wurr Road Bridge and Pilarcitos Creek Road Bridge are two (2) bridges that are highly vulnerable to significant seismic events. Overall, eight structures are classified as structurally deficient or functionally obsolete.

Landfills: Two landfills are highly vulnerable to earthquakes in San Mateo County.

- ***Half Moon Bay Landfill:*** The closed Half Moon Bay Landfill presents a unique seismic vulnerability due to its coastal location and proximity to environmentally sensitive receptors. The landfill is situated in a coastal bluff environment where an earthquake could trigger differential settlement of waste mass, lateral spreading, slope instability, or local failure, and damage to the landfill cap system. Furthermore, an earthquake could compromise the integrity of the final cover, gas monitoring infrastructure, and surface drainage systems. Failure of the cap or drainage features could allow increased infiltration, potentially mobilizing contaminants and creating pathways for leachate migration. Damage to the gas monitoring system could result in the release of landfill gas and localized air quality impacts.

  The landfill is located near developed coastal communities and sensitive marine environments; any earthquake-induced damage could lead to secondary environmental impacts on nearby residential areas, coastal waters, and ecological resources. Post-earthquake access challenges along coastal routes may also delay inspection, stabilization, or emergency response actions.

- ***Pescadero Landfill:*** The Pescadero Landfill presents a different but equally significant earthquake risk profile due to its location within a rural watershed and proximity to floodplain and agricultural lands. An earthquake could result in settlement or deformation of the waste prism, damage to the cap and stormwater control features, and disruption of erosion control systems. Given the

landfill's hydrologic context, earthquake damage could increase the risk of sediment transport, leachate migration, and surface water contamination pathways. Damage to drainage systems could reduce the site's ability to manage severe weather events following an earthquake, compounding risks during subsequent rainfall. Additionally, rural access constraints could delay response and recovery efforts, increasing the duration of potential environmental exposure. Impacts could extend beyond the landfill footprint, affecting local waterways, habitats, and downstream water quality.

Utilities: San Mateo County's utility systems are particularly vulnerable to seismic activity, especially the two (2) small community-serving potable water systems (CSA 7 in the La Honda area and CSA 11 in the Pescadero area), and 10 sewer districts that provide essential service to rural and coastal communities. These assets rely on mechanical and electrical components, including treatment plants, storage tanks, and pumping facilities, that are highly sensitive to seismic forces. Furthermore, much of the sewer and water distribution network consists of aging underground pipelines made of clay, ductile iron, and asbestos cement. These materials are susceptible to joint separation, cracking, and displacement during an earthquake, particularly in areas prone to liquefaction or differential settlement. Streetlight infrastructure presents additional risks, as older wooden poles and foundations may not meet current seismic design standards, posing public safety hazards if displaced or damaged.

A defining vulnerability of these systems is that damage to underground pipelines may not be immediately visible, delaying detection, extending service interruptions, and increasing emergency repair costs. When failure occurs, the consequences are severe, ranging from the loss of potable water supply to sanitary sewer overflows that cause environmental contamination and regulatory violations. Since these systems are small and lack the redundancy found in larger municipal networks, even localized damage can result in widespread service disruptions. Consequently, a major earthquake would likely lead to significant public health risks and a recovery timeline that is substantially longer than that of a more robust urban system.

Airports: There are two airports that are owned and operated by San Mateo County, which are vulnerable to earthquakes.

- ***Half Moon Bay Airport:*** The airport is situated adjacent to the Montara Mountain Fault Zone and the San Gregorio fault, facing significant seismic risk. The terminal building, constructed in the 1950s, has exceeded its useful lifespan, and portions of the airport sit within a liquefaction zone. Furthermore, the facility relies on an unsecured above-ground propane tank that is highly vulnerable to seismic activity and prone to failure during an earthquake.
- ***San Carlos Airport:*** A quaternary fault is located less than one mile to the east of the Airport. The entire airport is located in a liquefaction zone, including the existing terminal that was built in the 1960s as a temporary facility.

Note: Although the San Francisco International Airport is located within the County's boundary, the airport is owned and operated by the City and County of San Francisco.

Facilities: The County owns and maintains over four million square feet of facilities located throughout San Mateo County. These structures range in age, size, construction type, and occupancy type. Many of these structures were designed with seismic reinforcement; others have undergone seismic retrofit; and

some still require seismic review to determine if a retrofit is required. County-owned facilities that may benefit most from seismic review and may require retrofitting are:

- Hall of Justice and Records (400 County Center, Redwood City, CA 94063)
- County Office Building 1 (455 County Center, Redwood City, CA 94063)
- East Palo Alto Government Center (2415 University Avenue, East Palo Alto, CA 94303)
- Spruce Medical Center (306 Spruce Street, South San Francisco, CA 94080)

Many of these facilities serve specific groups and/or small communities; seismic-related damage could result in loss of essential County services (e.g., housing, rehabilitation, emergency response capabilities), inability to provide routine County services, and damage to the structural integrity of County facilities.

Flood *(riverine, urban/flash, coastal flooding)*

Flood-prone areas within unincorporated County occur primarily along the interior waterways (e.g., creeks, rivers, and lakes), including Crystal Spring Reservoir, San Andreas Lake, Denniston Creek, and San Gregorio Creek. These hazard zones expand significantly where creeks drain into the San Francisco Bay or Pacific Ocean. For instance, Pescadero Creek floodplains widen near the coast, while much of the land east of El Camino Real, near the Bay shoreline, sits within a floodplain. These coastal and Bayshore zones encompass critical infrastructure, including segments of State Route 1, US Highway 101, multiple State beaches, the Harbor Industrial area, and the developed unincorporated community of Pescadero.

The Pescadero Creek Watershed represents one of the most significant riverine flood risks in the County. Driven by intense winter storms and atmospheric rivers, flooding in this area is exacerbated by limited channel capacity and constrained crossing at aging culverts and bridges. Unique vulnerabilities include agricultural lands and residential developments located directly within the floodplain, as well as low-lying roadways that serve as the sole access and evacuation routes for rural residents in this community. During riverine events, roadway overtopping and closures, often caused by sediment and debris loading, isolate the community and significantly impair emergency response.

Urbanized unincorporated areas, such as North Fair Oaks, Broadmoor, and the Harbor Industrial area, face localized urban/flash flooding due to legacy drainage systems, high levels of impervious surfaces, and flat topography. Even in areas outside FEMA's Special Flood Hazard Area (SFHA), these communities experience infrastructure damage and economic losses during severe weather (e.g., heavy rainfall) due to undersized inlets, limited capacity at pump stations (e.g., Athlone), and a lack of downstream redundancy. Unlike municipalities with centralized stormwater systems, these unincorporated communities are topographically constrained and rely on aging infrastructure, resulting in frequent nuisance flooding and mobility issues.

In low-lying coastal areas, impacts are further intensified by compound flood events, where heavy precipitation and high river flows coincide with elevated groundwater and coastal water levels. On both the Bay and Pacific coasts, communities such as La Honda, Montara, El Granada, and San Gregorio are vulnerable to saturated soils that trigger slope instability and landslides. Since these areas rely on a limited number of access routes, the combination of flooding and landslides can sever evacuation routes and overwhelm roadside drainage. As sea levels rise and tides move farther inland, these coastal

floodplains will continue to expand, leading to prolonged recovery timelines for residents who depend on County transportation networks and local services.

Utilities: The County's utility infrastructure is vulnerable to flooding because pipelines and intake facilities are located in low-lying, river-adjacent areas. During flooding events, sewer systems may experience infiltration, inflow, and system surcharge, which elevate the risk of sanitary sewer overflows, service disruptions, and environmental impacts. Since these portions of the system are aging and distributed, these impacts can occur even during moderate weather events. Specifically, the creek intake structure for CSA 7 (in the La Honda area) is particularly exposed to debris loading, sediment transport, and high-velocity flows that may damage structures, clog equipment, or prevent water from being pumped. Loss of functionality would directly disrupt the raw water supply and threaten the reliability of potable water, especially given the limited redundancy of these small community-serving systems.

Landfills: The Half Moon Bay landfill, located along the coastline, is vulnerable to coastal flooding, storm surges, wave action, and erosion. Extreme coastal events could erode protective features, compromise drainage controls, and expose buried waste materials, potentially resulting in environmental impacts and increased monitoring and maintenance needs.

Facilities: The County owns and maintains several facilities identified as vulnerable due to their proximity to the Bay, compounded by rising groundwater and intense, frequent heavy rainfall events that may overwhelm some of the aging, flat-gradient drainage systems. These facilities include, but are not necessarily limited to:

- Animal Shelter (12 Airport Boulevard, Burlingame, CA 94401)
- Three (3) County Offices (849 Mitten Road, Burlingame, CA 94010, 863 Mitten Road, Burlingame, CA 94010, 866 Malcolm Road, Burlingame, CA 94010)
- Homeless Shelter (795 North Access Road, South San Francisco, CA 94128)
- Housing (1000 Twin Dolphin Drive, Redwood City, CA 94065)
- Patient Treatment Facility (2560 Pulgas Avenue, East Palo Alto, CA 94303)

Many of these facilities serve specific groups and/or small communities; flood-related damage could result in loss of essential County services (e.g., housing, rehabilitation, emergency response capabilities).

Landslides

San Mateo County's coastal areas are the most susceptible to landslides, particularly Sky Londa, La Honda, and Loma Mar. These areas have a history of landslides, making them susceptible to further sliding from heavy rainfall or earthquakes. Roadways in high-risk landslide areas include Interstate 280, and State Routes 35 and 84. Most landslides occur in these areas, where the risk is highest. However, landslides can also occur outside these high-risk regions, including areas where few landslides occur, and activity is considered moderate, presenting a medium level of risk. These moderately susceptible regions experience fewer landslides but remain at some risk of future events. In contrast, areas with surficial deposits, where landslides are least likely, pose the lowest risk and are least susceptible to landslides.

Climate change is expected to exacerbate landslide hazards by increasing the frequency of wildfires and severe storms, thereby intensifying landslide impacts, particularly from fast-moving debris flows. Wildfires increase landslide risk by making slopes more vulnerable to erosion, as they burn away vegetation that stabilizes them, and by altering soil properties by drying them out and reducing their capacity to retain water. Climate change is expected to increase the frequency of very dry and very wet years, increasing the risk of landslides and mudslides. These hazards can cascade, with post-wildfire debris flows blocking rivers or damaging infrastructure, which in turn can trigger flooding, isolate communities, and compound disaster recovery challenges.

County-maintained infrastructure within landslide-prone areas, including roadways, retaining wall systems, and drainage conveyance, is particularly vulnerable because many of these assets were built prior to modern geotechnical design standards. Landslides can cause structural damage, loss of roadway support, and utility displacement, while repeated failures in areas of ongoing movement create long-term maintenance challenges and financial strain. A defining jurisdictional challenge is that these landslides often affect the same limited-access routes required for emergency response, evacuation, and utility repair. In communities with no practical alternative routes, even relatively small slope failures can create high-consequence scenarios characterized by community isolation, extended service disruptions, and delayed recovery.

Roads/Bridges: Unlike urban municipalities with grid-based redundancy, many unincorporated communities are located along narrow ridge lines, coastal bluffs, or canyon corridors where roadways are built into slopes, and drainage systems are limited. Furthermore, some communities are uniquely vulnerable because landslides can isolate them, creating infrastructure and life safety risks.

The Seal Cove neighborhood is an area of active and historic landslide movement where ongoing ground movement and slope instability pose significant risks to local roadways, private property, and underground utilities. Heavy rainfall or seismic activity can accelerate this movement, resulting in pavement cracking, roadway shoulder loss, and progressive roadway deformation. Ultimately, this area illustrates a compound risk in which landslides are driven not only by immediate rainfall but also by long-term geologic conditions.

Rural hillside communities, particularly La Honda, are highly vulnerable due to steep terrain and heavy dependence on hillside access routes with limited redundancy. For instance, Entrada Way serves as the primary and widest emergency access route for a large portion of the community; even small landslides can significantly affect mobility in this area due to the roadway's constrained geometry. Slope failures along such corridors can cut off evacuation routes, delay emergency response, and isolate communities. Similarly, other unincorporated roadways (Pescadero Creek, Stage, Higgins Canyon, Cloverdale, Alpine, and Gazos Creek roads) are vulnerable to landslides driven by unsaturated soils, erosion, aging drainage, and proximity to creeks. These failures often result in roadway closures, culvert damage, and sediment loading into waterways. Since these routes serve residents and agricultural operations, the resulting impacts extend beyond transportation, causing significant economic and community disruption.

Utilities: Landslides and slope instability pose significant risks to sewer and water pipelines traversing hillside or unstable terrain. Ground movement can result in pipe misalignment, cracking, and structural failure, while access to pipelines in steep or remote areas may be cut off following a landslide, delaying inspection and repair and prolonging service disruptions. Furthermore, streetlight infrastructure installed along hillside roadways may be subject to undermining and displacement due to erosion or slope failure, creating additional public safety concerns.

Sea Level Rise

Sea levels on both the Bayside and Coastside of San Mateo County are projected to increase by as much as 0.4 feet (5 inches) by 2030, 1.3 feet (16 inches) by 2050, and 6.5 feet (78 inches) by 2100. However, sea levels could also rise faster than these projections, and storm surge, wave run up, and King Tide events could add 24 to 36 inches of temporary flooding that could extend farther inland.[7]

Emergent groundwater is a consequence of sea level rise. It occurs when denser saline water pushes groundwater upward as it travels farther inland, raising the water level and, in some places, causing groundwater to emerge to the surface, leading to temporary or permanent inundation. Higher groundwater levels, even if they do not reach the surface, can infiltrate storm drains, destabilize pipes, spread soil or groundwater contamination, undermine building foundations, corrode infrastructure not designed for saline groundwater, and increase liquefaction hazards.[8]

Key areas vulnerable to sea level rise include low-lying developed coastal neighborhoods, bluff-backed roadways and public infrastructure, harbor adjacent areas, and drainage outfalls and stormwater discharge points including discharges to the Bay. The San Mateo County communities facing the most significant impacts from sea level rise include Pescadero, El Granada, Miramar, Montara, Moss Beach, Princeton, North Fair Oaks, unincorporated mobile home parks near Redwood City, the Harbor Industrial area, Olympic Country Club, and the San Francisco International Airport. The same communities are vulnerable to emergent groundwater, except Miramar and Princeton.

Unlike incorporated coastal cities that often have centralized shoreline protection strategies, many of the Midcoast communities that the County's Department of Public Works serves (Montara, Moss Beach, El Granada, and areas near the City of Half Moon Bay) developed incrementally over time with infrastructure that was not designed for long-term shoreline change or tidal influence.

Roads/Bridges: County-maintained roadways located along coastal terraces or adjacent to the ocean (e.g., Mirada Road), bluff edges, low elevation corridors, and Bay-influenced areas, exposing them to chronic inundation, undermining from coastal erosion, and increased wave runup.

Utilities: The coastline's stormwater infrastructure was originally designed to rely on gravity for drainage. However, sea level rise will reduce system outfall capacity, cause backflow into drainage networks, and increase surface flooding, creating compound flooding risks (e.g., coastal storm surge, heavy rainfall, and high tides occurring simultaneously). Small community-serving systems may be at risk of saltwater intrusion, particularly CSA 11 (in the Pescadero area), which impacts water sources, reduces reliability, and increases maintenance costs. Since these systems serve small populations and lack redundancy, disruptions can be significant for the communities they serve.

Landfills: The Half Moon Bay landfill, located along the coastline, is vulnerable to long-term risks posed by sea level rise. Increased coastal storm influence could stress the landfill cap systems, degrade drainage performance, and increase infiltration potential, thereby elevating the risk of leachate migration, gas system disruption, and environmental exposure pathways.

[7] San Francisco Bay Conservation and Development Commission. (2024). Regional Shoreline Adaptation Plan. Retrieved from https://www.bayadapt.org/wp-content/uploads/2024/09/BCDC_Draft_Regional_Shoreline_Adaptation_Plan_Appendix-A_Spreads.pdf.
[8] Ocean Protection Council. (2024). State of California Sea Level Rise Guidance. Retrieved from https://opc.ca.gov/wp-content/uploads/2024/05/California-Sea-Level-Rise-Guidance-2024-508.pdf.

Airports: The San Carlos Airport is surrounded by a levee on two sides, adjacent to the Smith Slough; however, the existing levee does not meet FEMA standards. The Airport has two pump stations that prevent flooding at high tide and during storm events.

Facilities: The County owns and maintains several facilities that are vulnerable to sea level rise due to their proximity to the Bay. While the Sea Level Rise Protection Project, scheduled to be completed, along with similar levee improvement projects across the Peninsula, will greatly reduce these facilities' vulnerability, the current conditions leave them exposed to damage from sea level rise. These facilities include, but are not necessarily limited to:

- Animal Shelter (12 Airport Boulevard, Burlingame, CA 94401)
- Three (3) County Offices (849 Mitten Road, Burlingame, CA 94010, 863 Mitten Road, Burlingame, CA 94010, 866 Malcolm Road, Burlingame, CA 94010)
- Homeless Shelter (795 North Access Road, South San Francisco, CA 94128)
- Housing (1000 Twin Dolphin Drive, Redwood City, CA 94065)
- Patient Treatment Facility (2560 Pulgas Avenue, East Palo Alto, CA 94303)

Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*

San Mateo County, like most of California, has a Mediterranean climate that receives 75% of its rainfall between November and March, with virtually no rainfall in the summer. A large portion of winter rainfall is delivered by atmospheric rivers, which are long, narrow regions in the atmosphere that transport water vapor from the tropics. When atmospheric rivers make landfall, they release water vapor as precipitation, often causing heavy rainfall that can lead to flooding and mudslides. While atmospheric rivers play a critical role in replenishing California's water supplies, they can also cause significant injuries, disrupt travel, and damage property. Occasionally, atmospheric rivers may occur simultaneously with storm systems from temperate regions, known as extratropical cyclones. When these events happen together, they create conditions known as "bomb cyclones", often causing very heavy precipitation, high wind speeds, and large waves. Climate change is expected to increase the number of years with intense precipitation, even though average annual rainfall is not expected to change significantly. These extreme precipitation events (i.e., heavy rainfall) are particularly concerning when coupled with sea level rise. Heavy rainfall can increase the frequency and severity of other hazards, including flooding.

Strong winds generally occur as short-term events, with winds or gusts exceeding 50 to 60 mph that can cause property damage. In San Mateo County, wind speeds can reach up to 100 mph, causing significant property damage, threatening public safety, and having adverse economic impacts through business closures and power outages. Falling trees and branches can damage buildings, power lines, and other properties and infrastructure. During wet winters, saturated soil makes trees less stable and more vulnerable to uprooting by high winds. Downed trees, downed power lines, and damaged property can also be major hindrances to emergency response and disaster recovery.

Public safety power shutoffs (PSPS) are used as a preventative strategy to reduce wildfire risk during severe weather, especially high winds and dry conditions. Utility companies (e.g., PG&E) may shut off power lines during strong winds, especially in hot, dry conditions, to prevent them from sparking fires and causing power outages that may last for extended periods. Without backup power, communication

networks may be disrupted, making it harder for residents to receive emergency notifications and for first responders to coordinate effectively. People who depend on medical devices (e.g., oxygen concentrators or ventilators) are at greater risk during power outages, as are those who need electricity for climate control to maintain safe indoor temperatures. The loss of power to communications and other critical infrastructure disrupts access to goods and services. Many residents in San Mateo County's coastal and hillside areas depend on landlines for phone service due to unreliable cellphone coverage. Those who use cellular or cordless landline phones are more vulnerable in a hazardous situation that results in a loss of power, owing to the loss of access to communication.

In San Mateo County, extreme heat is an increasing concern as climate change increases the frequency and severity of these events, which are defined as temperatures exceeding 98% of historical highs.[9,10] The County has varying extreme heat temperatures across regions. On an extreme heat day, temperatures reach at least 83°F in Broadmoor, 93.6°F in Emerald Lake Hills, 95.3°F in North Fair Oaks, 80°F in El Granada, and 85.6°F in Pescadero.[11] Countywide, the projected number of annual extreme heat days could increase from eight (8) to 25 by the late century, while warm nights could increase from 25 to 122.[12] Elevated nighttime temperatures are important because people, ecosystems, and infrastructure may not receive relief from high temperatures, exacerbating risks to community health, safety, energy costs, and water supplies.

Public health remains the primary concern during heat waves/extreme heat events, as high temperatures can cause heat-related illnesses (e.g., heat cramps, heat exhaustion, heat stroke) and fatalities, and can worsen respiratory conditions due to increased air pollution. These impacts disproportionately affect vulnerable populations, including the elderly, children, people who do not live or work in climate-controlled conditions (e.g., outdoor workers, landscapers), who do not have personal vehicles, or who have pre-existing medical conditions. Extreme temperatures can also harm plants and animals that are not well adapted to such events, as well as natural ecosystems.

The most affected areas include North Fair Oaks, the City of Menlo Park, Redwood City, and the City of East Palo Alto. Although temperatures tend to be lower along the coast, higher-than-usual temperatures in these areas can be critical, as people and assets are unlikely to have the resources to cope with them. This is particularly the case in North Fair Oaks, where equity issues such as income disparities, housing quality, and a higher proportion of renters further exacerbate vulnerabilities.

Beyond public health, extreme heat places additional stress on power lines, causing them to operate less efficiently and increasing electricity demand (typically to run air conditioning units), which may lead to brownouts and blackouts. Extreme heat also adversely impacts transportation infrastructure. Sustained heat can cause asphalt surfaces to expand, resulting in potholed and rutted roads, and may cause train tracks to expand, resulting in rail buckling and train derailments. Impacts on roadways and rail lines can lead to short-term closures and travel delays and accelerate the breakdown of infrastructure in the long term. Bay Area Rapid Transit (BART) and Caltrain cannot operate at full speed during heat waves/extreme heat events due to these risks, leading to longer wait times and extended heat exposure for commuters.

[9] Cal-Adapt. (2024). Extreme Heat Days and Warm Nights. Retrieved from https://cal-adapt.org/tools/extreme-heat/.
[10] San Mateo County Sustainability Department. (2024). Climate Resilience: Extreme Heat. Retrieved from https://www.smcsustainability.org/climate-change/climate-resilience/climate-risks/extreme-heat/.
[11] Cal-Adapt. (2024). Extreme Heat Days and Warm Nights. Retrieved from https://cmip5.cal-adapt.org/tools/extreme-heat.
[12] Ibid.

Cool marine air and fog are common in the Bay Area in the summer. Heavy fog is particularly hazardous because it can restrict surface visibility. Furthermore, severe fog incidents can close roads, cause vehicle accidents and airport delays, and impair the effectiveness of emergency response.

Tsunami

Tsunamis, a secondary hazard from earthquakes, have the potential to affect the shoreline areas of San Mateo County. Sudden displacement of the ocean floor by an undersea earthquake, volcanic eruption, or landslide can trigger tsunamis in the County. At some locations, the advancing wave front will be the most destructive part of the tsunami. In other situations, the greatest damage will be caused by the outflow of water back to the sea between crests, sweeping away surface items and undermining roads, buildings, bulkheads, and other structures. This outflow can carry enormous amounts of debris, resulting in further destruction. Ships and boats may be forced against breakwaters, wharves, and other crafts, or be washed ashore and left grounded after the withdrawal of the seawater. The areas within the Tsunami Hazard Zone are regions near sea level or lower than the surrounding areas (e.g., beaches, sand dunes, harbors, floodplains, creeks, rivers, and oceanside sections of highways).

There are two types of tsunamis in San Mateo County – distant source and local source tsunamis. Distant source tsunamis originate from seismic events more than 621 miles away, such as those near Alaska or Japan. These tsunamis may take more than three hours to reach the County's shoreline, allowing more time to move to higher ground. Local source tsunamis are caused by seismic events near the California coast and can arrive within 15 to 20 minutes after the earthquake. Though relatively rare, these events leave little time to respond. Individuals may be required to act fast and move to safety before an official alert is given.[13]

Seiches are a potential hazard related to tsunamis. Seiches are standing waves oscillating in a body of water, and they can form in any enclosed or semi-enclosed body of water (e.g., the San Francisco Bay). They typically result from strong winds and rapid changes in atmospheric pressure, which push the water from one end of the enclosure to the other. Earthquakes and severe storm fronts can also cause seiches.

Wildfire

Wildfires pose a significant and growing threat to San Mateo County, where the Mediterranean climate, steep topography, and diverse fuels (i.e., forest, chaparral, and grassland vegetation) create ideal conditions for periodic large-scale wildfires. Historically, the wildfire season extended from early summer through late fall, during the hotter, drier months, although it is increasingly a year-round hazard due to higher temperatures, lower moisture content in the air and plant matter, accumulation of vegetation, and high winds. Rising temperatures and prolonged droughts dry out vegetation, creating abundant fuel for fires. Pest outbreaks, such as bark beetle infestations, leave behind weakened and dead trees that serve as additional fuel, while extreme heat and erratic wind conditions make wildfires more unpredictable and harder to control. The wildfire season is extending beyond historical norms, leaving communities vulnerable for much longer periods.

[13] San Mateo County Department of Emergency Management. (n.d.). Tsunamis in San Mateo County. Retrieved from https://www.smcgov.org/dem/tsunamis-san-mateo-county.

There are 212,868 acres of San Mateo County within moderate, high, or very high Fire Hazard Severity Zones (FHSZ). Of these, 22,508 acres fall under the moderate FHSZ, 129,479 under the high FHSZ, and 60,880 under the very high FHSZ.[14] Wildfire-prone areas in Unincorporated County are generally in the foothills and open space areas on both the Bayside and Coastside. The communities most at risk are those surrounded by extensive open spaces and forested lands, often located along hillsides and ridgelines, which heightens their vulnerability to wildfires. Areas within the high and very high FHSZ include Shelter Cove, Moss Beach, the City of Half Moon Bay, Sky Londa, Crystal Springs Lake, and La Honda. Additionally, wildfire smoke can negatively impact air quality and health across the County.

Roads/Bridges: County-owned roadways located within La Honda, Loma Mar, Pescadero, Montara hillsides, Los Trancos, Emerald Lake Hills, Devonshire Canyon, Sky Londa, among other wooded inland communities, are vulnerable to wildfires. These areas are characterized by dense vegetation, narrow access roads, limited defensible space (in some locations), and rural development patterns.

Limited evacuation and emergency response access in some areas is a significant vulnerability for San Mateo County, as many communities rely on narrow, winding roads and infrastructure built along steep terrain. In areas like La Honda, where Entrada Way functions as the primary and widest access route for a significant portion of the community, wildfire impacts (e.g., fallen trees, slope failure, fire damage to road infrastructure) could block critical arteries and significantly delay emergency response.

Utilities: Small community-serving systems (CSA 7 and CSA 11) were not designed for large-scale firefighting demand. Unique vulnerabilities to these systems include limited storage capacity, single-source supply, above-ground storage tanks, and power-dependent treatment and pump stations. Additionally, wildfire impacts can cause power outages at pumping facilities and reduce system pressure, potentially compromising fire suppression operations. This risk also extends to overhead utilities and roadside drainage infrastructure, where damage can disrupt emergency operations, complicate post-fire recovery, and trigger secondary hazards (e.g., landslides).

Facilities: A number of facilities in San Mateo County are uniquely vulnerable to wildfires due to extensive development within the Wildland Urban Interface (WUI), where facilities and critical infrastructures are located in close proximity to highly flammable vegetation. Some of the risk factors include steep, challenging topography, intense coastal wind patterns, and a high probability of ember-driven ignition of structures. This was most recently demonstrated by the CZU Lightning Complex wildfire. These facilities include, but are not necessarily limited to:

- Glenwood Fire Camp (400 Log Cabin Road, La Honda, CA 94020)
- Sheriff's Honor Camp, currently being demolished (7546 Alpine Road, La Honda, CA 94020)
- Department of Public Works Corporation Yard (59 Entrada Way, La Honda, CA 94020)
- Canyon Oaks Youth Center (400 Edmonds Road, Redwood City, CA 94062)
- CalFire Station #18 (300 Edmonds Road, Redwood City, CA 94062)
- Cordilleras Mental Health Campus, includes five (5) structures (200 Edmonds Road, Redwood City, CA 94062)

[14] CalFire. (2025). Fire Hazard Severity Zone Acres in SRA and LRA. Retrieved from https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

- County Office Buildings, includes 10 structures (20-50 Tower Road, San Mateo, CA 94402)
- Central Library (125 Lessingia Court, San Mateo, CA 94402)
- County Facilities, 17 structures (320-400 Paul Scannell Drive, San Mateo, CA 94402)

San Mateo County evaluated whether vulnerability in hazard-prone areas had increased, decreased, or remained the same for each natural hazard identified in this LHMP. Climate change, changes in population, infrastructure expansion, and economic shifts that can affect vulnerability were considered. For example, if planned development is in an identified hazard area or is not built to the updated building codes, it may increase the community's vulnerability to future hazards and disasters. On the other hand, if development occurred with mitigation practices in place, the vulnerability may have remained the same or decreased. Additionally, shifting demographics (e.g., underserved population) were taken into consideration.

Table 14 outlines whether climate change has increased or decreased San Mateo County's vulnerability (i.e., exposure) and impact to each natural hazard over the past five years, and the effect of climate change on the future probability of occurrence and impacts from each natural hazard.

Table 14. Climate Change: Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Dam Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Increased
Landslide	Increased
Sea Level Rise	Increased
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Increased
Tsunami	Remained the Same
Wildfire	Increased
Future Vulnerability and Impact	
Dam Failure	No Change Anticipated
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Increase
Landslide	Increase
Sea Level Rise	Increase
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Increase
Tsunami	No Change Anticipated

Hazard	Vulnerability and Impact
Wildfire	Increase

Table 15 outlines whether changes in population within San Mateo County over the past five years have increased or decreased the vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in population may have on the future probability of occurrence and impacts from these natural hazards.

Table 15. Changes in Population: Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Dam Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Remained the Same
Landslide	Remained the Same
Sea Level Rise	Remained the Same
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Remained the Same
Tsunami	Remained the Same
Wildfire	Increased
Future Vulnerability and Impact	
Dam Failure	No Change Anticipated
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Increase
Landslide	No Change Anticipated
Sea Level Rise	No Change Anticipated
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Increase
Tsunami	No Change Anticipated
Wildfire	Increase

Table 16 outlines whether development over the past five (5) years has increased or decreased San Mateo County's vulnerability (i.e., exposure) and impact to these natural hazards, and the anticipated effects changes in development may have on the future probability of occurrence and impacts from these natural hazards.

Table 16. Changes in Development: Current and Future Vulnerability and Impact

Hazard	Vulnerability and Impact
Current Vulnerability and Impact	
Dam Failure	Remained the Same
Drought	Remained the Same
Earthquake	Remained the Same
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Remained the Same
Landslide	Remained the Same
Sea Level Rise	Remained the Same
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Remained the Same
Tsunami	Remained the Same
Wildfire	Increased
Future Vulnerability and Impact	
Dam Failure	No Change Anticipated
Drought	No Change Anticipated
Earthquake	No Change Anticipated
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	No Change Anticipated
Landslide	No Change Anticipated
Sea Level Rise	No Change Anticipated
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	No Change Anticipated
Tsunami	No Change Anticipated
Wildfire	Increase

8.1. Future Major Assets

Community assets should include anything that is important to a community's character and function. Assets include people (i.e., underserved population); structures (i.e., new and existing buildings); community lifelines and other critical facilities; natural, historic, and cultural resources; and the economy and other activities that have value to the community. In the Five (5)-Year Capital Improvement Plan, San Mateo County has identified several future major assets that will be exposed to or vulnerable to hazards identified in this LHMP. However, any new assets (e.g., new construction in hazard-prone areas) will be built to comply with the latest building codes and standards and will be designed to mitigate identified and anticipated hazards, especially those expected to increase due to climate change.

- **Pescadero Fire Station:** This project is within an Alquist-Priolo Fault Zone and is in an area of High Liquefaction Susceptibility.

- **Granada Community Park & Recreation Center**: The facility is located within a Tsunami Hazard Area.
- **Midcoast Multimodal Trail Project:** A County-led project for a multimodal trail parallel to State Route 1 in the unincorporated Midcoast, which passes through mapped hazard areas for sea level rise, tsunami, flood, coastal erosion, landslide, and wildfire. However, this trail is intended to serve existing communities already located in or near these hazard areas.
- **849 Mitten Road, Burlingame, CA 94010:** The real property was purchased by the County for new buildings. The property is within hazard-prone areas, potentially exposing the project to sea level rise, flooding, liquefaction, and tsunamis.
- **Industrial Park:** Located in the Harbor Industrial Area, east of El Camino Real and west of US Highway 101, is intended to create conditions for additional land uses, including retail, hotel, research and development, and residential uses. The property is exposed to liquefaction and flooding.

9. HAZARD RISK RANKING

Table 17 presents the hazard ranking for San Mateo County of all hazards of concern listed in **Volume 1** of this Plan. This ranking summarizes how hazards vary for this jurisdiction. As thoroughly described in **Volume 1** of this Plan, 14 factors were evaluated to provide an informed and comprehensive analysis and ranking of the hazards included in this LHMP.

- **Probability** (likelihood of annual occurrence)
- **Extent** of the hazard, including catastrophic potential
- **Vulnerability** (i.e., exposure) of the population, property (including critical infrastructure), and changes in the development (over the past five (5) years)
- **Impacts** on population and life safety, underserved population, property (including critical infrastructure), the economy, the environment, continuity of operations/delivery of services, future development, and climate change

The scores for extent, vulnerability, and impact were weighted and combined to produce a consequence score. This consequence score was then multiplied by the probability score to calculate the total risk score for each hazard. At the fundamental level, the consequence is an assessment of the potential impact(s) if the hazards incident were to occur. In this assessment, the consequence score (i.e., the consequence of an event) will be independent of the extent, vulnerability, and impacts. The probability of the hazards is not included in assessing the consequence because, without an event, there is no consequence or impact. For further details on how the probability, extent, vulnerability, and impact factors in **Table 17** were calculated, please refer to Chapter 4 in **Volume 1** of this Plan. Details of the hazard ranking results are provided in Appendix C of this Annex.

The sub-hazards for severe weather (i.e., heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, and fog) and flood (i.e., riverine flooding, urban/flash flooding, coastal flooding) were individually ranked in the hazard risk ranking; however, severe weather and flood are each considered as the main hazard throughout this Annex and **Volume 1**.

Table 17. San Mateo County Hazard Risk Ranking

Hazard Event	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	Total Risk Score*
Urban/Flash Flooding ***(Flood)***	3	18	14	32	64	89
Heavy Rainfall ***(Severe Weather)***	3	12	13	23	48	67
Earthquake	2	18	14	35	67	62
Strong Winds ***(Severe Weather)***	3	9	13	22	44	61
Wildfire	2	18	10	34	62	57
Sea Level Rise	3	6	8	25	39	54
Heat Wave/Extreme Heat ***(Severe Weather)***	3	9	10	15	34	47
Landslide	2	9	9	30	48	44
Riverine Flooding ***(Flood)***	2	12	6	28	46	43
Severe Thunderstorms ***(Severe Weather)***	2	12	13	21	46	43
Drought	2	6	11	22	39	36
Dam Failure	1	12	9	28	49	23
Coastal Flooding ***(Flood)***	1	9	5	25	39	18
Tornado ***(Severe Weather)***	1	6	13	13	32	15
Fog ***(Severe Weather)***	1	6	9	11	26	12
Tsunami	1	6	5	12	23	11

Extent: Sum of the weighted Extent factors.
Vulnerability: Sum of the weighted Vulnerability factors.
Impact: Sum of the weighted Impact factors.

Consequence Score: Extent + Vulnerability + Impact (Sum of all weighted factors).
Total Risk Score = Probability x Consequence
* Normalized to 100

Total Risk Score Legend

Classification	Probability	Extent	Vulnerability	Impact	Consequence Score	Total Risk Score
Low (L)	1	0 – 6	0 – 4	0 – 12	0 – 24	0 – 32
Medium (M)	2	7 – 12	5 – 10	13 – 26	25 – 48	33 – 66
High (H)	3	13 – 18	11 – 15	27 – 39	49 – 72	67 – 100

*The **legend**—specifically the assignment of low, medium, and high—provides an additional means to qualitatively assess the probability factor, sum of weighted factors, and the total risk scores for each hazard. The **Consequence Score** represents the sum of the Extent, Vulnerability, and Impact Factors. The **Total Risk Score** is a measure of Probability and Consequence.*

10. MITIGATION ACTIONS

This section includes the mitigation actions developed to address the risks and vulnerabilities to the hazards identified in this Plan. This Plan serves only to recommend mitigation measures based on the potential for risk reduction and available funding. Implementation of mitigation actions is dependent on risk reduction priorities, feasibility, and available funding. It is dependent on the cooperation and support of the jurisdiction and/or department responsible for each action item. Additionally, all mitigation actions identified in the 2021 Plan Revision or before were updated accordingly. Any new mitigation actions are listed as *New* (under Project Status).

San Mateo County agreed to **28** mitigation actions that apply to the jurisdiction's properties for which it has jurisdictional responsibility and authority. A summary of the County's mitigation actions status is listed in **Table 18**.

Note: The mitigation actions outlined in this Plan are designed only to address those natural hazards that received a risk ranking of *medium* or *high* during the hazard risk assessment (**Table 17**). Hazards that ranked *low* (dam failure and tsunami) may not have specific mitigation actions detailed in this document.

Table 18. San Mateo County Mitigation Actions Summary

Status	Mitigation Action Total
Continuing	3
In Progress	10
Not Yet Started	13
New	2
TOTAL	**28**
Completed	4
No Longer Needed	7

Mitigation Actions per Hazard			
Dam Failure	11	Sea Level Rise	14
Drought	11	Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	22
Earthquake	12	Tsunami	12
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	18	Wildfire	13
Landslide	12		

A detailed explanation of the Mitigation Strategy can be found in Chapter 5 of **Volume 1**.

Mitigation Action	Coordinate and lead the implementation of the Countywide initiatives identified in Volume I of the San Mateo County Local Hazard Mitigation Plan.				
Action Number	SMC-1	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	29/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	Medium
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Continuing	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details					

Mitigation Action	Coordinate and incorporate Hazard Mitigation Plan maintenance protocols outlined in Volume 1 of the San Mateo County Local Hazard Mitigation Plan.				
Action Number	SMC-2	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	33/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Continuing	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details					

Mitigation Action	Implement an equity-driven hazard mitigation and outreach program to reduce long-term risk for socially vulnerable populations, including, but not limited to, monolingual residents, individuals with access and functional needs, and those in high-hazard areas. This initiative will integrate equity into program decision-making and establish resilient community infrastructure (e.g., radio and audible alert systems) to ensure all-hazard warnings and evacuation protocols reach the County's most at-risk population.				
Action Number	SMC-3	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	35/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Office of Community Affairs				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC< HSGP, EMPG		
Additional Details	Current activities include: Annual Disaster Prep Day, which serves over 2,000 people with multi-lingual programming; SMC Alert template messaging (for 40 hazards) has been translated into five (5) languages, including Spanish, Simplified Chinese, Arabic, Tagalog, and Russian; Translated the Wireless Emergency Alerts (WEA) templates into Spanish; and continue to implement and enhance the County's multi-lingual outreach program.				

Mitigation Action	Integrate the participation of diverse community members, especially from socially vulnerable communities, including those with access and functional needs, in hazard risk assessment, mitigation, and emergency planning. This ensures that Countywide risk reduction strategies are developed collaboratively and applied equitably.				
Action Number	SMC-4	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	31/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Office of Community Affairs				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC< HSGP, EMPG		
Additional Details	Community participation was integrated into the planning process of the County's Emergency Operations Plan (EOP). Access and Functional Needs Community-Based Organizations meetings are held to discuss best practices and considerations for sheltering, transportation, public health, and communications.				

Mitigation Action	Provide training to emergency planning and Community Emergency Response Team (CERT) personnel, including support for the socially vulnerable, especially those with disabilities or special medical needs.				
Action Number	SMC-5	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2016	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was removed because its focus on preparedness falls outside the scope of hazard mitigation.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Actively implement and expand the use of the County's new ZoneHaven evacuation tool, which includes more than 300 evacuation zones. Develop the interface between the ZoneHaven evacuation tool with the SMCAlert alert and warning tool to provide multilingual messages for rapidly evolving emergencies requiring evacuations. Develop a coordinated strategy to address the evacuation of transit-dependent people, people with disabilities and medical needs, and others who cannot evacuate independently.				
Action Number	SMC-6	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Expand the County's Evacuation Centers/Cooling Centers/Clean Air Centers/Respite Centers Program, which includes community facilities, as well as private sector facilities (e.g., hotels). This initiative will ensure that the designated facilities have the capabilities to meet the needs of the vulnerable population, especially those with access and functional needs. Additionally, a multilingual notification protocol will be institutionalized through SMC Alert, social media, and by coordinating with other service providers and community-based organizations.				
Action Number	SMC-7	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	34/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Libraries				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	San Mateo County is working in partnership with Libraries and other agencies across the County to establish Community Resilience Centers (CRCs) to provide a safe place for people to seek assistance.				

Mitigation Action	Identify Technology Services Department equipment and facilities that need relocation or improvement, and implement measures to reduce their vulnerability to natural hazards. This will improve county communications capacity, interoperability capabilities, systemwide reliability, and disaster resilience to maintain critical post-disaster operability.				
Action Number	SMC-8	**Goal(s) Addressed**	1, 5	**Prioritization Score**	27/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits	Medium				
Lead Agency / Organization	San Mateo County Technology Services Department				
Supporting Agency / Organization	San Mateo County Department of Emergency Management				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Update the Emergency Operations Plan, Continuity of Government Operations Plan, Department Operations Center Plan, and Joint Information Center Plan. Continue to incorporate mitigation principles into local event management during the Incident Command Post and Department Operations Center Action Planning.				
Action Number	SMC-9	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2016	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was removed because its focus on preparedness falls outside the scope of hazard mitigation.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Where appropriate, support retrofitting, purchasing, or relocating structures located in high-hazard areas, prioritizing those that have experienced repetitive losses and/or are in high- or medium-risk hazard areas.				
Action Number	SMC-10	**Goal(s) Addressed**	1, 4, 5	**Prioritization Score**	28/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Dam Failure, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Planning and Building Department				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Integrate the San Mateo County Local Hazard Mitigation Plan into other County plans, ordinances, and programs that govern land use decisions in the community, including, but not limited to, the General Plan (and its elements, as appropriate), the Community Wildfire Protection Plan, the Green Infrastructure Plan, the County Capital Improvement Plan, and develop appropriate implementation procedures following plan adoption.				
Action Number	SMC-11	**Goal(s) Addressed**	1, 5	**Prioritization Score**	33/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Planning and Building Department				
Supporting Agency / Organization	San Mateo County Department of Emergency Management				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	The LHMP has been integrated into the Safety Element of the General Plan.				

Mitigation Action	Identify, retrofit, upgrade, or replace vulnerable County facilities and infrastructure, including but not limited to the Pescadero Fire Station, bridges, and roadways, to mitigate risks from the hazards identified in the San Mateo County Local Hazard Mitigation Plan. This includes integrating hazard risk and equity assessments into the evaluation of land and building acquisitions to ensure the long-term, equitable resilience of County-owned assets.				
Action Number	SMC-12	**Goal(s) Addressed**	1, 3, 4, 5	**Prioritization Score**	36/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Public Works				
Supporting Agency / Organization	San Mateo County Project Development Unit				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), BRIC		
Additional Details					

Mitigation Action	Establish the AgPass Program through the County Agricultural Commissioner's Office. The Program will administer an agricultural verification process and issue the identification to the producer to enter an evacuation zone, if deemed safe, to perform tasks to mitigate crops and livestock loss during a disaster.				
Action Number	SMC-13	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	San Mateo County Department of Agriculture/Weights and Measures				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Integrate multi-hazard vulnerability assessments, specifically addressing cascading impacts (e.g., extreme drought followed by flooding), into infrastructure design and land use planning to reduce long-term risk to people, property, and the economy.				
Action Number	SMC-14	**Goal(s) Addressed**	1, 3, 4, 5	**Prioritization Score**	30/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Planning and Building				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Plan (Staff Time), BRIC		
Additional Details	The Safety Element Vulnerability Assessment addressed these cascading impacts.				

Mitigation Action	Actively support the mitigation actions led by other San Mateo County Local Hazard Mitigation Plan participants, such as FSLRRD, the County Office of Education, RCD, and water and sewer districts, and stakeholders representing the unincorporated areas, including CAL FIRE, San Francisco Public Utilities Commission, and Caltrans, as well as the San Mateo Operational Area Emergency Services Organization (JPA) and the San Mateo County Emergency Management Association. Where needed, actively promote the development of new mitigation actions to address hazards in the unincorporated areas of San Mateo County.				
Action Number	SMC-15	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2016	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action is a duplicate of SMC-1 and SMC-2.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details *(optional)*					

Mitigation Action	Develop the San Mateo County Climate Action Plan and the San Mateo County Sea Level Rise Vulnerability Assessment. Upon completion, coordinate the implementation with the Local Climate Adaptation Policy Guide for Local Governments (Cal OES) to reduce risks exacerbated by climate change and sea level rise impacts and to adapt to those impacts. Furthermore, integrate climate adaptation actions across regional and local General Plans (and their elements, as appropriate), Local Coastal Programs, Housing Plans, mitigation planning efforts, and infrastructure planning and development.				
Action Number	SMC-16	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2016	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Drought, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details *(optional)*	The San Mateo County Climate Action Plan was completed in 2022. The San Mateo County Sea Level Rise Vulnerability Assessment was completed in 2018 for the San Mateo County coast and bay shorelines except for the south coast. The South Coast Sea Level Rise Risk and Solutions Study was completed in 2022. The County used the California Adaptation Planning Guide (Cal OES) to guide the update of the San Mateo County General Plan Safety Element to include climate change hazards. The Peninsula Resilience Planning Project is a collaboration among local cities and the County, sharing a consultant team to perform a Climate Change Vulnerability Assessment for eight (8) of the participating jurisdictions and to update the Safety Elements for six (6) of the participating jurisdictions.				

Mitigation Action	Implement the County's Government Operations Climate Action Plan in all County Capital Projects.				
Action Number	SMC-17	**Goal(s) Addressed**	1, 5	**Prioritization Score**	32/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Sea Level Rise				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	San Mateo County Department of Public Works				
Supporting Agency / Organization	San Mateo County Project Development Unit, San Mateo Department of Sustainability				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details					

Mitigation Action	In coordination with CalFire and the San Francisco Public Utilities Commission, develop strategies to protect watershed and drinking water reservoirs from debris flows that could occur following wildfires in the watershed areas.				
Action Number	SMC-18	**Goal(s) Addressed**	1	**Prioritization Score**	30/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Landslide				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Public Works				
Supporting Agency / Organization	CalFire, San Francisco Public Utilities Commission, San Mateo County Department of Emergency Management				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Conduct a feasibility study to develop an inventory of existing or suspected soft-story structures (residential, commercial, and industrial) and develop retrofit recommendations for consideration by the County Board of Supervisors.				
Action Number	SMC-19	**Goal(s) Addressed**	1, 5	**Prioritization Score**	29/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Earthquake				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Planning and Building Department				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Evaluate the need to incorporate dam failure strategies into existing emergency plans, utilizing information developed in the San Mateo County Local Hazard Mitigation Plan.				
Action Number	SMC-20	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	Dam Failure				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details	Local dams are required to have an Emergency Action Plan (EAP). All dams in the County have an EAP and are reviewed by the San Mateo County Department of Emergency Management on an annual basis, following state legislation.				

Mitigation Action	Implement the County's Green Infrastructure Plan to improve stormwater capture in County projects.				
Action Number	SMC-21	**Goal(s) Addressed**	1, 3, 4, 5	**Prioritization Score**	28/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Public Works				
Supporting Agency / Organization	San Mateo County Department of Sustainability, San Mateo County Planning and Building Department				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	Implemented as part of the San Mateo Water Pollution Prevention Program (SMCWPPP) and C.3 regulated development projects.				

Mitigation Action	Identify and update County-operated utility systems, and acquire and install emergency backup power systems (e.g., generators) at pump stations that lack adequate backup power. This will allow for continuity of operations and reduce the impact on service delivery during and after an emergency or major disaster.				
Action Number	SMC-22	**Goal(s) Addressed**	1, 5	**Prioritization Score**	28/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated		Flood, Severe Weather			
Project Status		Not Yet Started	If *No Longer Needed*, provide reason.	n/a	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization		San Mateo County Department of Public Works			
Supporting Agency / Organization		n/a			
Additional Participating Jurisdictions		n/a			
Estimated Cost		High	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC	
Additional Details					

Mitigation Action	Coordinate with the San Francisquito Creek Joint Powers Authority and neighboring jurisdictions to address flooding, sea level rise, and other environmental concerns along waterways that lead to the San Francisco Bay and along Colma, San Bruno, Belmont creeks.				
Action Number	SMC-23	**Goal(s) Addressed**	1, 3, 4, 5	**Prioritization Score**	33/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	Ongoing	**Implementation Priority**	High
Hazard(s) Mitigated	Flood, Sea Level Rise, Severe Weather				
Project Status	Continuing	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Public Works				
Supporting Agency / Organization	OneShoreline				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) developed and implemented a flood early warning system with a dashboard to track water levels and flooding in these creeks.				

Mitigation Action	Implement a targeted flood risk reduction and outreach program to facilitate vulnerability reduction through the National Flood Insurance Program (NFIP). This program is intended to provide property owners with technical information and promote the importance of obtaining flood insurance for long-term property protection and resilience.				
Action Number	SMC-24	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	30/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Planning and Building				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details					

Mitigation Action	Reduce infrastructure vulnerability to coastal erosion and sea level rise by implementing structural improvements to County-maintained roads, bridges, and storm drains. This will include establishing a five (5) year programmatic framework for County parks to reinforce infrastructure against flooding and partnering with Caltrans to develop long-term realignment strategies for State Route 1 to ensure regional transportation resilience against climate-driven hazards.				
Action Number	SMC-25	**Goal(s) Addressed**	1, 3, 5	**Prioritization Score**	32/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated		Flood, Sea Level Rise, Severe Weather			
Project Status		In Progress	If *No Longer Needed*, provide reason.	n/a	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization		San Mateo County Department of Public Works			
Supporting Agency / Organization		San Mateo County Planning and Building Department, San Mateo County Department of Emergency Management, San Mateo County Parks Department			
Additional Participating Jurisdictions		n/a			
Estimated Cost		High	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC, Caltrans funds	
Additional Details		The County is currently working with Caltrans on realignment strategies for State Route 1 in El Granada and Pescadero. Pescadero State Route 1 Realignment Project Surfer's Beach Adaptation Concepts Plan			

Mitigation Action	Develop and implement a new stormwater ordinance and drainage manual to formalize and expand requirements, incorporating stormwater retention and low-impact development practices into new and redevelopment projects to mitigate downstream impacts of heavy rainfall and prevent localized flooding and other hazards.				
Action Number	SMC-26	**Goal(s) Addressed**	1, 3, 5	**Prioritization Score**	32/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated		Flood, Severe Weather			
Project Status		Completed	If *No Longer Needed*, provide reason.	n/a	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization		San Mateo County Planning and Building Department			
Supporting Agency / Organization		n/a			
Additional Participating Jurisdictions		n/a			
Estimated Cost		Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC	
Additional Details		The Stormwater Ordinance was completed in 2025, and the drainage manual was updated in 2023.			

Mitigation Action	Coordinate with Pacific Gas and Electric Company (PG&E) to add Public Safety Power Shutoff (PSPS) Resource Centers on the Coastside during extended power outages due to severe weather activity.				
Action Number	SMC-27	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	26/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Severe Weather, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	Pacific Gas and Electric Company				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Implement urban heat reduction solutions that prioritize historically marginalized communities and elevate community-driven initiatives, such as planting trees and installing shade, cooling, and other infrastructure along high-traffic streets.				
Action Number	SMC-28	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	33/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Severe Weather				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Office of Sustainability				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA, BRIC		
Additional Details					

Mitigation Action	Expand heat-resilience programs for low-income residents that provide cooling devices and help them enroll in or qualify for energy-saving or renewable-energy programs to reduce long-term vulnerabilities during heat waves/extreme heat events.				
Action Number	SMC-29	**Goal(s) Addressed**	1, 2, 3, 4	**Prioritization Score**	32/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Department of Housing				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), BRIC		
Additional Details					

Mitigation Action	Implement a community-driven heat vulnerability assessment to map and validate extreme heat data, helping to identify high-risk areas, particularly those with vulnerable populations. This assessment can support the identification of cooling infrastructure and heat-reduction initiatives.				
Action Number	SMC-30	**Goal(s) Addressed**	1, 2, 3, 4	**Prioritization Score**	36/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Severe Weather				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Sustainability				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), BRIC		
Additional Details					

Mitigation Action	Expand the County's wildfire resilience program to implement a vegetation management program and fuel reduction projects within the Unincorporated County, including parks, rights-of-way, and critical evacuation corridors. This initiative will leverage partnerships with CalFire, the San Mateo Resource Conservation District, the San Francisco Public Utilities Commission, and Caltrans to execute defensible space projects to reduce the community's risk.				
Action Number	SMC-31	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	36/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Parks Department, CalFire, San Mateo Resource Conservation District, San Francisco Public Utilities Commission, Caltrans				
Additional Participating Jurisdictions	n/a				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP Post Fire, FMAG, California Fire Safe Council grants		
Additional Details					

Mitigation Action	Implement drought-resilience policies to reduce the drought impacts for residents and businesses. This can include, but is not limited to, waiving or reducing fees for the replacement of domestic wells that have failed due to drought conditions.				
Action Number	SMC-32	**Goal(s) Addressed**	1, 5	**Prioritization Score**	28/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Drought				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Health				
Supporting Agency / Organization	San Mateo County Planning and Building Department				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	The County has developed a Drought Resilience Plan and created a Water Shortage Taskforce to comply with Senate Bill 552. The Drought Resilience Plan is currently being finalized and will be adopted along with the Safety Element.				

Mitigation Action	Implement a standardized hazard warning and evacuation signage program, informed by the State and Cal OES tsunami mapping, to delineate risk zones and evacuation routes for tsunamis and flood-prone areas, particularly in Coastside communities.				
Action Number	SMC-33	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	31/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Flood, Severe Weather, Tsunami				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Emergency Management				
Supporting Agency / Organization	San Mateo County Department of Public Works				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details	A tsunami zone viewer and webpage were created. The placement of updated and visible evacuation signage was initiated in coastal areas. SMC EM continues to work with partners to raise awareness on tsunami preparedness and public safety communications.				

Mitigation Action	Strengthen core public health infrastructure for surveillance, laboratories, and disease control to mitigate pandemic impacts.				
Action Number	SMC-34	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	n/a				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This action was removed to keep the LHMP focused exclusively on natural hazards.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Increase situational awareness and trustful communication and engagement with the most vulnerable populations by coordinating culturally relevant public health messaging to reduce the risk of outbreaks, and maintain healthcare emergency communication infrastructure by coordinating relevant messaging.				
Action Number	SMC-35	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	n/a				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This action was removed to keep the LHMP focused exclusively on natural hazards.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Enhance preparedness of healthcare facilities through participation in the San Mateo County Healthcare Coalition and coordination of the hazard mitigation plan into the Coalition policy and planning process.				
Action Number	SMC-36	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	n/a				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This action was removed to keep the LHMP focused exclusively on natural hazards.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Rapidly eliminate outbreaks and spread of disease as new disease risks emerge and threaten the public's health.				
Action Number	SMC-37	**Goal(s) Addressed**	n/a	**Prioritization Score**	n/a
Year Added to the Plan	2021	**Timeline** *(estimated)*	n/a	**Implementation Priority**	n/a
Hazard(s) Mitigated	n/a				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This action was removed to keep the LHMP focused exclusively on natural hazards.		
Benefits *(Loss Avoided)*	n/a				
Lead Agency / Organization	n/a				
Supporting Agency / Organization	n/a				
Additional Participating Jurisdictions	n/a				
Estimated Cost	n/a	**Potential Funding Source**	n/a		
Additional Details					

Mitigation Action	Leverage partnerships with engineering, architectural, design, and home building organizations to provide specialized training on seismic code implementation. This initiative will deliver information and marketing materials to assist professionals in communicating the life safety and economic benefits of seismic safety and compliance through targeted outreach and potentially co-sponsored workshops. Additionally, the County will partner with community-based organizations to pilot low-cost, nonstructural earthquake mitigation measures and document those efforts as part of public and professional information campaigns.				
Action Number	SMC-38	**Goal(s) Addressed**	1, 2, 4, 5	**Prioritization Score**	37/40
Year Added to the Plan	2026	**Timeline** *(estimated)*	1 to 3 Years	**Implementation Priority**	High
Hazard(s) Mitigated		Earthquake			
Project Status		New	If *No Longer Needed*, provide reason.	n/a	
Benefits *(Loss Avoided)*		High			
Lead Agency / Organization		San Mateo County Department of Emergency Management			
Supporting Agency / Organization		San Mateo County Planning and Building Department, San Mateo County Department of Housing			
Additional Participating Jurisdictions		n/a			
Estimated Cost		Medium	**Potential Funding Source**	General Fund (Staff Time), National Earthquake Hazards Reduction Program grants	
Additional Details					

Mitigation Action	Implement climate adaptation actions identified in the San Mateo County General Plan Safety Element Update and the San Mateo County Climate Action Plan. Continue efforts to integrate climate adaptation actions into other county plans and regulations, such as the Local Coastal Program and the Zoning Regulations.				
Action Number	SMC-39	**Goal(s) Addressed**	1, 3, 4, 5	**Prioritization Score**	36/40
Year Added to the Plan	2026	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire				
Project Status	New	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	San Mateo County Department of Sustainability				
Supporting Agency / Organization	San Mateo County Planning and Building Department				
Additional Participating Jurisdictions	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, BRIC		
Additional Details *(optional)*	The San Mateo County Climate Action Plan was completed in 2022. The San Mateo County Sea Level Rise Vulnerability Assessment was completed in 2018 for the San Mateo County coast and bay shorelines except for the south coast. The South Coast Sea Level Rise Risk and Solutions Study was completed in 2022.				

APPENDIX A. HAZARD MAPS

[Maps are under development…]

APPENDIX B. STAKEHOLDER AND PUBLIC ENGAGEMENT

[Information and supporting documentation will be added after the Public Comment Period concludes.]

APPENDIX C. HAZARD RISK RANKING DETAILS

This appendix provides the details of the hazard ranking results presented in Section 9 of this Annex. For a comprehensive explanation of the risk assessment methodology used for the 2026 LHMP rankings, refer to Chapter 4 in **Volume 1** of this Plan.

C.1. Probability of Occurrence

Hazard Event	Probability of Occurrence		Probability Factor	Weighted Factor
Dam Failure	Low	A significant hazard event is likely to occur within 100 years.	1	N/A
Drought	Medium	A significant hazard event is likely to occur within 25 years.	1	N/A
Earthquake	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A
Riverine Flooding ***(Flood)***	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A
Urban/Flash Flooding ***(Flood)***	High	A significant hazard event is likely to occur annually.	3	N/A
Coastal Flooding ***(Flood)***	Low	A significant hazard event is likely to occur within 100 years.	1	N/A
Landslide	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A
Sea Level Rise	High	A significant hazard event is likely to occur annually.	3	N/A
Heavy Rainfall ***(Severe Weather)***	High	A significant hazard event is likely to occur annually.	3	N/A
Heat Wave/Extreme Heat ***(Severe Weather)***	High	A significant hazard event is likely to occur annually.	3	N/A
Fog ***(Severe Weather)***	Low	A significant hazard event is likely to occur within 100 years.	1	N/A
Severe Thunderstorm ***(Severe Weather)***	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A
Tornado ***(Severe Weather)***	Low	A significant hazard event is likely to occur within 100 years.	1	N/A
Strong Winds ***(Severe Weather)***	High	A significant hazard event is likely to occur annually.	3	N/A
Tsunami	Low	A significant hazard event is likely to occur within 100 years.	1	N/A
Wildfire	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A

C.2. Extent Factors

Hazard Event	Extent Factor	Extent		Extent Factor	Weighted Factor	Score
Dam Failure	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Medium	Medium potential that this hazard could be catastrophic.	2	3	6
Drought	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Earthquake	***Extent/Severity***	High	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident.	3	3	9
	Catastrophic	High	High potential that this hazard could be catastrophic.	3	3	9
Riverine Flooding ***(Flood)***	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Medium	Medium potential that this hazard could be catastrophic.	2	3	6
Urban/Flash Flooding ***(Flood)***	***Extent/Severity***	High	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident.	3	3	9
	Catastrophic	High	High potential that this hazard could be catastrophic.	3	3	9
Coastal Flooding ***(Flood)***	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Medium	Medium potential that this hazard could be catastrophic.	2	3	6
Landslide	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3

Hazard Event	Extent Factor	Extent		Extent Factor	Weighted Factor	Score
Sea Level Rise	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Heavy Rainfall ***(Severe Weather)***	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Medium	Medium potential that this hazard could be catastrophic.	2	3	6
Heat Wave/Extreme Heat ***(Severe Weather)***	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Fog ***(Severe Weather)***	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Severe Thunderstorm ***(Severe Weather)***	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Medium	Medium potential that this hazard could be catastrophic.	2	3	6
Tornado ***(Severe Weather)***	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Strong Winds ***(Severe Weather)***	***Extent/Severity***	Medium	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident.	2	3	6
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3

Hazard Event	Extent Factor	Extent		Extent Factor	Weighted Factor	Score
Tsunami	***Extent/Severity***	Low	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident.	1	3	3
	Catastrophic	Low	Low potential that this hazard could be catastrophic.	1	3	3
Wildfire	***Extent/Severity***	High	Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident.	3	3	9
	Catastrophic	High	High potential that this hazard could be catastrophic.	3	3	9

C.3. Vulnerability Factors

Hazard Event	Vulnerability Factor	Vulnerability		Vulnerability Factor	Weighted Factor	Score
Dam Failure	***Population Exposure***	Medium	15% to 29% of the population is exposed to the hazard.	2	3	6
	Property Exposure	Medium	10% to 24% of the total assessed property value is exposed to a hazard.	2	1	2
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Drought	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	Low	9% or less of the total assessed property value is exposed to a hazard.	1	1	1
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Earthquake	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Medium	Changes in development have increased the community's exposure to the hazard between 5% and 9%.	2	1	2

Hazard Event	Vulnerability Factor	Vulnerability		Vulnerability Factor	Weighted Factor	Score
Riverine Flooding *(Flood)*	***Population Exposure***	Low	14% or less of the population is exposed to the hazard.	1	3	3
	Property Exposure	Medium	10% to 24% of the total assessed property value is exposed to a hazard.	2	1	2
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Urban/Flash Flooding *(Flood)*	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Medium	Changes in development have increased the community's exposure to the hazard between 5% and 9%.	2	1	2
Coastal Flooding *(Flood)*	***Population Exposure***	Low	14% or less of the population is exposed to the hazard.	1	3	3
	Property Exposure	Low	9% or less of the total assessed property value is exposed to a hazard.	1	1	1
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Landslide	***Population Exposure***	Medium	15% to 29% of the population is exposed to the hazard.	2	3	6
	Property Exposure	Medium	10% to 24% of the total assessed property value is exposed to a hazard.	2	1	2
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Sea Level Rise	***Population Exposure***	Low	14% or less of the population is exposed to the hazard.	1	3	3
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Medium	Changes in development have increased the community's exposure to the hazard between 5% and 9%.	2	1	2

Hazard Event	Vulnerability Factor	Vulnerability		Vulnerability Factor	Weighted Factor	Score
Heavy Rainfall ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Heat Wave/Extreme Heat ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	No Vulnerability	None of the total assessed property value is exposed to a hazard.	0	1	0
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Fog ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	No Vulnerability	None of the total assessed property value is exposed to a hazard.	0	1	0
	Changes in Development	No Vulnerability	Changes in development have had no effect and/or have decreased the community's exposure to the hazard.	0	1	0
Severe Thunderstorm ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Tornado ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1

Hazard Event	Vulnerability Factor	Vulnerability		Vulnerability Factor	Weighted Factor	Score
Strong Winds ***(Severe Weather)***	***Population Exposure***	High	30% or more of the population is exposed to the hazard.	3	3	9
	Property Exposure	High	25% or more of the total assessed property value is exposed to the hazard.	3	1	3
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Tsunami	***Population Exposure***	Low	14% or less of the population is exposed to the hazard.	1	3	3
	Property Exposure	Low	9% or less of the total assessed property value is exposed to a hazard.	1	1	1
	Changes in Development	Low	Changes in development have increased the community's exposure to the hazard by 4% or less.	1	1	1
Wildfire	***Population Exposure***	Medium	15% to 29% of the population is exposed to the hazard.	2	3	6
	Property Exposure	Medium	10% to 24% of the total assessed property value is exposed to a hazard.	2	1	2
	Changes in Development	Medium	Changes in development have increased the community's exposure to the hazard between 5% and 9%.	2	1	2

C.4. Impact Factors

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Dam Failure	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	High	Environmental impact from a single significant event is likely to be substantial, requiring extensive outside resources and support; and/or repair, cleanup, restoration, and/or preservation work.	3	1	3
	Continuity of Operations/Delivery of Services	Medium	Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	2	1	2
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	No Impact	Climate change trends will not increase the impacts of this hazard.	0	1	0

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Drought	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	Low	Less than $500,000 in property, facilities, and infrastructure damages is expected from a single significant event, or damages are expected to occur to less than 5% of the property value within the jurisdiction.	1	2	2
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Medium	Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	2	1	2
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Earthquake	***Population and Life Safety***	High	Populations exposed to this hazard are likely to experience significant adverse impacts, such as fatalities and severe injuries.	3	3	9
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	High	More than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction.	3	2	6
	Economic	High	Total economic impact is likely to be greater than $10 million.	3	1	3
	Environmental	High	Environmental impact from a single significant event is likely to be substantial, requiring extensive outside resources and support; and/or repair, cleanup, restoration, and/or preservation work.	3	1	3
	Continuity of Operations/Delivery of Services	High	Impact lasting more than 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	3	1	3
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	No Impact	Climate change trends will not increase the impacts of this hazard.	0	1	0

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Riverine Flooding *(Flood)*	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Urban/Flash Flooding *(Flood)*	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	High	More than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction.	3	2	6
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Medium	Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	2	1	2
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Coastal Flooding *(Flood)*	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	High	More than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction.	3	2	6
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Medium	Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	2	1	2
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Landslide	***Population and Life Safety***	High	Populations exposed to this hazard are likely to experience significant adverse impacts, such as fatalities and severe injuries.	3	3	9
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	Medium	Climate Change trends will increase the impacts of this hazard, but not significantly.	2	1	2

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Sea Level Rise	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	High	More than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction.	3	2	6
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	No Impact	No impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	0	1	0
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Heavy Rainfall *(Severe Weather)*	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Medium	Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	2	1	2
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	Medium	Climate Change trends will increase the impacts of this hazard, but not significantly.	2	1	2

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Heat Wave/Extreme Heat ***(Severe Weather)***	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	No Impact	Little to no property, facilities, and infrastructure damage is expected from a single significant event.	0	2	0
	Economic	Low	Total economic impact is not likely to be greater than $100,000.	1	1	1
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	No Impact	No impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	0	1	0
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Fog *(Severe Weather)*	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Low	Underserved populations exposed to the hazard are likely to experience minimal adverse/disproportionate impacts, such as ambulatory injuries.	1	3	3
	Property, Facilities, and Critical Infrastructure	Low	Less than $500,000 in property, facilities, and infrastructure damages is expected from a single significant event, or damages are expected to occur to less than 5% of the property value within the jurisdiction.	1	2	2
	Economic	Low	Total economic impact is not likely to be greater than $100,000.	1	1	1
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	No Impact	Future development trends will not increase the impacts of this hazard, and/or may even decrease it.	0	1	0
	Climate Change	No Impact	Climate change trends will not increase the impacts of this hazard.	0	1	0

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Severe Thunderstorm ***(Severe Weather)***	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Medium	Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work.	2	1	2
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	Low	Climate Change trends will minimally increase the impacts of this hazard.	1	1	1

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Tornado *(Severe Weather)*	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Low	Underserved populations exposed to the hazard are likely to experience minimal adverse/disproportionate impacts, such as ambulatory injuries.	1	3	3
	Property, Facilities, and Critical Infrastructure	Low	Less than $500,000 in property, facilities, and infrastructure damages is expected from a single significant event, or damages are expected to occur to less than 5% of the property value within the jurisdiction.	1	2	2
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	Low	Climate Change trends will minimally increase the impacts of this hazard.	1	1	1

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Strong Winds *(Severe Weather)*	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	Medium	Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care.	2	3	6
	Property, Facilities, and Critical Infrastructure	Medium	More than $500,000 but less than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to more than 5% but less than 15% of the property value within the jurisdiction.	2	2	4
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	Low	Climate Change trends will minimally increase the impacts of this hazard.	1	1	1

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Tsunami	***Population and Life Safety***	Low	Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries.	1	3	3
	Underserved Population	Low	Underserved populations exposed to the hazard are likely to experience minimal adverse/disproportionate impacts, such as ambulatory injuries.	1	3	3
	Property, Facilities, and Critical Infrastructure	Low	Less than $500,000 in property, facilities, and infrastructure damages is expected from a single significant event, or damages are expected to occur to less than 5% of the property value within the jurisdiction.	1	2	2
	Economic	Low	Total economic impact is not likely to be greater than $100,000.	1	1	1
	Environmental	Low	Environmental impact from a single significant event is likely to be minimal, requiring little to no outside resources and support; and/or minimal repair, cleanup, restoration, or preservation work.	1	1	1
	Continuity of Operations/Delivery of Services	Low	Impact lasting less than 24 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	1	1	1
	Future Development	Low	Future development trends will minimally increase the impacts of this hazard.	1	1	1
	Climate Change	No Impact	Climate change trends will not increase the impacts of this hazard.	0	1	0

Hazard Event	Impact Factor	Impact		Impact Factor	Weighted Factor	Score
Wildfire	***Population and Life Safety***	Medium	Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care.	2	3	6
	Underserved Population	High	Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries.	3	3	9
	Property, Facilities, and Critical Infrastructure	High	More than $5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction.	3	2	6
	Economic	Medium	Total economic impact is likely to be greater than $100,000, but less than or equal to $10 million.	2	1	2
	Environmental	High	Environmental impact from a single significant event is likely to be substantial, requiring extensive outside resources and support; and/or repair, cleanup, restoration, and/or preservation work.	3	1	3
	Continuity of Operations/Delivery of Services	High	Impact lasting more than 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event.	3	1	3
	Future Development	Medium	Future development trends will increase the impacts of this hazard, but not significantly.	2	1	2
	Climate Change	High	Climate Change trends will significantly increase the impacts of this hazard.	3	1	3

APPENDIX D. PLAN ADOPTION

[Placeholder for adoption documentation after State and FEMA approval]