COUNTY OF SAN MATEO
EMERGENCY MANAGEMENT

Local Hazard Mitigation Plan

San Mateo County, California

City of Menlo Park Annex

2026

DRAFT

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This Annex details the hazard mitigation elements specific to the City of Menlo Park, 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 the City of Menlo Park. This Annex provides additional information specific to the City, 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 City of Menlo Park 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
Brandon Bond	Emergency Preparedness Coordinator	City Manager's Office
Liz Tapia	Management Analyst II	City Manager's Office
Rachel Londer	Sustainability Manager	City Manager's Office
Azalea Mitch	Public Works Director	Public Works
Brian Henry	Assistant Public Works Director	Public Works
Stephen Stolte	Assistant City Manager	City Manager's Office
Brittany Mello	Administrative Services Director	Administrative Services
Deanna Chow	Community Development Director	Community Development

2. JURISDICTION PROFILE

The City of Menlo Park is located in the San Francisco Bay Area, positioned between the major metropolitan centers of San Francisco and San José. The City encompasses approximately 19 square miles. Menlo Park is characterized by a mix of established residential neighborhoods, commercial corridors, institutional land uses, and open space. The City's geographic setting includes the San Francisco Bay to the east and the foothills of the Pacific Coast Range to the west, influencing local environmental conditions and hazard exposure.

The City of Menlo Park's proximity to Stanford University and Menlo College contributes to daytime population fluctuations and concentrations of critical facilities and infrastructure. The City is also a regional employment center, including major research and technology employers such as Meta Platforms and SRI International, and is located adjacent to Sand Hill Road, a global center of venture capital activity. The City of Menlo Park experiences a Mediterranean climate with warm, dry summers and cool, wet winters. Average summer temperatures typically range from the mid-60s to the high 70s, while winter temperatures commonly fall in the upper 30s to 40s. Most annual precipitation occurs

between November and March, conditions that influence flood, storm, and drought-related hazard considerations.

2.1. Brief History

In 1854, Menlo Park received its official name when two (2) Irishmen, Dennis J. Oliver and D. C. McGlynn, whose wives were sisters, purchased 1,700 acres (some sources say it was 640 acres) bordering County Road, now El Camino Real, and built two (2) houses with a common entrance.

Across the drive, they erected a huge wooden gate with tall arches on which the name of their estate was printed in foot-high letters: "MENLO PARK," with the date, August 1854, underneath it. When the railroad came through in 1863, this station had no name; it was just the end of the line, but it needed a designation. During a discussion about the choice of a name, a railroad official looked over at the gates and decided that "MENLO PARK" would be appropriate, and so the name was officially adopted. This station is now California State Landmark No. 955, the oldest California station in continuous operation.

On March 23, 1874, Menlo Park became the second incorporated city in San Mateo County, although only for a short time. The purpose was to provide a quick way to raise money for road repairs.

This incorporation, which included Fair Oaks (later the Town of Atherton) and Ravenswood (later the City of East Palo Alto), lasted only until 1876. Little occurred to change the rural flavor of the community until the first World War when, almost overnight, Menlo Park was populated by 43,000 soldiers in training at Camp Fremont, on land which extended from Valparaiso Avenue to San Francisquito Creek, and El Camino Real to the Alameda de las Pulgas, with the Base Hospital and other facilities on Willow Road where the Veterans Administration Medical Center now stands.

Following the war, enough service center activity remained to prompt an effort to reincorporate Menlo Park in 1923 with much the same boundaries as the earlier town. Incorporation planning involving Menlo Park and Atherton culminated in a dramatic race to the County Courthouse to file differing plans. Atherton representatives arrived only minutes before those from Menlo Park, who had wished to include Atherton in their plans. Final incorporation of Menlo Park took place in November 1927.

2.2. Governing Body Format

Menlo Park is a general law city under the State of California and operates under the Council-Manager form of government. The City Council is the governing body for the City of Menlo Park. In general, during municipal elections, City Council members are elected from five (5) districts to four (4) year overlapping terms. The Mayor and Mayor Pro Tempore (Vice Mayor) each serve one (1) year terms and are selected annually by the City Council at its first regular meeting in December. The Mayor, who represents the City of Menlo Park at ceremonial and public functions, also serves as the presiding officer of the City Council.

The City Council appoints the City Manager and the City Attorney. The City is organized into operating departments, including Administrative Services, City Manager's Office, Community Development, Library and Community Services, Police, and Public Works. The City of Menlo Park assumes responsibility for adopting this Plan, and the Community Development, Public Works, and Police Departments will oversee its implementation.

2.3. Population

In 2024, the City of Menlo Park had a population of 33,040, a 2.2% decrease from the estimated 2020 population of 33,782. **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.[1]

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***
32,026	33,782	33,040	-2.2%	5.9%	16.6%	5.8%

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. The City of Menlo Park adopted its General Plan under this law and has updated various elements several times over the years, including most recently when the City Council adopted the General Plan in November 2016.

Recent development in Menlo Park has occurred primarily through infill and redevelopment within existing urban areas. Growth has been concentrated in the Bayfront area and in the Downtown and El Camino Real corridors, where higher-intensity uses are permitted. Development in the Bayfront area is subject to enhanced floodplain management and resilience requirements due to its exposure to flooding and sea level rise. Elsewhere in the City, development has been limited to small-scale residential projects and accessory dwelling units. These development patterns emphasize the need to incorporate hazard mitigation considerations into land use planning and project review.

During the next five (5) years, the City has advanced planning efforts to accommodate future residential development through updates to its General Plan, including adoption of the Housing Element for the 2023–2031 planning period. The Housing Element identifies opportunity sites throughout the City that may accommodate additional residential growth, including higher-density development near transit corridors and commercial centers. While much of this growth is expected to occur through infill and redevelopment, these changes may incrementally increase population and asset exposure in areas vulnerable to seismic activity, flooding, extreme heat, and other climate-related hazards. As such, future development identified through General Plan implementation will continue to be evaluated for consistency with hazard mitigation policies, floodplain management regulations, and climate adaptation strategies outlined in this LHMP.

[1] United States Census Bureau. (2024). QuickFacts: City of Menlo Park, California. Retrieved from https://www.census.gov/quickfacts/fact/table/menloparkcitycalifornia/.

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).

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?	The City of Menlo Park has received ongoing interest from property owners in the West Menlo Triangle, an unincorporated residential area located within the City's sphere of influence, regarding potential annexation. The area consists of approximately 14 acres of primarily single-family residential development. While the City has not identified the area as being located within a known high-risk hazard, annexation would require additional site-specific analysis and environmental review consistent with applicable planning, hazard mitigation, and California Environmental Quality Act (CEQA) requirements.
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.*	Over the past five (5) years, development activity in Menlo Park has remained concentrated primarily in the Bayfront area and the Downtown/El Camino Real corridor, with an emphasis on mixed-use, commercial, and higher-density residential projects consistent with regional housing and transportation objectives. Of these areas, the Bayfront continues to present greater exposure to natural hazards, including flooding, sea level rise, and storm surge. New development and redevelopment within the Bayfront area are subject to special flood hazard area construction requirements, resilience standards, and adaptation policies as established by City ordinances and applicable state and federal regulations. These requirements are intended to reduce risk to life, property, and critical infrastructure while accommodating planned growth.
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.*	During the next five (5) years, the City has advanced planning efforts to accommodate future residential development through updates to its General Plan, including adoption of the Housing Element for the 2023–2031 planning period. The Housing Element identifies opportunity sites throughout the City that may accommodate additional residential growth, including higher-density development near transit corridors and commercial centers. While much of this growth is expected to occur through infill and redevelopment, these changes may incrementally increase population and asset exposure in areas subject to seismic, flooding, extreme heat, and other climate-related hazards.

Criteria	Description
Provide the number of permits for each hazard area or provide a qualitative description of where development has occurred.	Recent development in Menlo Park has occurred primarily through infill and redevelopment within existing urban areas. Growth has been concentrated in the Bayfront area and in the Downtown and El Camino Real corridors, where higher-intensity uses are permitted. Development in the Bayfront area is subject to enhanced floodplain management and resilience requirements due to its exposure to flooding and sea level rise. Elsewhere in the City, development has been limited to small-scale residential projects and accessory dwelling units.

3.1. Changes in Priority

Over the past five (5) years, the City of Menlo Park has maintained its hazard mitigation priorities while increasing emphasis on climate resilience, emergency preparedness, and integration of hazard considerations into land use and capital planning. Participation in the 2026 LHMP reflects the City's continued priority to maintain FEMA eligibility and update risk assessments and mitigation actions. These changes represent an increased focus on integration and resilience rather than a substantive shift in mitigation priorities. Additionally, mitigation actions from the previous Plan were updated, and a more concerted effort to achieve equitable outcomes for all communities, including underserved communities and socially vulnerable populations, has been implemented.

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 the City of Menlo Park's authorities, policies, programs, and resources. Goals and mitigation actions were developed using input from this assessment. Information regarding the City'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 City of Menlo Park'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 City'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	Local, State	City Manager's Office	General Plan (November 2016)
Capital Improvement Plan	Yes	Local	Public Works Department	5-year basis, with annual updates
Floodplain Management / Basin Plan	Yes	Local	Community Development Department	The City maintains FEMA floodplain maps and provides information on flood zones to the public upon request.
Stormwater Management Plan	Yes	Local	Public Works Department	National Pollutant Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit
Open Space Plan	Yes	Local	Public Works Department	General Plan (Open Space/Conservation Element) Parks and Recreation Facilities Master Plan
Stream Corridor Management Plan	No	n/a	Public Works Department	Coordinated with the San Francisquito Creek Joint Powers Authority and revised annually
Watershed Management or Protection Plan	No	n/a	n/a	n/a
Economic Development Plan	Yes	Local	City Manager's Office	Updated and adopted in 2015
Comprehensive Emergency Management Plan	Yes	Local	City Manager's Office	
Emergency Operations Plan	Yes	Local	City Manager's Office	The Emergency Operations Base Plan is the foundation of the Comprehensive Emergency Management Plan (CEMP) and is in compliance with NIMS and SIMS
Evacuation Plan	Yes	Local	City Manager's Office	Evacuation Planning is a component of several hazard-specific Incident Response Guides

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.)*
Post-Disaster Recovery Plan	Yes	Local	City Manager's Office	Outlined in the Emergency Operations Plan, supported with several post-disaster recovery documents, such as the Preliminary Damage Assessment procedure.
Transportation Plan	Yes	Local	Public Works Department	Transportation Master Plan (November 2020)
Strategic Recovery Planning Report	Yes	Local	City Manager's Office	The current Strategic Recovery Plan is a plan in progress as a part of the CEMP
Climate Adaptation Plan	Yes	Local	City Manager's Office	2030 Climate Action Plan (Adopted in June 2020, Amended in August 2024)
Resilience Plan	Yes	Local	City Manager's Office	It is an element of the 2030 Climate Action Plan
Urban Water Management Plan	Yes	Local	Menlo Park Municipal Water	Urban Water Management Plan (June 2021) Water Shortage Contingency Plan (June 2021)
Community Wildfire Protection Plan	No	n/a	n/a	n/a
Regulatory Capability				
Building Code	Yes	Local	Community Development Department	Title 12 of the City Code
Zoning Code	Yes	Local	Community Development Department	Title 16 of the City Code General Plan (Land Use and Zoning Map)
Subdivision Code	Yes	Local	Community Development Department	Title 15 of the City Code
Flood Damage Prevention Ordinance	Yes	Local	Public Works Department	Title 12, Chapters 12.42.5 and 12.42.52 of the City Code
Cumulative Substantial Damage Ordinance	No	n/a	n/a	n/a
Freeboard	Yes	Local	Public Works Department	Incorporating standards from ASCE 24 (Flood Resistant Design and Construction)
Growth Management Ordinance	Yes	Local	Public Works Department	ConnectMenlo General Plan
Site Plan Review	Yes	Local	Community Development Department	
Stormwater Management Ordinance	Yes	Local	Public Works Department	Title 7, Chapter 7.42 of the City Code, in compliance with the NPDES Municipal Regional Permit

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.)*
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Public Works Department	The City is required to comply with the NDPES Stormwater Discharge Permit
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	Section 1102 of the California Civil Code

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. This capability includes 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, Community Development Department
Mitigation Planning Committee	Yes	Emergency and Disaster Preparedness Division, City Manager's Office
Environmental Board/Commission	Yes	Sustainability Division, City Manager's Office
Open Space Board/Committee	Yes	Maintenance Division, Public Works Department
Economic Development Commission/Committee	Yes	Economic Development Division, City Manager's Office
Maintenance programs to reduce risk	Yes	Maintenance Division, Public Works Department
Mutual Aid Agreements	Yes	Public Works Department City Manager's Office
Technical/Staffing Capabilities		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Public Works Department Community Development Department
Engineer(s) or professional(s) trained in building or infrastructure construction practices	Yes	Public Works Department
Planners or engineers with an understanding of natural hazards	Yes	Public Works Department
NFIP Floodplain Administrator	Yes	Public Works Department

Capability	Yes/No	Comments *(e.g., position, department, agency, explanation)*
Surveyor(s)	Yes	Community Development Department
Personnel skilled or trained in GIS applications	Yes	Administrative Services Division
A scientist familiar with natural hazards	No	n/a
Warning systems/services	Yes	SMC Alert, in partnership with the San Mateo County Department of Emergency Management
Emergency manager	Yes	City Manager's Office
Grantwriter(s)	Yes	City Manager's Office
Staff with expertise or training in benefit cost analysis	Yes	Administrative Services Division
Professionals trained in conducting damage assessments	Yes	Public Works Department

4.3. Fiscal Capabilities

Table 5 lists fiscal capabilities available to the City of Menlo Park 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	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	Yes (City Council authorization required)
Other federal or state funding programs	Yes
Open space acquisition funding programs	No

4.4. Education and Outreach Capabilities

Table 6 lists the City'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	City Manager's Office
Personnel skilled or trained in website development	Yes	City Manager's Office
Hazard mitigation information is available on the jurisdiction's website	Yes	City Manager's Office, information posted based on relevance of the season
Utilize social media for hazard mitigation education and outreach	Yes	**Facebook:** Facebook.com/cityofmenlopark/ **X:** x.com/MenloParkPD **Instagram:** Instagram.com/cityofmenlopark/ **Nextdoor:** Nextdoor.com/menlo-park--ca/
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Planning Commission City Manager's Office
Other programs already in place that could be used to communicate hazard-related information	Yes	City Manager's Office
An established warning system for hazard events	Yes	SMC Alert, in partnership with the San Mateo County Department of Emergency Management Zonehaven evacuation platform

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 the City of Menlo Park.

Table 7. Community Classifications

Program	Yes/No	Classification *(if applicable)*	Date Classified *(if applicable)*
Community Rating System (CRS)	Yes	8	10/1/2025
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3	2020
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	2	2023
NWS StormReady®	No	n/a	n/a
NWS TsunamiReady®	No	n/a	n/a

Program	Yes/No	Classification *(if applicable)*	Date Classified *(if applicable)*
Firewise USA®	No	n/a	n/a

4.6. Needs to Expand/Improve Capabilities

The City has made progress in mainstreaming mitigation into land use decisions and capital investment programs, including embedding hazard mitigation, climate adaptation, and environmental justice considerations into General Plan elements, zoning standards, development review conditions, and Capital Improvement Program criteria. The City 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). To better implement the Plan's mitigation strategies, Menlo Park must strengthen several technical, planning, and funding-related capabilities. A foundational need is to improve the City's asset inventory and risk analytics, particularly for seismic, flood, sea level rise, and repetitive loss risks. Developing a comprehensive, GIS-based inventory of critical facilities, lifelines, and infrastructure, paired with consistent risk and consequence scoring, would allow Menlo Park to better prioritize mitigation projects, quantify avoided losses, and establish a defensible basis for capital planning and grant applications.

The City also needs to expand its ability to mainstream mitigation into land use decisions and capital investment programs. This includes embedding hazard mitigation, climate adaptation, and environmental justice considerations into General Plan elements, zoning standards, development review conditions, and Capital Improvement Program criteria. By systematically integrating mitigation into these processes, Menlo Park can ensure that new development and infrastructure investments reduce future risk, protect vulnerable populations, and avoid exposure to hazards as growth continues.

Finally, Menlo Park must enhance its infrastructure readiness, flood preparedness, and grant strategy capacity. This includes implementing a lifecycle approach to emergency power systems at critical facilities, strengthening multi-agency coordination and Emergency Action Plans for flood and sea level rise risks, and conducting regular exercises to test operational readiness. In parallel, the City should build a more robust mitigation grant strategy by maintaining a shelf of grant-ready projects with defined scopes, cost estimates, benefit-cost documentation, and environmental readiness. Together, these improvements would position Menlo Park to more effectively leverage state and federal funding, accelerate implementation of mitigation actions, and achieve measurable reductions in long-term disaster risk.

5. NATIONAL FLOOD INSURANCE PROGRAM

The City of Menlo Park is a member of the National Flood Insurance Program (NFIP) and has chosen to participate in the NFIP Community Rating System (CRS) Program. The City 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 City'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
060321	6/14/1974	4/5/2019	10/1/2020	10/1/2025	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 City of Menlo Park Floodplain Administrator information is listed in **Table 9**.

Table 9. Floodplain Administrator

Name	Title	Department	Phone Number
Azalea A. Mitch	P.E., Public Works Director	Public Works	(650) 330-6692

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 (4) or more separate claims payments greater than $5,000 each (including building and contents payment).
- Two (2) 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 (2) of the claim payments must occur within 10 years of one another.[2]

A Severe Repetitive Loss property is defined by FEMA as any NFIP-insured single-family or multi-family residential building meeting at least one (1) of the following paid loss criteria since 1978 or from a building constructed after 1978, regardless of any changes in ownership:[3]

- That has incurred flood-related damage for which four (4) 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.

[2] 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.
[3] 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.

- For which at least two (2) 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 the City of Menlo Park.

Table 10. Repetitive Loss and Severe Repetitive Loss Properties

Repetitive Loss Properties		Severe Repetitive Loss Properties	
Total	***Occupancy***	***Total***	***Occupancy***
1	**1** Single Family	0	n/a
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*			

Table 11 summarizes NFIP active policies and coverage in force data for the City of Menlo Park.

Table 11. NFIP Policies

NFIP Policies	Insurance in Force	Total Claims Paid	Sum of Claims Paid
227	$64,327,000	5	$62,703.56

5.3. Participation Activities

The City of Menlo Park'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 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 18, Chapter 18.22 of the City Code)*

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 market value of the structure either:

- Before the improvement or repair is started.
- If the structure has been damaged, and is being restored, 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 that alteration affects the external dimensions of the structure. The term does not, however, 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.
    - Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places. *(Title 18, Chapter 18.22 of the City Code)*

5.3.3. Substantial Damage/Substantial Improvement Determination Process

Menlo Park determines whether a structure has sustained substantial damage following a flood event through a coordinated, post-disaster assessment process led by the Community Development Department and Building Division, consistent with the City's floodplain management regulations and NFIP requirements. After a flooding incident, City staff conduct field inspections and damage assessments to document flood-related impacts to affected structures. Property owners are required to provide repair cost estimates prepared by licensed contractors, which the City reviews. City staff then compares the total cost to repair the flood damage (to restore the structure to its pre-damage condition) against the structure's pre-damage market value (excluding land value), using accepted valuation sources such as County Assessor records or independent appraisals. If the cost of repairs equals or exceeds 50% of the structure's market value, the structure is determined to be substantially damaged. When this threshold is met, the City notifies the property owner in writing and requires that any reconstruction or improvement comply with current floodplain standards, including elevation or floodproofing requirements. This process ensures consistent enforcement of substantial damage and substantial improvement provisions while supporting long-term flood risk reduction and NFIP compliance.

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 (2) 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 (5) years to demonstrate progress in local mitigation efforts. During the performance period since the adoption of the previous LHMP, the City of Menlo Park 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 (Safety Element)	The Safety Element addresses natural and climate-related hazards, including seismic, flood, fire, and climate impacts, and provides policies guiding the type, location, intensity, and design of development in hazard-prone areas. These policies are intended to reduce risk to life and property while supporting informed land use decisions consistent with state requirements, including Assembly Bill 2140. The LHMP served as a crucial tool in shaping policies and actions within the General Plan.
Climate Action and Climate Adaptation Planning	The City's Climate Action Plan and related climate initiatives support hazard mitigation by reducing greenhouse gas emissions and advancing adaptation strategies related to extreme heat, flooding, drought, and sea level rise. LHMP goals and actions are coordinated with climate planning efforts to support shared mitigation and resilience objectives.
Zoning and Open Space Protection	The Zoning Code (Title 16 of the City Code) includes provisions such as the Open Space and Conservation District, which preserves open space for conservation, hazard buffering, and protection of life and property from fire, flood, and seismic hazards, while coordinating with federal, state, and regional open space planning efforts.
Stormwater Management and Floodplain Regulation	New and redevelopment projects are required to reduce stormwater runoff and pollutant loading consistent with NPDES permit requirements and floodplain management regulations. These requirements support flood hazard mitigation, water quality protection, and climate resilience objectives identified in the LHMP.
Environmental Review and Growth Management	Development projects are subject to environmental review under the CEQA, which provides a mechanism to identify hazard exposure and requires mitigation measures consistent with LHMP goals.
Environmental Protection and Sustainability Programs	The City has adopted ordinances and policies addressing building energy standards, vehicle electrification, sustainable fleet management, and urban forestry. These programs support mitigation of climate-related hazards, including wildfire risk reduction, drought adaptation, and air quality improvement.

Planning Initiative	Current Integration Description
Flood Damage Prevention	Floodplain management regulations (Section 12.42.13 of the City Code) are designed to reduce public and private losses from flooding by protecting life and health, minimizing damage to infrastructure, reducing emergency response costs, and ensuring informed development decisions in Special Flood Hazard Areas (SFHA).
Capital Improvement Planning	The Capital Improvement Plan includes infrastructure projects that support hazard mitigation, including stormwater, transportation, utilities, and public facilities. The City coordinates capital planning with LHMP priorities to ensure consistency and to identify potential funding opportunities for mitigation projects.
Water Supply and Drought Planning	The Urban Water Management Plan and Water Shortage Contingency Plan assess long-term water supply reliability and establish staged response actions for drought and supply interruptions, supporting public health, economic stability, and environmental protection during water shortage events.

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 (5) 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 City will continue to integrate the LHMP into all General Plan Element updates, particularly the Safety Element and the Environmental Justice Element. During periodic General Plan updates, hazard data, vulnerability assessments, and mitigation strategies from the LHMP will be reviewed and incorporated into policy language that addresses seismic safety, flooding, sea level rise, wildfire smoke, extreme heat, and climate adaptation. The City will also use the LHMP's hazard profiles and risk assessments to inform land use policies, site suitability discussions, and long-range growth decisions, ensuring that hazard exposure and resilience considerations are embedded into the City's foundational planning document rather than treated as standalone emergency management topics.
Capital Improvement Program	Mitigation actions identified in the LHMP, such as seismic retrofits, flood control improvements, stormwater system upgrades, and emergency power enhancements at critical facilities, will be evaluated for inclusion in the multi-year Capital Improvement Program (CIP) and annual updates. City departments will use LHMP data to justify project prioritization, scope development, and sequencing, particularly where infrastructure failure would significantly impact life safety, continuity of operations, or vulnerable populations. By aligning mitigation actions with routine capital replacement and rehabilitation cycles, the City will reduce long-term risk, maximize cost efficiency, and leverage mitigation investments across multiple funding sources.

Planning Initiative	Current Integration Description
Building and Zoning Ordinances	Hazard maps, floodplain data, and mitigation policies will inform project conditions of approval, building standards, and floodplain management requirements, including substantial damage and substantial improvement determinations. Mitigation actions and the hazard risk assessment in this LHMP can also inform updates and revisions to the City Code (e.g., building, zoning). Portions of this LHMP will be reviewed to consider any future improvements to the Code, if appropriate.
Emergency Preparedness, Continuity Planning, and Interagency Coordination	The LHMP will continue to guide staff training, emergency operations planning, and collaboration with special districts and regional partners. Through these mechanisms, Menlo Park ensures that hazard mitigation goals and actions are systematically translated from planning documents into day-to-day decision-making, capital investments, and long-term resilience outcomes.

By integrating the LHMP into operational planning, asset management, development financing, continuity planning, climate initiatives, and grant strategies, Menlo Park can move mitigation from a periodic planning exercise to a continuous decision-making framework. These integration mechanisms ensure that hazard data and mitigation actions inform daily operations, long-term investments, and funding decisions, resulting in more consistent implementation, stronger resilience outcomes, and reduced long-term disaster risk for the community.

The City of Menlo Park's Local Planning Team will identify all relevant planning initiatives scheduled for update in the next year and during the annual update process 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 the County and its municipalities. **Table 14** provides information on significant hazard events that uniquely impacted the City of Menlo Park.

Table 14. Significant Past Events

Date	Event Type *(include Disaster Declaration, if applicable)*	Description of Event and Impacts
December 2022	n/a	Heavy rainfall and strong winds resulted in flooding and extended power outages throughout the City.
August 2020	DR-4558	Large wildfires outside San Mateo County led to poor air quality in the City.
February 2017	DR-4308	Heavy rainfall led to flooding and road closures throughout the City.

Date	Event Type *(include Disaster Declaration, if applicable)*	Description of Event and Impacts
December 2012	n/a	An atmospheric river produced heavy rainfall, resulting in $3 million in total damage, including severe creek bank erosion and impacts on private property. Of this total, $820,000 was attributed to residential losses, with the remainder affecting local businesses and infrastructure.
February 1998	DR-1203	An atmospheric river produced heavy rainfall, resulting in flooding and road closures throughout the City.

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).

The Local Planning Team determined that the planning area ***did not have unique vulnerabilities or impacts*** from any of the County's natural hazards; rather, its vulnerabilities and impacts are consistent with those experienced throughout the County based on the hazards profiled in **Volume 1**.

- Dam Failure
- Drought
- Earthquake
- Flood *(riverine flooding, urban/flash flooding, coastal flooding)*
- Landslide
- Sea Level Rise
- Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*
- Tsunami
- Wildfire

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 can be found in Chapter 4 of **Volume 1** of this Plan.

Table 15 outlines the ***unique vulnerabilities and impacts*** for the City of Menlo Park and addresses only the hazards relevant to the jurisdiction. A complete risk assessment for each identified hazard of concern is in **Volume 1** of this Plan. Hazard mapping can be found in Appendix A of this Annex.

Table 15. Hazard Vulnerability and Impact Assessment

Hazard	Vulnerability and Impacts
Dam Failure	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from dam failure; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Drought	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from drought; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Earthquake	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from earthquakes; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from flooding; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Landslide	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from landslides; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Sea Level Rise	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from sea level rise; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from severe weather; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Tsunami	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from tsunamis; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.
Wildfire	The Local Planning Team determined that the City does not have unique vulnerabilities or impacts from wildfires; rather, the jurisdiction's vulnerabilities and impacts are consistent with those experienced throughout the County.

The City 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 16 outlines whether climate change has increased or decreased the City's vulnerability (i.e., exposure) and impact to each natural hazard over the past five (5) years, and the effect of climate change on the future probability of occurrence and impacts from each natural hazard

Table 16. Climate Change: Current and Future Vulnerability and Impact

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

Table 17 outlines whether changes in population within the City over the past five (5) 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 17. 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

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

Table 18 outlines whether development over the past five (5) years has increased or decreased the City'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 18. Changes in Development: Current and Future Vulnerability and Impact

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

Hazard	Vulnerability and Impact
Drought	Increase
Earthquake	Increase
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	Increase
Landslide	No Change Anticipated
Sea Level Rise	Increase
Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	Increase
Tsunami	Increase
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. The City of Menlo Park does not anticipate that future major assets may be exposed or vulnerable to any of the natural 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 mitigated to protect them from identified and anticipated hazards, especially those expected to increase due to climate change.

9. HAZARD RISK RANKING

Table 19 presents the local hazard ranking for the City of Menlo Park 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 19** 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.

It is important to note that 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 19. City of Menlo Park 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
Sea Level Rise	3	6	7	25	38	53
Heat Wave/Extreme Heat ***(Severe Weather)***	3	9	10	15	34	47
Wildfire	2	12	5	29	46	43
Riverine Flooding ***(Flood)***	2	12	6	28	46	43
Severe Thunderstorm ***(Severe Weather)***	2	12	13	21	46	43
Coastal Flooding ***(Flood)***	2	9	5	25	39	36
Drought	2	6	10	19	35	32
Dam Failure	1	12	6	28	46	21
Tornado ***(Severe Weather)***	1	6	13	13	32	15
Fog ***(Severe Weather)***	1	6	9	11	26	12
Landslide	1	6	5	13	24	11
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 also 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 update or before were updated accordingly. Any new mitigation actions are listed as *New* (under Project Status).

The City of Menlo Park agreed to **25** mitigation actions that apply to the jurisdiction's properties for which it has jurisdictional responsibility and authority. A summary of the City's mitigation actions status is listed in **Table 20**.

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 19**). Hazards that ranked *low* (dam failure, drought, landslide, and tsunami) may not have specific mitigation actions detailed in this document.

Table 20. City of Menlo Park Mitigation Actions Summary

Status	Mitigation Action Total
Continuing	1
In Progress	21
Not Yet Started	2
New	0
TOTAL	**24**
Completed	3
No Longer Needed	7

Mitigation Actions per Hazard			
Dam Failure	9	Sea Level Rise	12
Drought	7	Severe Weather *(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)*	21
Earthquake	11	Tsunami	3
Flood *(riverine flooding, urban/flash flooding, coastal flooding)*	22	Wildfire	7
Landslide	5		

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

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. This may include, but not limited to, an inventory of City structures known to be at seismic risk.				
Action Number	MPK-1	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	25/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated		Earthquake, Flood			
Project Status		In Progress	If *No Longer Needed*, provide reason.	n/a	
Benefits *(Loss Avoided)*		Medium			
Lead Agency / Organization		City of Menlo Park Public Works Department			
Supporting Agency / Organization *(If applicable)*		n/a			
Additional Participating Jurisdictions *(If Applicable)*		n/a			
Estimated Cost		High	**Potential Funding Source**	HMGP, FMA	
Additional Details *(optional)*					

Mitigation Action	Integrate the San Mateo County Local Hazard Mitigation Plan and CalEnvrioScreen into other plans, ordinances, and programs that dictate land use decisions within the community, including, but not limited to, the General Plan (and its elements, as appropriate). CalEnviroScreen's four (4) broad groups of environmental condition indicators (exposures, environmental effects, sensitive populations, and socioeconomic factors) can inform plans to promote public health, protect against environmental hazards, and enrich the quality of life for all Menlo Park residents.				
Action Number	MPK-2	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	29/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Earthquake, Flood, Sea Level Rise				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Community Development Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*	The Environmental Justice and Safety elements in the General Plan were completed.				

Mitigation Action	Integrate the San Mateo County Local Hazard Mitigation Plan into other City plans, ordinances, and programs that support infrastructure investments, such as the Capital Improvement Program.				
Action Number	MPK-3	**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, Earthquake, Flood, Sea Level Rise				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
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	Actively participate in the Hazard Mitigation Plan maintenance protocols outlined in Volume 1 of the San Mateo County Local Hazard Mitigation Plan.				
Action Number	MPK-4	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	25/40
Year Added to the Plan	2016	**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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Continue to keep good standing and compliance with the National Flood Insurance Program (NFIP) by implementing floodplain management programs that, at a minimum, meet NFIP requirements. These include, but are not limited to, enforcing the City's flood damage prevention ordinance, participating in floodplain identification and mapping updates, and providing public assistance/information on floodplain requirements and impacts. Additionally, leverage other community mitigation frameworks, such as Tree City USA and the Building Code Effectiveness Grading Schedule (BCEGS), and work toward obtaining StormReady Community certification to optimize emergency notification systems and incentivize hazard reduction on private property.				
Action Number	MPK-5	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	30/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Implement pre- and post-disaster recovery plans, a post-earthquake operations plan, and a debris management plan to institutionalize resilient construction and long-term risk reduction, in accordance with FEMA guidelines.				
Action Number	MPK-6	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	32/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 2 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Earthquake, Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	City of Menlo Park City Manager's Office (Emergency Services)				
Supporting Agency / Organization *(If applicable)*	Menlo Park Fire Protection District				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Develop mitigation controls (e.g., continuity of government plans) and ensure that protective measures are in place for vulnerable critical facilities within the City (e.g., police stations, fire stations, emergency operations center, City Hall, emergency shelters).				
Action Number	MPK-7	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	28/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 2 Years	**Implementation Priority**	Medium
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)*	Medium				
Lead Agency / Organization	City of Menlo Park City Manager's Office (Emergency Services)				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Plan (Staff Time), HMGP		
Additional Details *(optional)*					

Mitigation Action	Execute storm preparedness plans to ensure that stormwater drains, culverts, drainage ditches, and other waterways (e.g., Atherton Channel and San Francisquito Creek) remain clear of debris to provide continuous flood protection.				
Action Number	MPK-8	**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, Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Coordinate with the San Francisquito Creek Joint Powers Authority on San Francisquito Creek and the Strategy to Advance Flood Protection, Ecosystems, and Recreation along the San Francisco Bay (SAFER Bay) flood control projects.				
Action Number	MPK-9	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	34/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Flood, Landslide, Sea Level Rise, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Coordinate with the California Coastal Conservancy and the United States Fish & Wildlife Service on the South Bay Salt Pond Restoration Project.				
Action Number	MPK-10	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	33/40
Year Added to the Plan	2016	**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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Upsize the Chrysler Pump Station to improve flood protection in the Bayfront Area.				
Action Number	MPK-11	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	36/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Produce hazard maps that account for the impacts of climate change-induced flooding.				
Action Number	MPK-12	**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	Flood, Sea Level Rise, Severe Weather				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
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 and implement a climate adaptation and resilience plan that includes the following strategies: • Identify local risks of climate change (e.g., flooding, sea level rise, air quality, water supply, energy outages, vector control, extreme heat, increased social unrest). • Identify what the City can do in the short-term while long-term planning is underway. • Include strategies in the long-term plan to address further increases in global temperatures beyond 2040. • Conduct general engagement and education to develop the plan (e.g., city staff and the community). • Address existing and future equity issues through research and engagement with low to moderate-income community members who are likely to be most impacted and vulnerable to climate change. • Address mitigation and resiliency through capital improvement projects, city operations, and development projects. • Evaluate whether federal, state, and regional sea level rise districts and San Francisquito Creek agencies holistically address Menlo Park's local needs for climate adaptation/resiliency with a focus on equity. • Provide a roadmap for the City to follow over the next 10 years and/or beyond. • Revise policies and/or create programs to improve climate resilience.				
Action Number	MPK-13	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	34/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	4 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Flood, Sea Level Rise, Severe Weather, Wildfire				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	City of Menlo Park Sustainability Team				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Participate with and support the San Mateo County Flood and Sea Level Rise Resiliency District on flood control projects located within the City to help reduce flooding.				
Action Number	MPK-14	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	29/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline)				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Implement a lifecycle replacement and modernization program for emergency backup power at critical facilities to ensure continuous power and operational resilience, and to reduce service interruptions following emergencies and disasters.				
Action Number	MPK-15	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	29/40
Year Added to the Plan	2016	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Earthquake, Flood, Severe Weather, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Low				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	High	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Expand and promote incentive-based resilience programs that support eligible non-profits, businesses, and homeowners in reducing hazard risk through structural and nonstructural retrofits. Leverage and align with City of Menlo Park initiatives (e.g., energy efficiency and electrification rebates, sustainability incentives, and regional/state programs) to encourage seismic strengthening, floodproofing, wildfire hardening, and backup power solutions, with a focus on accessibility, equity, and high-risk areas.				
Action Number	MPK-16	**Goal(s) Addressed**	1, 2, 3, 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, Severe Weather, Wildfire				
Project Status	Not Yet Started	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Low				
Lead Agency / Organization	City of Menlo Park City Manager's Office				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Update and implement the City's Stormwater Master Plan to identify areas vulnerable to localized flooding, prioritize capital projects to mitigate flooding in those areas, and ensure long-term system performance.				
Action Number	MPK-17	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	22/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Plan (Staff Time), HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Develop a shoreline management plan to protect the coastline from soil erosion and enhance the coastline with trails, parks, and a wildlife refuge.				
Action Number	MPK-18	**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	Flood, Sea Level Rise				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was combined with other actions that address climate adaptation and resilience, and shoreline management.		
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	Update the City's 2014 Emergency Operation Plan and incorporate outreach and establish an annual report on the Local Hazard Mitigation Plan. The update may also include incorporating FEMA-recommended guidelines and Senate Bill 160 (Cultural Competence).				
Action Number	MPK-19	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	34/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 2 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)*	Medium				
Lead Agency / Organization	City of Menlo Park City Manager's Office (Emergency Services)				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Enhance the City's technical expertise by certifying staff as Floodplain Managers through training opportunities, ensuring professional oversight and implementation of floodplain management standards.				
Action Number	MPK-20	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	29/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	Medium
Hazard(s) Mitigated	Dam Failure, Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Provide education to community members and City staff on the City's 2030 Climate Action Plan goals and present strategies to achieve them.				
Action Number	MPK-21	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	36/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Sea Level Rise				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	Medium				
Lead Agency / Organization	City of Menlo Park City Manager's Office (Sustainability)				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time)		
Additional Details *(optional)*					

Mitigation Action	Develop an emergency water storage and supply project that may include, but is not limited to, a new underground reservoir to provide emergency water to residents during emergencies.				
Action Number	MPK-22	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	31/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Drought, Earthquake, Flood, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), Water Fund		
Additional Details *(optional)*					

Mitigation Action	Replace the roof on Reservoir 2, which is deteriorating and at the end of its life expectancy. The replacement would ensure continued public health protection, system reliability, and functionality of the existing emergency water storage.				
Action Number	MPK-23	**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	Drought, Earthquake, Severe Weather				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	Water Fund		
Additional Details *(optional)*					

Mitigation Action	Plan, design, and implement the water infrastructure improvements recommended in the Water System Master Plan to upgrade the Menlo Park Municipal Water service area infrastructure to meet fire-flow demands.				
Action Number	MPK-24	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	35/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
Hazard(s) Mitigated	Dam Failure, Flood, Severe Weather, Wildfire				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	Water Fund		
Additional Details *(optional)*					

Mitigation Action	Advance climate-resilient infrastructure and land use planning by integrating green infrastructure and hazard mitigation design into capital projects; upgrading utility systems, equipment, and critical facilities; incorporating FEMA 100-year tide, sea level rise projections, and climate-driven extreme storm data into shoreline development and planning decisions; and implementing water system interconnections to ensure redundant, emergency water supply.				
Action Number	MPK-25	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	36/40
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				
Project Status	In Progress	If *No Longer Needed*, provide reason.	n/a		
Benefits *(Loss Avoided)*	High				
Lead Agency / Organization	City of Menlo Park Public Works Department, City of Menlo Park Community Development Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	General Fund (Staff Time), City Capital Improvement Program funds, Water Fund		
Additional Details *(optional)*					

Mitigation Action	Incorporate consideration of the FEMA 100-year tide and sea level rise data and climate change-driven extreme storms into land use planning and shoreline development. This includes new policies by local jurisdictions, and County and City actions regarding their General Plans, Climate-related Plans, and the development applications.				
Action Number	MPK-26	**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		Flood, Sea Level Rise			
Project Status		No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was combined with mitigation action MPK-25.	
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	Continue to identify and plan upgrades of utility systems, equipment, and critical facilities, including pump stations, generators, tide gates, stream gages, open channel, and culvert/pipeline infrastructure.				
Action Number	MPK-27	**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	Flood, Severe Weather				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was combined with mitigation action MPK-25.		
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	Support green infrastructure projects that enhance resiliency to natural disasters and incorporate green design elements into hazard mitigation projects where feasible.				
Action Number	MPK-28	**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	Drought, Flood, Landslide, Sea Level Rise, Severe Weather				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This mitigation action was combined with mitigation action MPK-25.		
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	Identify and pursue strategies to enhance recycled water infrastructure planning/implementation in the vicinity of San Mateo County Flood and Sea Level Rise Resiliency District projects.				
Action Number	MPK-29	**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	Drought				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This is not the City's responsibility.		
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	Improve community response to flood emergencies by supporting upgrades and expansions to the Countywide Flood Early Warning System and by conducting community flood-preparation, education, and recovery outreach.				
Action Number	MPK-30	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	35/40
Year Added to the Plan	2021	**Timeline** *(estimated)*	1 to 5 Years	**Implementation Priority**	High
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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline)				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Low	**Potential Funding Source**	General Fund (Staff Time), HMGP, FMA		
Additional Details *(optional)*					

Mitigation Action	Develop Emergency Action Plans for Bayfront Canal and Atherton Channel.				
Action Number	MPK-31	**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	Flood, Sea Level Rise, Severe Weather				
Project Status	Completed	If *No Longer Needed*, provide reason.	n/a		
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	Advance long-term resilience to sea level rise and extreme storms for the communities and critical assets along the San Francisco Bay shoreline south of Whipple Avenue to Marsh Road, and provide environmental, recreation, and community/connectivity enhancements where possible.				
Action Number	MPK-32	**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	Flood, Sea Level Rise, Severe Weather				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	This is not the City's responsibility.		
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	Complete construction and oversee ongoing operation, maintenance, and mitigation efforts for the Bayfront Canal and Atherton Channel Flood Protection and Ecosystem Restoration Project.				
Action Number	MPK-33	**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	Flood, Sea Level Rise, Severe Weather				
Project Status	No Longer Needed	If *No Longer Needed*, provide reason.	The responsibility for this project lies with OneShoreline.		
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	Advance long-term resilience to sea level rise and extreme storms for the communities and critical assets adjacent to the San Francisquito Creek and nearby areas of the shoreline with the cities of Menlo Park and East Palo Alto, as well as provide environmental, recreation, community/connectivity enhancements where possible.				
Action Number	MPK-34	**Goal(s) Addressed**	1, 2, 3, 4, 5	**Prioritization Score**	35/40
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	City of Menlo Park Public Works Department				
Supporting Agency / Organization *(If applicable)*	n/a				
Additional Participating Jurisdictions *(If Applicable)*	n/a				
Estimated Cost	Medium	**Potential Funding Source**	HMGP, FMA, City Capital Improvement Program funds		
Additional Details *(optional)*					

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.	2	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)***	Medium	A significant hazard event is likely to occur within 25 years.	2	N/A
Landslide	Low	A significant hazard event is likely to occur within 100 years.	1	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***	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

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***	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

C.3. Vulnerability Factors

Hazard Event	Vulnerability Factor	Vulnerability		Vulnerability Factor	Weighted Factor	Score
Dam Failure	***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
Drought	***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
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***	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
Sea Level Rise	***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	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***	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

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	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	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
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***	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	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
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	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	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

APPENDIX D. PLAN ADOPTION

[Placeholder for adoption documentation after State and FEMA approval]