



Local Hazard Mitigation Plan

San Mateo County, California

City of Half Moon Bay Annex

2026

DRAFT



TABLE OF CONTENTS

| | |
|---|-----------|
| 1. HAZARD MITIGATION LOCAL PLANNING TEAM | 1 |
| 2. JURISDICTION PROFILE | 1 |
| 2.1. Brief History | 1 |
| 2.2. Governing Body Format | 2 |
| 2.3. Population | 2 |
| 3. CHANGES IN DEVELOPMENT | 3 |
| 3.1. Changes in Priority | 4 |
| 4. CAPABILITY ASSESSMENT | 4 |
| 4.1. Planning and Regulatory Capabilities | 5 |
| 4.2. Administrative and Technical Capabilities | 7 |
| 4.3. Fiscal Capabilities | 8 |
| 4.4. Education and Outreach Capabilities | 9 |
| 4.5. Community Classifications | 9 |
| 4.6. Needs to Expand/Improve Capabilities | 10 |
| 5. NATIONAL FLOOD INSURANCE PROGRAM | 10 |
| 5.1. NFIP Floodplain Administrator | 10 |
| 5.2. Repetitive Loss and Severe Repetitive Loss Property | 11 |
| 5.3. Participation Activities | 12 |
| 5.3.1. Substantial Damage | 12 |
| 5.3.2. Substantial Improvement | 12 |
| 5.3.3. Substantial Damage/Substantial Improvement Determination Process | 13 |
| 6. HAZARD MITIGATION PLAN INTEGRATION | 13 |
| 6.1. Existing Plan Integration | 13 |
| 6.2. Potential Future Integration | 14 |
| 7. SIGNIFICANT PAST EVENTS | 15 |
| 8. HAZARD VULNERABILITY AND IMPACT ASSESSMENT | 15 |
| 8.1. Future Major Assets | 21 |
| 9. HAZARD RISK RANKING | 21 |
| 10. MITIGATION ACTIONS | 23 |
| APPENDIX A. HAZARD MAPS | 46 |
| APPENDIX B. STAKEHOLDER AND PUBLIC ENGAGEMENT | 47 |
| APPENDIX C. HAZARD RISK RANKING DETAILS | 48 |
| APPENDIX D. PLAN ADOPTION | 71 |



This Annex details the hazard mitigation elements specific to the City of Half Moon Bay, 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 Half Moon Bay. 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 Half Moon Bay 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 |
|-----------------|-------------------------------|-------------------------|
| Todd Seeley | Interim Public Works Director | Public Works Department |
| Matthew Nichols | Senior Management Analyst | Public Works Department |

2. JURISDICTION PROFILE

The City of Half Moon Bay is a small city in San Mateo County, located on the Pacific Coast, 23 miles south of the City of San Francisco. The City is 6.2 square miles in area, approximately 6.5 miles long, and a little less than a mile wide. The developed portion of the City is located on relatively flat land between the coastal bluffs to the west and the foothills of the Santa Cruz Mountains to the east. State Route 1 provides the only contiguous access from north to south, while State Route 92 provides access to the east side of the San Francisco Peninsula.

Half Moon Bay’s weather is typical of the Northern California Coast, with mild summers and cool, wet winters. It rarely freezes in the winter, and it is rarely hot in the summer. The annual average rainfall exceeds 26 inches, with 80% falling between November and March. The average year-round temperature is 59°F. Humidity averages between 57% and 100%.

2.1. Brief History

Half Moon Bay is in a region historically occupied by the tribelets of the Costanoan linguistic group. Descendants of Costanoan speakers prefer to be called by the name of the tribelet from which they are descended. When their heritage is mixed, or the specifics have been lost over generations, they prefer using the native term Ohlone rather than the European-imposed term Costanoan (“coastal dwellers”). The rich resources of the ocean, bays, valleys, and mountains in the region provided Ohlone-speaking people with food and all material needs. The primary food staple was the acorn, supplemented by a great variety of animal and plant resources.



The Ohlones were composed of 50 or more tribes in the southern San Francisco Bay Region, 10 of which were situated along the Peninsula. The Portola Expedition, set out to claim land for Spanish territory, encountered several Ohlone villages after their arrival in the late 1760s, including the Chinguan village in today’s Half Moon Bay. Spanish explorer records indicate that the Spanish received meals, directions, and guidance from the Ohlones leading up to the 1769 ascent up Sweeney Ridge. This marked the point at which the Spanish discovered and settled in San Francisco Bay. When Mexico won its independence from the Spanish crown in 1821, California fell under the rule of Mexican territorial governors who granted much of the former Spanish mission lands to Mexican subjects. These land grants effectively displaced the Ohlones, ignoring any of their remaining territorial rights.

The early community became known as “Spanishtown” because of the number of Spanish-speaking inhabitants. In 1874, Spanishtown officially became known as Half Moon Bay, named for the beautiful crescent-shaped harbor that lies just north of town. The City of Half Moon Bay was incorporated in 1959. The City of Half Moon Bay still has many reminders of its early beginnings in the mid-1800s as an agricultural town.

2.2. Governing Body Format

The City of Half Moon Bay is a General Law City with a council-manager form of governance. A five (5) member City Council establishes policy and provides direction for all City operations, while the City Manager serves as the chief executive officer for implementation and the day-to-day provision of services. The City Planning Commission has final authority under the Municipal Code and otherwise is advisory to the City Council. The Parks and Recreation Commission is also advisory to the City Council. From time to time, the City Council establishes task forces and advisory committees that focus on plans and projects. The City consists of five (5) departments – City Manager’s Office, Communication/City Clerk’s Office, Administrative Services, Public Works, and Community Development. The City contracts with the San Mateo County Sheriff’s Office for police services. The City is served by the Coastside Fire Protection District, the Coastside County Water District, and participates in the Sewer Authority Mid-Coastside Joint Powers Authority. Services such as library, senior services, and animal control are supported by the City; however, day-to-day operations are the responsibility of respective agencies and nonprofits.

The City Council is responsible for adopting this Plan, and the City Manager will oversee its implementation.

2.3. Population

In 2024, the City of Half Moon Bay had a population of 11,324, a 4% decrease from the estimated 2020 population of 11,799. **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

¹ United States Census Bureau. (2024). QuickFacts: City of Half Moon Bay, California. Retrieved from <https://www.census.gov/quickfacts/fact/table/halfmoonbaycitycalifornia/>.



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 |
| 11,324 | 11,799 | 11,324 | -4.0% | 7.0% | 23.1% | 5.6% |

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 Half Moon Bay adopted its General Plan under this law and has updated various elements several times over the years. At the time of this LHMP update, the City's General Plan was undergoing a comprehensive update, with a key focus on the Housing Element.

Local Coastal Program (LCP) is to ensure that the local government's land use plans, zoning ordinances, zoning maps, and implementation actions meet the requirements, provisions, and policies of the California Coastal Act. The City is located entirely within the coastal zone; therefore, the LCP applies Citywide. The Half Moon Bay Local Coastal Land Use Plan (LCLUP) and the Local Coastal Implementation Plan (LCIP) together constitute the city's LCP. The City's LCLUP was comprehensively updated and adopted by the City County in October 2020, and certified by the California Coastal Commission in April 2021. The LCLUP serves as the City's Land Use Element (General Plan).

Development primarily comprises infill residential, small-scale commercial, and town center mixed-use projects. Residential development is paced by a voter-adopted growth control measure (Measure D LCP, 1999) that allows an annual residential growth rate of no more than 1.5%, while commercial projects typically involve changing uses within existing buildings or new small-scale projects in the town center infill sites. In recent years, City Council priorities have led to incentives for development in the town center and established neighborhoods where public infrastructure and services are available.

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 |
|--|-------------|
| <p>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.</p> | No |



| Criteria | Description |
|---|---|
| Is your jurisdiction expected to annex any areas during the performance period of this Plan? | No |
| Has your jurisdiction had any significant changes in development over the past five (5) years that have occurred in hazard-prone areas? <i>If yes, briefly describe.</i> | The Stone Pine Cove farmworker housing project lies along the Pilarcitos watershed, which is vulnerable to dam inundation, flooding, and tsunami impacts. |
| Are there any areas targeted for development or major redevelopment in the next five (5) years that will occur in hazard-prone areas? <i>If yes, briefly describe.</i> | No |
| Provide the number of permits for each hazard area or provide a qualitative description of where development has occurred. | Development primarily comprises infill residential, small-scale commercial, and town center mixed-use projects. Residential development is paced by a voter-adopted growth control measure that caps the annual residential growth rate at 1.5%, while commercial projects typically involve changing uses within existing buildings or new small-scale projects in the town center infill sites. |

3.1. Changes in Priority

Since the last update to the Plan, the City of Half Moon Bay has prioritized incorporating CalFire Fire Hazard Severity Zone (FHSZ) maps into planning and mitigation efforts. 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 Half Moon Bay'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 Half Moon Bay'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 <i>(local, county, state, federal)</i> | Responsible Department/ Agency | Code Citation and Comments <i>(e.g., Code Chapter, name of plan, explanation of authority, etc.)</i> |
|---|--------|---|-----------------------------------|--|
| Planning Capacity | | | | |
| Comprehensive Plan / General Plan | Yes | Local | Community Development Department | A comprehensive update of the General Plan is underway with a key focus on the Housing Element. Local Coastal Land Use Plan (October 2020) |
| Capital Improvement Plan | Yes | Local | Community Development Department | Updated annually |
| Floodplain Management / Basin Plan | Yes | Local | Public Works Department | |
| Stormwater Management Plan | Yes | Local | Public Works Department | Storm Drain Master Plan (August 2016) Green Infrastructure Plan (September 2019) |
| Open Space Plan | No | n/a | n/a | n/a |
| Stream Corridor Management Plan | No | n/a | n/a | n/a |
| Watershed Management or Protection Plan | No | n/a | n/a | n/a |
| Economic Development Plan | Yes | Local | Community Development Department | City Council Strategic Plan Coastside Recovery Initiative |
| Comprehensive Emergency Management Plan | No | n/a | n/a | n/a |
| Emergency Operations Plan | Yes | Local | Emergency Preparedness Division | Adopted 2017 |



| 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.) |
|---|--------|--|------------------------------------|---|
| Evacuation Plan | No | n/a | n/a | n/a |
| Post-Disaster Recovery Plan | No | n/a | n/a | n/a |
| Transportation Plan | Yes | Local | Public Works Department | Bicycle and Pedestrian Master Plan |
| Strategic Recovery Planning Report | No | n/a | n/a | n/a |
| Climate Adaptation Plan | Yes | Local | Public Works Department | Climate Action Plan (December 2023) Climate Adaptation Plan (December 2025) Sustainability Implementation Plan (September 2020) |
| Resilience Plan | No | n/a | n/a | n/a |
| Urban Water Management Plan | Yes | County | Coastside County Water District | |
| Community Wildfire Protection Plan | Yes | State | Coastside Fire Protection District | San Mateo-Santa Cruz Community Wildfire Protection Plan (October 2022) |
| Regulatory Capability | | | | |
| Building Code | Yes | Local | Community Development Department | Title 14, Chapter 14.04.02 of the City Code |
| Zoning Code | Yes | Local | Community Development Department | Title 18 of the City Code |
| Subdivision Code | Yes | Local | Community Development Department | Title 17 of the City Code |
| Flood Damage Prevention Ordinance | Yes | Local | Public Works Department | Title 14, Chapter 14.34 of the City Code |
| Cumulative Substantial Damage Ordinance | No | n/a | n/a | n/a |
| Freeboard | No | n/a | n/a | n/a |
| Growth Management Ordinance | Yes | Local | Community Development Department | Title 14, Chapter 14.38 and Title 17, Chapter 17.06 of the City Code General Plan Local Coastal Land Use Plan (October 2020) |
| Site Plan Review | Yes | Local | Community Development Department | Title 18 of the City Code |



| 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.) |
|---|--------|--|--------------------------------------|--|
| Stormwater Management Ordinance | Yes | Local | Public Works Department | Title 13, Chapter 13.15 of the City Code |
| Municipal Separate Storm Sewer System (MS4) | No | n/a | n/a | n/a |
| Natural Hazard Ordinance | No | n/a | n/a | n/a |
| Post-Disaster Recovery Ordinance | Yes | Yes | Emergency Preparedness Division | Title 2, Chapter 2.25 of the City Code |
| 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 |
| Mitigation Planning Committee | Yes | Coastside Recovery Initiative |
| Environmental Board/Commission | Yes | Sustainability Division |
| Open Space Board/Committee | Yes | Parks and Recreation Commission |
| Economic Development Commission/Committee | Yes | Coastside Recovery Initiative |
| Maintenance programs to reduce risk | No | n/a |
| Mutual Aid Agreements | No | n/a |
| Technical/Staffing Capabilities | | |
| Planner(s) or engineer(s) with knowledge of land development and land management practices | Yes | Community Development Department Public Works Department |
| Engineer(s) or professional(s) trained in building or infrastructure construction practices | Yes | Community Development Department (Building Inspector) Public Works Department (City Engineer) |
| Planners or engineers with an understanding of natural hazards | Yes | Community Development Department Public Works Department |



| Capability | Yes/No | Comments <i>(e.g., position, department, agency, explanation)</i> |
|---|--------|--|
| NFIP Floodplain Administrator | Yes | Administrative Services |
| Surveyor(s) | Yes | Contracted Consultants |
| Personnel skilled or trained in GIS applications | Yes | Contracted Consultants |
| A scientist familiar with natural hazards | Yes | Contracted Consultants |
| Warning systems/services | Yes | SMC Alert, in partnership with the San Mateo County Department of Emergency Management |
| Emergency manager | Yes | Management Analyst, Deputy City Manager |
| Grantwriter(s) | Yes | Multiple Departments |
| Staff with expertise or training in benefit cost analysis | Yes | Contracted Consultants |
| Professionals trained in conducting damage assessments | Yes | Community Development Department Public Works Department Contracted Consultants |

4.3. Fiscal Capabilities

Table 5 lists fiscal capabilities available to the City of Half Moon Bay 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>(i.e., Hazard Mitigation Grant Program (HMGP), HMGP Post Fire, Flood Mitigation Assistance (FMA) Program)</i> | 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 | No |
| 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 |
| Other federal or state funding programs | Yes |



| Capability | Accessible or Eligible to Use |
|---|-------------------------------|
| 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 <i>(e.g., position, department, agency, explanation)</i> |
|--|--------|---|
| Public Information Officer | Yes | Communications Department Director |
| Personnel skilled or trained in website development | Yes | |
| Hazard mitigation information is available on the jurisdiction’s website | Yes | LHMP and information on severe weather, wildfires, earthquakes, and tsunamis are available on the City website |
| Utilize social media for hazard mitigation education and outreach | Yes | Facebook: Facebook.com/cityofhalfmoonbay/ Instagram: Instagram.com/cityofhmb/ X: x.com/CityofHMB Nextdoor: nextdoor.com/city/half-moon-bay--ca/ |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Coastside Emergency Action Program |
| Other programs already in place that could be used to communicate hazard-related information | Yes | Emergency Preparedness Division |
| An established warning system for hazard events | Yes | SMC Alert, in partnership with the San Mateo County Department of Emergency Management |

4.5. Community Classifications

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

Table 7. Community Classifications

| Program | Yes/No | Classification <i>(if applicable)</i> | Date Classified <i>(if applicable)</i> |
|--|--------|--|---|
| Community Rating System (CRS) | No | n/a | n/a |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | n/a | n/a |



| Program | Yes/No | Classification (if applicable) | Date Classified (if applicable) |
|--|--------|-----------------------------------|------------------------------------|
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | ISO Class 3/3X | May 2018 |
| NWS StormReady® | Yes | n/a | n/a |
| NWS TsunamiReady® | No | n/a | n/a |
| Firewise USA® | Yes | n/a | n/a |

4.6. Needs to Expand/Improve Capabilities

The City of Half Moon Bay 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).

- Enhance urban forest management by implementing rigorous vegetation management and hazardous fuel reduction initiatives to decrease wildfire fuel loads within the Wildland Urban Interface (WUI).
- Expand GIS capacity in the City by increasing specialized staffing to enhance hazard mapping, vulnerability assessments, real-time situational awareness, data-driven execution of long-term mitigation initiatives, and emergency response coordination.
- City codes and ordinances (e.g., building, zoning, land use, fire) should be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.

5. NATIONAL FLOOD INSURANCE PROGRAM

The City of Half Moon Bay is a member of the National Flood Insurance Program (NFIP) but has chosen not 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 |
|--------------|-------------------------|-----------------------------|----------------|----------------------------|-----------|
| 060319 | 3/1/1974 | 8/2/2017 | n/a | n/a | n/a |

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 Half Moon Bay Floodplain Administrator information is listed in **Table 9**.

Table 9. Floodplain Administrator

| Name | Title | Department | Phone Number |
|----------------|--|-------------------------|----------------|
| Kenneth Stiles | Interim Administrative Services Director | Administrative Services | (650) 750-2025 |

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.
- 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 Half Moon Bay.

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.



Table 10. Repetitive Loss and Severe Repetitive Loss Properties

| Repetitive Loss Properties | | Severe Repetitive Loss Properties | |
|---|-----------|-----------------------------------|-----------|
| Total | Occupancy | Total | Occupancy |
| 0 | n/a | 0 | n/a |
| <p>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</p> | | | |

Table 11 summarizes NFIP active policies and coverage in force data for the City of Half Moon Bay.

Table 11. NFIP Policies

| NFIP Policies | Insurance in Force | Total Claims Paid | Sum of Claims Paid |
|---------------|--------------------|-------------------|--------------------|
| 32 | \$11,033,000 | 2 | \$4,826.64 |

5.3. Participation Activities

The City of Half Moon Bay'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.

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 14, Chapter 14.34 of the City Code)

5.3.2. Substantial Improvement

Substantial improvement means any reconstruction, rehabilitation, addition or other proposed new development of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred



substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations or state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
- Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure. (*Title 14, Chapter 14.34 of the City Code*)

5.3.3. Substantial Damage/Substantial Improvement Determination Process

The City of Half Moon Bay's Substantial Damage/Substantial Improvement determination process ensures compliance with the NFIP and the local floodplain management ordinances. To determine whether a structure has sustained Substantial Damage/Substantial Improvement after a flood event, the City will use the FEMA Substantial Damage Estimator tool, along with a collaborative review conducted by Public Works Department and Building Division staff and other relevant officials.

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 Half Moon Bay 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 |
|---------------------|--|
| City General Plan | Hazard data and mitigation priorities from the LHMP informed Safety Element policies, especially for flood, wildfire, tsunami, seismic (e.g., earthquake), and climate-related risks. The LHMP served as a crucial tool in shaping policies and actions within the General Plan. |



| Planning Initiative | Current Integration Description |
|-----------------------------|---|
| Emergency Operations Plan | The City integrates hazard mitigation for storm and tsunami readiness, along with annexes for other natural disasters (e.g., earthquakes and all-hazard). The LHMP is an essential tool for updating the City EOP. |
| Capital Improvement Program | Hazard data and mitigation priorities from the LHMP inform capital project prioritization and align mitigation projects with funding opportunities, including FEMA grant programs. During development review, staff applied hazard maps and regulatory standards consistent with LHMP objectives to ensure new construction and improvements reduce long-term risk. |
| Local Coastal Land Use Plan | The City integrates hazard mitigation relative to environmental hazards, including sea level rise and other shoreline hazards, geologic and seismic hazards, fire hazards, and fluvial flooding. |

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 |
|-------------------------------|--|
| City General Plan | This LHMP will be incorporated into the General Plan Safety Element. The opportunity to incorporate additional hazard mitigation and abatement measures will be considered for inclusion in the updated General Plan. The Safety Element will be revised, and this LHMP will be used to identify new information not available during the previous revision, including hazards, climate adaptation, and resilience strategies. |
| Emergency Operations Plan | This LHMP will continue to be an essential tool to update the City EOP. The latest hazard descriptions in this LHMP will be included in the City EOP, as appropriate. Mitigation actions that are preparedness and response in nature will be analyzed for applicability and for inclusion in the description of EOP processes and procedures. |
| Capital Improvement Program | The City will continue to ensure consistency between this LHMP and future updates of the Capital Improvement Program. The LHMP may identify new potential funding sources for capital improvement projects, which may result in modifications to proposed projects based on the risk assessment results. |
| City Code | Mitigation actions and the hazard risk assessment in this LHMP can 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. |
| Coastside Recovery Initiative | Mitigation actions in this LHMP can inform updates and revisions to the Coastside Recovery Initiative. Coastal protection processes are a useful source of information for developing future mitigation actions. |

The City'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 Half Moon Bay.

Table 14. Significant Past Events

| Date | Event Type <i>(include Disaster Declaration, if applicable)</i> | Description of Event and Impacts |
|-----------------------|--|--|
| 12/31/2022 – 1/2/2023 | Flood | Localized flooding along watercourses. Flooding damaged numerous homes and facilities. |

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 identified **unique vulnerabilities and impacts** to the following natural hazards, based on the hazards profiled in **Volume 1**.

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

It was determined that the planning area did not have unique vulnerabilities or impacts from the following natural hazards; rather, its vulnerabilities and impacts are consistent with those experienced throughout the County.

- Drought



- Landslide

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 Half Moon Bay 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 Johnston Dam (owned by the Peninsula Open Space Trust) and the Pilarcitos Dam (owned and operated by the San Francisco Public Utilities Commission) could affect the City in the event of a dam failure. The area of the City susceptible to inundation is adjacent to State Route 92 along Pilarcitos Creek, extends into portions of Arroyo Leon, and then spreads out along the flatter terrain as it travels west to the coast. It is possible that inundation from a dam failure could partially or fully block access on State Route 92, which provides critical access east, as well as affect critical infrastructure such as the City’s Emergency Operations Center (EOC) and the Sewer Authority Mid-Coastside (SAM) sewage treatment plant. Dam inundation poses significant threats to life safety and public health, causing widespread property damage and disrupting critical facilities and infrastructure (e.g., overwhelmed local drainage systems) to those within the inundation area. |
| 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. |



| Hazard | Vulnerability and Impacts |
|--|--|
| Earthquake | <p>There are no active faults within the Half Moon Bay city limits; however, the San Andreas Fault is located approximately five (5) miles to the east of the City boundary. This is the predominant fault system in California and has generated some of the largest and most destructive earthquakes in the State’s history. Ground shaking could cause widespread and severe damage in Half Moon Bay. The City is generally moderately susceptible to liquefaction, which could be triggered by an earthquake. Areas along the eastern border of the City are vulnerable to landslides, as well as scattered locations in the southern portion of the City. Furthermore, the following critical facilities are not seismically reinforced - Sewer Treatment Plant, Emergency Operations Center, and Corporation Yard. Damage to these facilities can cause significant interruptions to operations and services.</p> <p>Highway 1 and State Route 92 provide the only entrances and exits to Half Moon Bay. A simple accident, a fallen tree, or other disruption on these roads can cause hours of complete traffic stoppages. These roadways also become congested on weekends, especially during major tourist events (e.g., the annual Half Moon Bay Art and Pumpkin Festival in October, the Mavericks surf competition). In the event of a major earthquake, evacuation and access are of significant concern for the City.</p> |
| Flood (<i>riverine flooding, urban/flash flooding, coastal flooding</i>) | <p>The City’s flood risk is influenced by several small watersheds that drain into the Pacific Ocean. Watersheds include Pilarcitos Creek, Arroyo Leon, Frenchman’s Creek, and several unnamed creeks throughout the City. Areas most at risk include low-lying neighborhoods, creekside communities, and coastal visitor-serving areas, such as Cañada Cove Mobile Home Park and Pelican Point RV Park.</p> |
| Landslide | <p>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.</p> |
| Sea Level Rise | <p>The City has six (6) to seven (7) miles of coastline within its city limits. Sea level rise is anticipated to increase the City’s exposure to coastal flooding and accelerated bluff erosion, causing estuaries and watercourses to retreat inland. This transition threatens the stability of coastal habitats, recreational areas, and public access points.</p> <p>Much of Half Moon Bay’s coastline, including Pilarcitos Creek, is at risk of periodic or permanent inundation. While dunes and bluffs offer some protection, critical infrastructure, such as the SAM Wastewater Treatment Plant and communication facilities, remains vulnerable. Under high-end sea level projections, 103 acres are at risk, putting \$30 million in property at risk. While the majority of inundated acreage is the beach area, other resources may be affected, including key roadways (US Highway 1 and Mirada Road), drainage systems, residential and commercial uses, and hazardous materials waste sites.</p> |
| Severe Weather (<i>heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog</i>) | <p>Heavy rainfall, mostly from atmospheric rivers, causes flooding in Half Moon Bay along its many watercourses. Additionally, severe winds threaten multiple neighborhoods due to large swaths of eucalyptus groves that are prone to falling during strong winds.</p> |



| Hazard | Vulnerability and Impacts |
|----------|---|
| Tsunami | The City is located along the Pacific Coast, and tsunamis threaten the majority of the City of Half Moon Bay. A tsunami can occur after an earthquake or a significant landslide that falls into the ocean. Tsunamis can cause coastal flooding, potentially severe property damage, and injury or death. Earthquakes off the shore of the Pacific Northwest are likely the most hazardous to Half Moon Bay because of the potential for very large wave generation, and a relatively short travel time (on the order of one (1) to three (3) hours). However, smaller events along local faults could result in a wave that reaches Half Moon Bay with essentially no warning time. Additionally, the City has evacuation and access limitations because US Highway 1 and State Route 92 provide the only entrances and exits. |
| Wildfire | High wildfire hazard areas are primarily in the City's undeveloped hillside areas. However, the Frenchman's Creek neighborhood, Arleta Park, along with parts of the historic downtown, are at a very high severity risk of wildfires. Local and regional wildfires (occurring outside of the City boundary) may also cause poor air quality due to smoke. Also, the City has evacuation and access limitations because US Highway 1 and State Route 92 provide the only entrances and exits. In the event of a major wildfire, evacuation and access are of significant concern for the City. |

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 | Remained the Same |
| Earthquake | Remained the Same |
| Flood (<i>riverine flooding, urban/flash flooding, coastal flooding</i>) | Increased |
| Landslide | Remained the Same |
| Sea Level Rise | Increased |



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



| Hazard | Vulnerability and Impact |
|---|--------------------------|
| Earthquake | No Change Anticipated |
| Flood (riverine flooding, urban/flash flooding, coastal flooding) | No Change Anticipated |
| Landslide | No Change Anticipated |
| Sea Level Rise | No Change Anticipated |
| Severe Weather (heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog) | No Change Anticipated |
| Tsunami | No Change Anticipated |
| Wildfire | No Change Anticipated |

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



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 Half Moon Bay 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 Half Moon Bay 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 Half Moon Bay 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 | 13 | 31 | 62 | 86 |
| Heavy Rainfall (Severe Weather) | 3 | 12 | 13 | 22 | 47 | 65 |
| Strong Winds (Severe Weather) | 3 | 9 | 13 | 22 | 44 | 61 |
| Earthquake | 2 | 18 | 14 | 34 | 66 | 61 |
| Sea Level Rise | 3 | 6 | 7 | 25 | 38 | 53 |
| Wildfire | 2 | 18 | 5 | 33 | 56 | 52 |
| Riverine Flooding (Flood) | 2 | 9 | 5 | 28 | 42 | 39 |
| Coastal Flooding (Flood) | 2 | 12 | 5 | 25 | 42 | 39 |
| Landslide | 2 | 6 | 5 | 30 | 41 | 38 |
| Severe Thunderstorm (Severe Weather) | 2 | 6 | 13 | 20 | 39 | 36 |
| Drought | 2 | 6 | 11 | 21 | 38 | 35 |
| Heat Wave/Extreme Heat (Severe Weather) | 2 | 6 | 10 | 15 | 31 | 29 |
| Dam Failure | 1 | 12 | 5 | 27 | 44 | 20 |
| Tsunami | 1 | 12 | 9 | 12 | 33 | 15 |
| Tornado (Severe Weather) | 1 | 6 | 13 | 13 | 32 | 15 |
| Fog (Severe Weather) | 1 | 6 | 9 | 11 | 26 | 12 |

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 Half Moon Bay agreed to **18** 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 and tsunami) may not have specific mitigation actions detailed in this document.

Table 20. City of Half Moon Bay Mitigation Actions Summary

| Status | | Mitigation Action Total | |
|---|----|---|----|
| Continuing | | 2 | |
| In Progress | | 16 | |
| Not Yet Started | | 0 | |
| New | | 0 | |
| TOTAL | | 18 | |
| Completed | | 3 | |
| No Longer Needed | | 2 | |
| Mitigation Actions per Hazard | | | |
| Dam Failure | 15 | Sea Level Rise | 16 |
| Drought | 6 | Severe Weather <i>(heavy rainfall, severe thunderstorms, strong winds, tornadoes, heat wave/extreme heat, fog)</i> | 13 |
| Earthquake | 8 | Tsunami | 9 |
| Flood <i>(riverine flooding, urban/flash flooding, coastal flooding)</i> | 18 | Wildfire | 8 |
| Landslide | 8 | | |

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. | | | | |
| Action Number | HMB-1 | 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 | Dam Failure, Earthquake, Flood, Landslide, Sea Level Rise, Tsunami, Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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, City Capital Improvement Program funds, CalFire funds | | |
| Additional Details (optional) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|--------------------------------------|---------------------------------|--------------------------------|-------|
| Mitigation Action | Integrate the San Mateo County Local Hazard Mitigation Plan into other City plans, ordinances, and programs that govern land use decisions in the community, including, but not limited to, the General Plan (and its elements, as appropriate), the Local Coastal Program, Climate Action and Adaptation Plan, and the Emergency Operations Plan. | | | | |
| Action Number | HMB-2 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 31/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | High |
| Hazard(s) Mitigated | Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami. Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department, City of Half Moon Bay 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), HMGP | | |
| Additional Details (optional) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|---|--------------------------------------|---------------------------|--------------------------------|--------|
| 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 | HMB-3 | 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) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|---|---------------------------|--------------------------------|-------|
| 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. | | | | |
| Action Number | HMB-4 | Goal(s) Addressed | 1, 3, 4, 5 | Prioritization Score | 30/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | Ongoing | Implementation Priority | High |
| Hazard(s) Mitigated | Dam Failure, Flood, Severe Weather, Tsunami | | | | |
| Project Status | Continuing | <i>If No Longer Needed, provide reason.</i> | n/a | | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|---|-----|--------------------------------|-----|
| Mitigation Action | Identify and institutionalize climate adaptation strategies by adopting the City's first Climate Action and Adaptation Plan to outline and prioritize City strategies for adapting to climate change impacts, and by analyzing the local economy and ecosystems' capacity to adapt to those impacts. | | | | |
| Action Number | HMB-5 | 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, Wildfire | | | | |
| Project Status | Completed | If No Longer Needed, provide reason. | n/a | | |
| Benefits (Loss Avoided) | n/a | | | | |
| Lead Agency / Organization | n/a | | | | |
| Supporting Agency / Organization (If applicable) | n/a | | | | |
| Additional Participating Jurisdictions (If Applicable) | n/a | | | | |
| Estimated Cost | n/a | Potential Funding Source | n/a | | |
| Additional Details (optional) | The Climate Action and Adaptation Plan was adopted in January 2026. | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|--------------------------------------|---|--------------------------------|--------|
| Mitigation Action | Acquire generators for critical facilities and infrastructure that lack adequate backup power in the event of an emergency or major disaster, to minimize service interruptions, including, but not limited to, the Half Moon Bay Library. | | | | |
| Action Number | HMB-6 | Goal(s) Addressed | 1, 3 | Prioritization Score | 26/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), HMGP, FMA, CalFire funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|---|---|--|--------------------------------|--------|
| Mitigation Action | Design and implement the environmental components for permanent erosion stabilization of the Seymour Ditch, including analyzing erosion stabilization options, designing the chosen solution, obtaining permits for it, and constructing the permanent measures. Additionally, this project will incorporate environmental recreation and community/connectivity improvements where possible. | | | | |
| Action Number | HMB-7 | Goal(s) Addressed | 1, 3, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Flood, Sea Level Rise | | | | |
| Project Status | In Progress | <i>If No Longer Needed, provide reason.</i> | n/a | | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|---|--------------------------------------|--|--------------------------------|--------|
| Mitigation Action | Complete the Poplar Gateways Master Plan and implement a phased program for erosion mitigation, bluff restoration, and initiate work on the easterly realignment of the Coastal Trail between Poplar Street and Kelly Avenue. | | | | |
| Action Number | HMB-8 | Goal(s) Addressed | 1, 3, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Flood, Sea Level Rise | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|---|---|--|--------------------------------|-------|
| Mitigation Action | Implement projects outlined in the Capital Improvement Projects, including rehabilitating the Main Street Bridge over Pilarcitos Bridge Creek and addressing hazard mitigation and response. These actions include, but are not limited to, the urban forestry management program, repairs and rehabilitations of stormwater outfalls, corporation yard improvements, flood management, and coastal bluff preservation. | | | | |
| Action Number | HMB-9 | 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 | Dam Failure, Earthquake, Flood, Landslide, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | In Progress | <i>If No Longer Needed, provide reason.</i> | n/a | | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|--|---|--|--------------------------------|-------|
| Mitigation Action | Replace the existing main electrical service equipment at the Sewer Authority of Mid-Coastside Wastewater Treatment Plant with new equipment to mitigate arc flash hazards, remove a single point of failure by creating a “main-tie-main” configuration, and to address the potential for flooding of the main electrical service components by relocating above flood and sea level rise levels. | | | | |
| Action Number | HMB-10 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 32/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | High |
| Hazard(s) Mitigated | Dam Failure, Flood, Sea Level Rise | | | | |
| Project Status | In Progress | <i>If No Longer Needed, provide reason.</i> | n/a | | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department | | | | |
| Supporting Agency / Organization (If applicable) | Sewer Authority Mid-Coastside | | | | |
| Additional Participating Jurisdictions (If Applicable) | n/a | | | | |
| Estimated Cost | High | Potential Funding Source | General Fund (Staff Time), FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|--|--------------------------------------|---|--------------------------------|-------|
| Mitigation Action | Integrate long-term hazard mitigation strategies into the City's Emergency Operations Plan (EOP), in coordination with the County, on an evacuation plan, to reduce future vulnerability and ensure a comprehensive approach from disaster prevention to recovery. | | | | |
| Action Number | HMB-11 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 32/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | High |
| Hazard(s) Mitigated | Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | High | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|--|--------------------------------------|--|--------------------------------|--------|
| Mitigation Action | Assess bluff and drainage system regressions, and identify and implement appropriate mitigation initiatives (e.g., clean closure) for the closed Half Moon Bay landfill located on the coastal bluffs near Poplar Beach. | | | | |
| Action Number | HMB-12 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Flood, Sea Level Rise | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|---|---|-----|--------------------------------|-----|
| Mitigation Action | Create broadband redundancy to improve digital infrastructure. The City plans to add connectivity on the Coastside to support communication prior to, during, and after an emergency. This includes working with other agencies, participating in mutual aid agreements, and identifying weak signal areas to prevent hazard-related disruptions. | | | | |
| Action Number | HMB-13 | Goal(s) Addressed | n/a | Prioritization Score | n/a |
| Year Added to the Plan | 2016 | Timeline (estimated) | n/a | Implementation Priority | n/a |
| Hazard(s) Mitigated | Dam Failure, Earthquake, Flood, Landslide, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | Completed | <i>If No Longer Needed, provide reason.</i> | 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) | Redundancies have been identified, and improvements have been made in this area. The City of Half Moon Bay will still continue to work with partners if new approaches are identified. | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|--------------------------------------|--|--------------------------------|--------|
| Mitigation Action | Establish a damage assessment program to systematically document and survey maximum inundation levels (i.e., high water marks, preliminary damage estimates, damage photos) following a significant flood event. The data will support future mitigation efforts, including the implementation and enhancements of hazard mitigation, climate action, and other plans. | | | | |
| Action Number | HMB-14 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2016 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department, San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) | | | | |
| Supporting Agency / Organization (If applicable) | n/a | | | | |
| Additional Participating Jurisdictions (If Applicable) | n/a | | | | |
| Estimated Cost | Medium | Potential Funding Source | General Fund (Staff Time), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|---|--------------------------------------|---|--------------------------------|-------|
| Mitigation Action | Implement flood hazard analysis (e.g., the 100-year tide and sea level rise projections) into all local shoreline ordinances and land use planning, the General Plan, the Climate Action and Adaptation Plan, and development applications, as appropriate. This ensures that new development and infrastructure account for climate-driven extreme weather events. | | | | |
| Action Number | HMB-15 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 21/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | High |
| Hazard(s) Mitigated | Dam Failure, Flood, Sea Level Rise, Severe Weather | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department, City of Half Moon Bay 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), City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|---|--------------------------------------|--|--------------------------------|--------|
| Mitigation Action | Harden and modernize aging critical municipal utility systems, equipment, and critical facilities (e.g., pump stations, tide gates, culverts) to ensure operational continuity during extreme weather events. | | | | |
| Action Number | HMB-16 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Flood, Sea Level Rise, Severe Weather | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |



| | | | | | |
|---|---|--------------------------------------|-----|--------------------------------|-----|
| Mitigation Action | Support green infrastructure projects that enhance resilience to natural disasters and incorporate green design elements into hazard mitigation projects, where feasible. | | | | |
| Action Number | HMB-17 | 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 | 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) | The City supports green infrastructure projects and requires green features in all new construction, in accordance with the City Code and the Land Use Plan. | | | | |



| | | | | | |
|---|---|--------------------------------------|--|--------------------------------|--------|
| Mitigation Action | Upsize stormwater drainage to alleviate repeated localized flooding, especially storm drain systems connected to the San Mateo County Flood and Sea Level Rise Resiliency District channels and infrastructure. | | | | |
| Action Number | HMB-18 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Flood, Sea Level Rise, Severe Weather | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department, San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) | | | | |
| Supporting Agency / Organization (If applicable) | n/a | | | | |
| Additional Participating Jurisdictions (If Applicable) | n/a | | | | |
| Estimated Cost | Medium | Potential Funding Source | General Fund (Staff Time), HMGP, FMA, City Capital Improvement Program funds | | |
| Additional Details (optional) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|--|---|---|--------------------------------|--------|
| Mitigation Action | Plan, design, and implement long-term resilience initiatives to sea level rise, severe weather, and coastal erosion for culverts, roadways, and bridges in the vicinity of other flood protection projects, including assets identified in the Caltrans District 4 Adaptation Priorities Report. | | | | |
| Action Number | HMB-19 | Goal(s) Addressed | 1, 3, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Flood, Sea Level Rise, Severe Weather | | | | |
| Project Status | In Progress | <i>If No Longer Needed, provide reason.</i> | n/a | | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay Public Works Department, San Mateo County Flood and Sea Level Rise Resiliency District (OneShoreline) | | | | |
| Supporting Agency / Organization (If applicable) | n/a | | | | |
| Additional Participating Jurisdictions (If Applicable) | n/a | | | | |
| Estimated Cost | Medium | Potential Funding Source | General Fund (Staff Time), HMGP, FMA, City Capital Improvement Program funds, Tax-Funded Flood Zones, Caltrans grants | | |
| 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 | HMB-20 | Goal(s) Addressed | n/a | Prioritization Score | n/a |
| Year Added to the Plan | 2021 | Timeline (estimated) | n/a | Implementation Priority | n/a |
| Hazard(s) Mitigated | Drought | | | | |
| Project Status | No Longer Needed | If <i>No Longer Needed</i> , provide reason. | Recycled water is feasible, but unrealistic on the Coastside due to high implementation costs. | | |
| 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) | | | | | |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| | | | | | |
|---|---|--------------------------------------|--|--------------------------------|-----|
| Mitigation Action | Advance long-term resilience to sea level rise, extreme storms, and coastal erosion for Pillar Point Harbor and the surrounding area. | | | | |
| Action Number | HMB-21 | Goal(s) Addressed | n/a | Prioritization Score | n/a |
| Year Added to the Plan | 2021 | Timeline (estimated) | n/a | Implementation Priority | n/a |
| Hazard(s) Mitigated | n/a | | | | |
| Project Status | No Longer Needed | If No Longer Needed, provide reason. | The City of Half Moon Bay is generally supportive of projects to limit the effects of sea level rise, but Pillar Point Harbor is not within the City limits. However, the City will continue to support the Harbor District's efforts. | | |
| 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 | Implement long-term resilience measures to protect the California Coastal Trail against sea level rise, severe weather, and coastal erosion. | | | | |
| Action Number | HMB-22 | Goal(s) Addressed | 1, 2, 3, 4, 5 | Prioritization Score | 24/40 |
| Year Added to the Plan | 2021 | Timeline (estimated) | 1 to 5 Years | Implementation Priority | Medium |
| Hazard(s) Mitigated | Dam Failure, Drought, Earthquake, Flood, Landslide, Sea Level Rise, Severe Weather, Tsunami, Wildfire | | | | |
| Project Status | In Progress | If No Longer Needed, provide reason. | | n/a | |
| Benefits (Loss Avoided) | Medium | | | | |
| Lead Agency / Organization | City of Half Moon Bay 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), 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 (<i>Flood</i>) | Medium | A significant hazard event is likely to occur within 25 years. | 2 | N/A |
| Urban/Flash Flooding (<i>Flood</i>) | High | A significant hazard event is likely to occur annually. | 3 | N/A |
| Coastal Flooding (<i>Flood</i>) | Medium | A significant hazard event is likely to occur within 25 years. | 2 | N/A |
| Landslide | Medium | A significant hazard event is likely to occur within 25 years. | 2 | N/A |
| Sea Level Rise | High | A significant hazard event is likely to occur annually. | 3 | N/A |
| Heavy Rainfall (<i>Severe Weather</i>) | High | A significant hazard event is likely to occur annually. | 3 | N/A |
| Heat Wave/Extreme Heat (<i>Severe Weather</i>) | Medium | A significant hazard event is likely to occur within 25 years. | 2 | N/A |
| Fog (<i>Severe Weather</i>) | Low | A significant hazard event is likely to occur within 100 years. | 1 | N/A |
| Severe Thunderstorm (<i>Severe Weather</i>) | Medium | A significant hazard event is likely to occur within 25 years. | 2 | N/A |
| Tornado (<i>Severe Weather</i>) | Low | A significant hazard event is likely to occur within 100 years. | 1 | N/A |
| Strong Winds (<i>Severe Weather</i>) | 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 | 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 |
| 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 | 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 |
| 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 | 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 |
| 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 | 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 |
| 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 | 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 |
| Wildfire | Extent/Severity | High | Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident. | 3 | 3 | 9 |
| | Catastrophic | High | High potential that this hazard could be catastrophic. | 3 | 3 | 9 |

C.3. Vulnerability Factors

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

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| 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 | 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 |
| 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 | Low | Changes in development have increased the community's exposure to the hazard by 4% or less. | 1 | 1 | 1 |
| 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 | 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 |

2026 San Mateo County Local Hazard Mitigation Plan (DRAFT)
 City of Half Moon Bay Annex



| 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) | <i>Population Exposure</i> | High | 30% or more of the population is exposed to the hazard. | 3 | 3 | 9 |
| | <i>Property Exposure</i> | High | 25% or more of the total assessed property value is exposed to the hazard. | 3 | 1 | 3 |
| | <i>Changes in Development</i> | Low | Changes in development have increased the community's exposure to the hazard by 4% or less. | 1 | 1 | 1 |
| Tsunami | <i>Population Exposure</i> | Medium | 15% to 29% of the population is exposed to the hazard. | 2 | 3 | 6 |
| | <i>Property Exposure</i> | Medium | 10% to 24% of the total assessed property value is exposed to a hazard. | 2 | 1 | 2 |
| | <i>Changes in Development</i> | Low | Changes in development have increased the community's exposure to the hazard by 4% or less. | 1 | 1 | 1 |
| Wildfire | <i>Population Exposure</i> | Low | 14% or less of the population is exposed to the hazard. | 1 | 3 | 3 |
| | <i>Property Exposure</i> | Low | 9% or less of the total assessed property value is exposed to a hazard. | 1 | 1 | 1 |
| | <i>Changes in Development</i> | 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 | <i>Population and Life Safety</i> | Medium | Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care. | 2 | 3 | 6 |
| | <i>Underserved Population</i> | High | Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries. | 3 | 3 | 9 |
| | <i>Property, Facilities, and Critical Infrastructure</i> | 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 |
| | <i>Economic</i> | Medium | Total economic impact is likely to be greater than \$100,000, but less than or equal to \$10 million. | 2 | 1 | 2 |
| | <i>Environmental</i> | 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 |
| | <i>Continuity of Operations/Delivery of Services</i> | 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 |
| | <i>Future Development</i> | Low | Future development trends will minimally increase the impacts of this hazard. | 1 | 1 | 1 |
| | <i>Climate Change</i> | No Impact | Climate change trends will not increase the impacts of this hazard. | 0 | 1 | 0 |



| Hazard Event | Impact Factor | Impact | | Impact Factor | Weighted Factor | Score |
|--------------|--|--------|--|---------------|-----------------|-------|
| Drought | Population and Life Safety | Low | Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries. | 1 | 3 | 3 |
| | Underserved Population | Medium | Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care. | 2 | 3 | 6 |
| | Property, Facilities, and Critical Infrastructure | Low | Less than \$500,000 in property, facilities, and infrastructure damages is expected from a single significant event, or damages are expected to occur to less than 5% of the property value within the jurisdiction. | 1 | 2 | 2 |
| | Economic | Medium | Total economic impact is likely to be greater than \$100,000, but less than or equal to \$10 million. | 2 | 1 | 2 |
| | Environmental | Medium | Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work. | 2 | 1 | 2 |
| | Continuity of Operations/Delivery of Services | Medium | Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event. | 2 | 1 | 2 |
| | Future Development | 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 | 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 |
|------------------------------|--|--------|---|---------------|-----------------|-------|
| 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 | 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 |
|--------------------------|--|--------|--|---------------|-----------------|-------|
| Coastal Flooding (Flood) | Population and Life Safety | Low | Populations exposed to this hazard are likely to experience minimal adverse impacts, such as ambulatory injuries. | 1 | 3 | 3 |
| | Underserved Population | Medium | Underserved populations exposed to the hazard are likely to experience some adverse/disproportionate impacts, such as injuries requiring acute medical care. | 2 | 3 | 6 |
| | Property, Facilities, and Critical Infrastructure | High | More than \$5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction. | 3 | 2 | 6 |
| | Economic | Medium | Total economic impact is likely to be greater than \$100,000, but less than or equal to \$10 million. | 2 | 1 | 2 |
| | Environmental | Medium | Environmental impact from a single significant event is likely to be localized, requiring some outside resources and support; and/or repair, cleanup, restoration, or preservation work. | 2 | 1 | 2 |
| | Continuity of Operations/Delivery of Services | Medium | Impact lasting between 24 and 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event. | 2 | 1 | 2 |
| | Future Development | Low | Future development trends will minimally increase the impacts of this hazard. | 1 | 1 | 1 |
| | Climate Change | High | Climate Change trends will significantly increase the impacts of this hazard. | 3 | 1 | 3 |



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



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



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



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



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



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



| Hazard Event | Impact Factor | Impact | Impact Factor | Weighted Factor | Score | |
|--------------|--|--------|--|-----------------|-------|---|
| Wildfire | Population and Life Safety | Medium | Populations exposed to this hazard are likely to experience some adverse impacts, such as injuries requiring acute medical care. | 2 | 3 | 6 |
| | Underserved Population | High | Underserved populations exposed to the hazard are likely to experience significant adverse/disproportionate impacts, such as fatalities and severe injuries. | 3 | 3 | 9 |
| | Property, Facilities, and Critical Infrastructure | High | More than \$5 million in property, facilities, and infrastructure damage is expected from a single significant event, or damages are expected to occur to 15% or more of the property value within the jurisdiction. | 3 | 2 | 6 |
| | Economic | Medium | Total economic impact is likely to be greater than \$100,000, but less than or equal to \$10 million. | 2 | 1 | 2 |
| | Environmental | High | Environmental impact from a single significant event is likely to be substantial, requiring extensive outside resources and support; and/or repair, cleanup, restoration, and/or preservation work. | 3 | 1 | 3 |
| | Continuity of Operations/Delivery of Services | High | Impact lasting more than 72 hours on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single significant event. | 3 | 1 | 3 |
| | Future Development | 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]