



2021 Multijurisdictional Local Hazard Mitigation Plan

Volume 2—Planning Partner Annexes



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TETRA TECH

2021 Multijurisdictional Local Hazard Mitigation Plan

September 2021

PREPARED FOR

County of San Mateo Department of Emergency Management

501 Winslow
Redwood City, CA 94063

PREPARED BY

Tetra Tech

1999 Harrison St., Suite 500
Oakland, CA 94612
510-302-6300 | tetrattech.com

Tetra Tech Project #103s7389

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Appendices

Appendix A. Planning Partner Expectations
Appendix B. Procedures for Linking to Hazard Mitigation Plan
Appendix C. Annex Instructions and Templates

ACRONYMS

The following acronyms are used throughout the annexes in this volume:

- AB—Assembly Bill
- AFG—Assistance for Firefighter Grant
- ACWA—Association of California Water Agencies
- BART—Bay Area Rapid Transit
- BAWSCA—Bay Area Water Supply & Conservation Agency
- BCEGS—Building Code Effectiveness Grading Schedule
- BMP—best management practice
- BRIC—Building Resilient Infrastructure and Communities
- C/CAG—City/County Association of Governments of San Mateo County
- Cal OES—California Office of Emergency Services
- CAL FIRE—California Department of Forestry and Fire Protection
- CBC—city building code
- C&CB—Core Capacity and Capability Building funding under BRIC
- CCFD—Central County Fire Department
- CCR—California Code of Regulations
- CCWD—Coastside County Water District
- CDAA—California Disaster Assistance Act
- CDC—Center for Disease Control
- CDFA—California Department of Food and Agriculture
- CDD—Community Development Department
- CEQA—California Environmental Quality Act
- CERPP—Citizens' Emergency Response and Preparedness Program
- CERT—Community Emergency Response Team
- CFPD—Colma Fire Protection District
- CFR—Code of Federal Regulations
- CIP—capital improvement program
- CMAP—Climate Mitigation and Adaptation Plan
- COOP/COG—continuity of operations plan and continuity of government
- CPAW—Community Partners for Wildfire Assistance
- CSM—College of San Mateo
- CWPP—community wildfire protection plan
- CWSRF—EPA Clean Water State Revolving Fund
- DEM—San Mateo County Department of Emergency Management
- DWR—Department of Water Resources
- EAP—emergency action plan
- EIR—Environmental Impact Report
- EMID—Estero Municipal Improvement District
- EMPG—Emergency Management Performance Grant
- EOC—emergency operations center
- EOP—emergency operations plan
- EPA—Environmental Protection Agency
- FEMA—Federal Emergency Management Agency
- FMA—Flood Mitigation Assistance Grant Program
- FMAG—Fire Management Assistance Grants

- FPD—fire protection district
- FSLRRD—Flood & Sea Level Rise Resiliency District
- GHG—greenhouse gas
- GIS—geographic information system
- HMA—Hazard Mitigation Assistance
- HMB—Half Moon Bay
- HMGP—Hazard Mitigation Grant Program
- HMP—hazard mitigation plan
- HRD—Highlands Recreation District
- HSGP—Homeland Security Grant Program
- IBC—International Building Code
- ISO—Insurance Services Office (insurance underwriter)
- JPA—joint powers authority
- LCP—Local Coastal Program
- LHMP—local hazard mitigation plan
- LUP—land use plan
- MJLHMP—Multijurisdictional Local Hazard Mitigation Plan
- MPFPD—Menlo Park Fire Protection District
- MPWD—Mid-Peninsula Water District
- MRP—Municipal Regional Stormwater Permit
- MWSD—Montara Water and Sanitary District
- NCCWD—North Coast County Water District
- NEPA—National Environmental Policy Act
- NFIP—National Flood Insurance Program
- NIMS—National Incident Management System
- NOAA—National Oceanic and Atmospheric Administration
- NRCS—Natural Resources Conservation Service
- OPC—California Ocean Protection Council
- POC—point of contact
- RCD—resource conservation district
- RHNA—Regional Housing Needs Allocation
- RICAPS—Regionally Integrated Climate Action Planning Suite
- SAFER—Staffing for Adequate Fire and Emergency Response Grants
- SB—Senate Bill
- SCC—California State Coastal Conservancy
- SFHA—special flood hazard area
- SFO—San Francisco International Airport
- SFPUC—San Francisco Public Utilities Commission
- SLR—sea-level rise
- SMCCD—San Mateo Community College District
- SMCFire or SMCFD—San Mateo County Fire Department
- SMCO—San Mateo County
- SMRCD—San Mateo Resource Conservation District
- SSF—South San Francisco
- SSFFD—South San Francisco Fire Department
- SSMP—Sanitary Sewer Management Plan
- SWRCB—California State Water Resources Control Board
- TEP—Training and Exercise Program
- THIRA—Threat & Hazard Identification & Risk Assessment
- TMDL—total maximum daily load
- UASI—Urban Area Security Initiative
- USDA—U.S. Department of Agriculture

- UWMP—urban water management plan
- WFPD—Woodside Fire Protection District
- WUI—wildland urban interface
- WWD—Westborough Water District

INTRODUCTION

BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. All participating jurisdictions must meet the requirements of Chapter 44 of the Code of Federal Regulations (44 CFR):

“Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.” (Section 201.6(a)(4)).

For the *San Mateo County 2021 Multi-Jurisdictional Local Hazard Mitigation Plan*, a planning partnership was formed to leverage resources and to meet requirements of the federal Disaster Mitigation Act for as many eligible local governments as possible. The Disaster Mitigation Act defines a local government as follows:

“Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.”

In addition, federally recognized tribes may participate in local/tribal multi-jurisdictional plans as long as the requirements of Section 201.7 of 44 CFR are met for tribal components of the plan.

Two types of planning partners participated in this process for the *2021 Multi-Jurisdictional Local Hazard Mitigation Plan*, with distinct needs and capabilities:

- Incorporated municipalities
- Special districts

Each participating planning partner prepared a jurisdiction-specific annex to this plan. These annexes, as well as information on the process by which they were created, are contained in this volume.

THE PLANNING PARTNERSHIP

Initial Solicitation and Letters of Intent

A planning team made up of San Mateo County and consultant staff solicited the participation of all eligible municipalities and special districts at the outset of this project. A kickoff meeting was held on January 5, 2021, to identify potential stakeholders and planning partners for this process. The purpose of the meeting was to introduce

the planning process to jurisdictions in the County that could have a stake in the outcome of the planning effort. All eligible local governments in the planning area were invited to attend. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act.
- Review the *2016 San Mateo County Hazard Mitigation Plan* and planning partnership
- Outline the work plan for this hazard mitigation plan.
- Describe the benefits of multi-jurisdictional planning.
- Outline planning partner expectations.
- Solicit planning partners.
- Solicit volunteers/recommendations for the steering committee.

Local governments wishing to join the planning effort were asked to provide the planning team with a “letter of intent to participate” that agreed to the planning partner expectations (see Appendix A) and designated lead and alternate points of contact for their jurisdiction. In all, the planning team received formal commitment from 37 planning partners in addition to the County. A map showing the location of participating special purpose districts is provided at the end of this introduction. Maps showing risk assessment results for participating cities are provided in the individual annexes for each city. Risk assessment maps for all planning areas countywide are provided in Volume 1 of this hazard mitigation plan.

Planning Partner Expectations

The planning team developed the following list of planning partner expectations, which were provided and discussed at the kickoff meeting (see Appendix A for details):

- Complete a “letter of intent to participate.”
- Designate lead and primary points of contact for this effort.
- Support and participate in the selection and function of the Steering Committee.
- Provide support required to implement the public involvement strategy.
- Participate in the process through opportunities such as:
 - Steering Committee meetings
 - Public meetings or open houses
 - Workshops and planning partner specific training sessions
 - Public review and comment periods prior to adoption.
- Attend the mandatory Phase 3 jurisdictional annex workshop.
- Complete the jurisdictional annex.
- Perform a “consistency review” of all technical studies, plans and ordinances specific to hazards.
- Review the risk assessment and identify hazards and vulnerabilities specific to the jurisdiction.
- Review and determine if the mitigation recommendations chosen in Volume 1 will meet the needs of the jurisdiction.

- Create an action plan that identifies each project, who will oversee the task, how it will be financed, and when it is estimated to occur.
- Formally adopt the hazard mitigation plan.

By adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume 1. Failure to meet these criteria may result in a partner being dropped from the partnership by the Steering Committee, and thus losing eligibility under the scope of this plan.

Final Coverage

Two jurisdictions that submitted letters of intent to participate withdrew from the planning process prior to its completion. The rest fully met the participation requirements for this update, completed an annex template, and will be covered by the updated hazard mitigation plan upon FEMA approval and adoption by their governing bodies. This final coverage will apply to the following jurisdictions:

- **Cities/County**
 - Town of Atherton
 - City of Belmont
 - City of Brisbane
 - City of Burlingame
 - Town of Colma
 - City of Daly City
 - City of East Palo Alto
 - City of Foster City
 - City of Half Moon Bay
 - Town of Hillsborough
 - City of Menlo Park
 - City of Millbrae
 - City of Pacifica
 - Town of Portola Valley
 - City of Redwood City
 - City of San Bruno
 - City of San Carlos
 - City of San Mateo
 - City of South San Francisco
 - Town of Woodside
 - San Mateo County
- **Special Purpose Districts**
 - Coastside County Water District
 - Colma Fire Protection District
 - Highlands Recreation District
 - Menlo Park Fire Protection District
 - Midpeninsula Regional Open Space District
 - Mid-Peninsula Water District
 - Montara Water & Sanitary District
 - North Coast County Water District
 - San Mateo Community College District
 - San Mateo County Flood & Sea Level Rise Resiliency District
 - San Mateo County Harbor District
 - San Mateo County Office of Education
 - San Mateo Resource Conservation District
 - Westborough Water District
 - Woodside Fire Protection District

Linkage Procedures

Eligible local jurisdictions that did not participate in development of this multi-jurisdictional plan may comply with Disaster Mitigation Act requirements by linking to this plan following procedures outlined in Appendix B.

PARTNER ANNEX DEVELOPMENT

Capability Assessment

All participating jurisdictions compiled an inventory and analysis of existing authorities and capabilities called a “capability assessment.” A capability assessment creates an inventory of a jurisdiction’s mission, programs, and policies, and evaluates its capacity to carry them out. This assessment identifies potential gaps in the jurisdiction’s capabilities. If the capability assessment identified an opportunity to add a missing core capability or expand an existing one, then doing so has been selected as an action in the jurisdiction’s action plan. The sections below describe the specific capabilities evaluated under the assessment.

Planning and Regulatory Capabilities

Jurisdictions can develop policies and programs and implement rules and regulations to protect and serve residents. Local policies are typically identified in planning documents, implemented via a local ordinance, and enforced by a governmental body. Because the planning and regulatory authority of municipal partners is generally broader than that of special-purpose districts, the assessment of these capabilities is more detailed for the municipal partners.

Development and Permitting Capability

This set of capabilities is not applicable to special purpose districts and was assessed only for municipal partners (cities and the County). Municipal jurisdictions regulate land use through the adoption and enforcement of zoning, subdivision, and land development ordinances, building codes, building permit ordinances, floodplain, and stormwater management ordinances. When effectively prepared and administered, these regulations can lead to hazard mitigation.

Fiscal Capabilities

Assessing a jurisdiction’s fiscal capability provides an understanding of the ability to fulfill the financial needs associated with hazard mitigation projects. This assessment identifies both outside resources, such as grant-funding eligibility, and local jurisdictional authority to generate internal financial capability, such as through impact fees.

Administrative and Technical Capabilities

Without appropriate personnel, the mitigation strategy may not be implemented. Administrative and technical capabilities focus on the availability of personnel resources responsible for implementing all the facets of hazard mitigation. These resources include technical experts, such as engineers and scientists, as well as personnel with capabilities that may be found in multiple departments, such as grant writers.

Education and Outreach Capability

Regular engagement with the public on issues regarding hazard mitigation provides an opportunity to directly interface with community members. Assessing this outreach and education capability illustrates the connection between the government and community members, which opens a two-way dialogue that can result in a more resilient community based on education and public engagement.

Compliance with National Flood Insurance Program Requirements

The National Flood Insurance Program (NFIP) is not available to special purpose districts, so this set of capabilities was assessed only for municipal partners (cities and the County). Flooding is the costliest natural hazard in the United States and homeowners face increasingly high flood insurance premiums. Community participation in the NFIP opens up opportunity for additional grant funding associated specifically with flooding issues. Assessment of a jurisdiction's current NFIP status and compliance provides a greater understanding of the local flood management program, opportunities for improvement, and available grant funding opportunities.

Participation and Classification in Other Programs

Other programs, such as the Community Rating System, Storm/Tsunami Ready, and Firewise USA, can enhance a jurisdiction's ability to mitigate, prepare for, and respond to natural hazards. These programs indicate a jurisdiction's desire to go beyond minimum requirements set forth by local, state, and federal regulations in order to create a more resilient community. These programs complement each other by focusing on communication, mitigation, and community preparedness to save lives and minimize the impact of natural hazards on a community. The programs reviewed here are applicable to municipal partners only so they are not included in the capability assessments for special-purpose districts.

Adaptive Capacity

An adaptive capacity assessment evaluates a jurisdiction's ability to anticipate impacts from future conditions. By looking at public support, technical adaptive capacity, and other factors, jurisdictions identify their core capability for resilience against issues such as sea level rise. The adaptive capacity assessment provides jurisdictions with an opportunity to identify areas for improvement by ranking their capacity high, medium, or low.

Mitigation Action Plan Development

Risk Ranking

In the risk-ranking exercise, each planning partner was asked to review the ranked risk specifically for its jurisdiction, based on the impact on its population and/or facilities. Municipalities based this ranking on probability of occurrence and the potential impact on people, property, and the economy. Special purpose districts based this ranking on probability of occurrence and the potential impact on their constituency, their vital facilities, and the facilities' functionality after an event. Additionally, to support the social equity lens for this plan update, a social vulnerability ranking factor and weighting was established to support planning partners wishing to apply an equity lens to their risk ranking and project identification and prioritization. The risk-ranking methodology for partner annexes was the same as that used for the countywide risk ranking, as described in Volume 1.

The objectives of this exercise were to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes and to help prioritize types of mitigation actions that should be considered. Hazards that were ranked as "high" and "medium" for each jurisdiction as a result of this exercise were considered to be priorities for identifying mitigation actions, although jurisdictions also identified actions to mitigate "low" ranked hazards, as appropriate.

Information Reviewed to Develop Action Plan

The tool kits were used during the workshops and in follow-up work conducted by the planning partners. A large portion of the workshop focused on how the tool kit should be used to develop the mitigation action plan. Planning partners were specifically asked to review the following to assist in the identification of actions:

- The Jurisdiction’s Capability Assessment—Reviewed to identify capabilities that the jurisdiction does not currently have but should consider pursuing or capabilities that should be revisited and updated to include best available information; also reviewed to determine how existing capabilities can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- The Jurisdiction’s National Flood Insurance Program Compliance Table—Reviewed to identify opportunities to increase floodplain management capabilities.
- The Jurisdiction’s Review of Its Adaptive Capacity for Climate Change—Reviewed to identify ways to leverage or continue to improve existing capacities and to improve understanding of other capacities.
- The Jurisdiction’s Identified Opportunities for Future Integration—Reviewed to identify specific integration actions to be included in the mitigation strategy.
- Jurisdiction-Specific Vulnerabilities—Reviewed to identify actions that will help reduce known vulnerabilities.
- The Mitigation Best Practices Catalog—Reviewed to identify actions that the jurisdiction should consider including in its action plan.
- Public Input—Reviewed to identify potential actions and community priorities.

Action Plan Prioritization

The actions recommended in the action plan were prioritized based on the following factors:

- Cost and availability of funding
- Benefit, based on likely risk reduction to be achieved
- Number of plan objectives achieved
- Timeframe for project implementation
- Eligibility for grant funding programs

Two priorities were assigned for each action:

- A high, medium, or low priority for implementing the action (with and without considerations of social equity)
- A high, medium, or low priority for pursuing grant funding for the action.

The sections below describe the analysis of benefits and costs and the assignment of the two priority ratings.

Benefit/Cost Review

The action plan must be prioritized according to a benefit/cost analysis of the proposed actions (44 CFR, Section 201.6(c)(3)(iii)). For this hazard mitigation plan, a qualitative benefit-cost review was performed for each action by assigning ratings for benefit and cost as follows:

- **Cost:**
 - **High**—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, bonds, grants, and fee increases).
 - **Medium**—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - **Low**—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Benefit:**
 - **High**—Action will provide an immediate reduction of risk exposure for life and property.
 - **Medium**—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - **Low**—Long-term benefits of the action are difficult to quantify in the short term.

To assign priorities, each action with a benefit rating equal to or higher than its cost rating (such as high benefit/medium cost, medium benefit/medium cost, medium benefit/low cost, etc.) was considered to be cost-beneficial. This is not the detailed level of benefit/cost analysis required for some FEMA hazard-related grant programs. Such analysis would be performed at the time a given action is being submitted for grant funding.

Implementation Priority

Implementation priority ratings were assigned as follows:

- **High Priority**—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
- **Medium Priority**—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
- **Low Priority**—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known grant funding. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for grant funding from programs that have not yet been identified.

Social Equity Implementation Priority

For planning partners that chose to apply an equity lens to their prioritization scheme, the following parameters were established:

- **High Priority**—The mitigation action is designed to reduce harm to multiple socially vulnerable groups in the County from one or more of the hazards identified in the hazard mitigation plan.
- **Medium Priority**—The mitigation action is designed to reduce harm to a single socially vulnerable population in the County from at least one hazard identified in the hazard mitigation plan.
- **Low Priority**—The mitigation action fails to advance social equity in any measurable way in the County

Grant Pursuit Priority

Grant pursuit priority ratings were assigned as follows:

- **High Priority**—An action that meets identified grant eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible for grant funding.
- **Medium Priority**—An action that meets identified grant eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting any grant eligibility requirements.

Classification of Actions

Each recommended action was classified based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this classification are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resiliency**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

Annex-Preparation Process

Templates

Templates were created to help the planning partners prepare their jurisdiction-specific annexes. Separate templates were created for the two types of jurisdictions participating in this plan. The templates were created so that all criteria of Section 201.6 of 44 CFR for local governments would be met based on the partners' capabilities and mode of operation. Separate templates were available for partners updating a previous hazard mitigation plan and those developing a first-time hazard mitigation plan. These templates were deployed in three phases during the course of this plan update process. These phases are described as follows:

- **Phase 1**—Profile, Trends, Previous Plan Status
 - Deployed: February 19, 2021
 - Due: March 19, 2021
- **Phase 2**—Capability Assessment and Information Sources
 - Deployed: April 2, 2021
 - Due: May 21, 2021
- **Phase 3**—Risk Ranking, Action Plan, and Information Sources
 - Deployed: June 11, 2021
 - Workshops: June 14 – 16, 2021
 - Due: July 23, 2021

The templates were set up to lead all partner through steps to generate Disaster Mitigation Act-required elements specific to their jurisdictions. The templates and their instructions are included in Appendix C of this volume.

Tool Kit

Each planning partner was provided with a tool kit to assist in completing the annex template and developing an action plan. The tool kits contained the following:

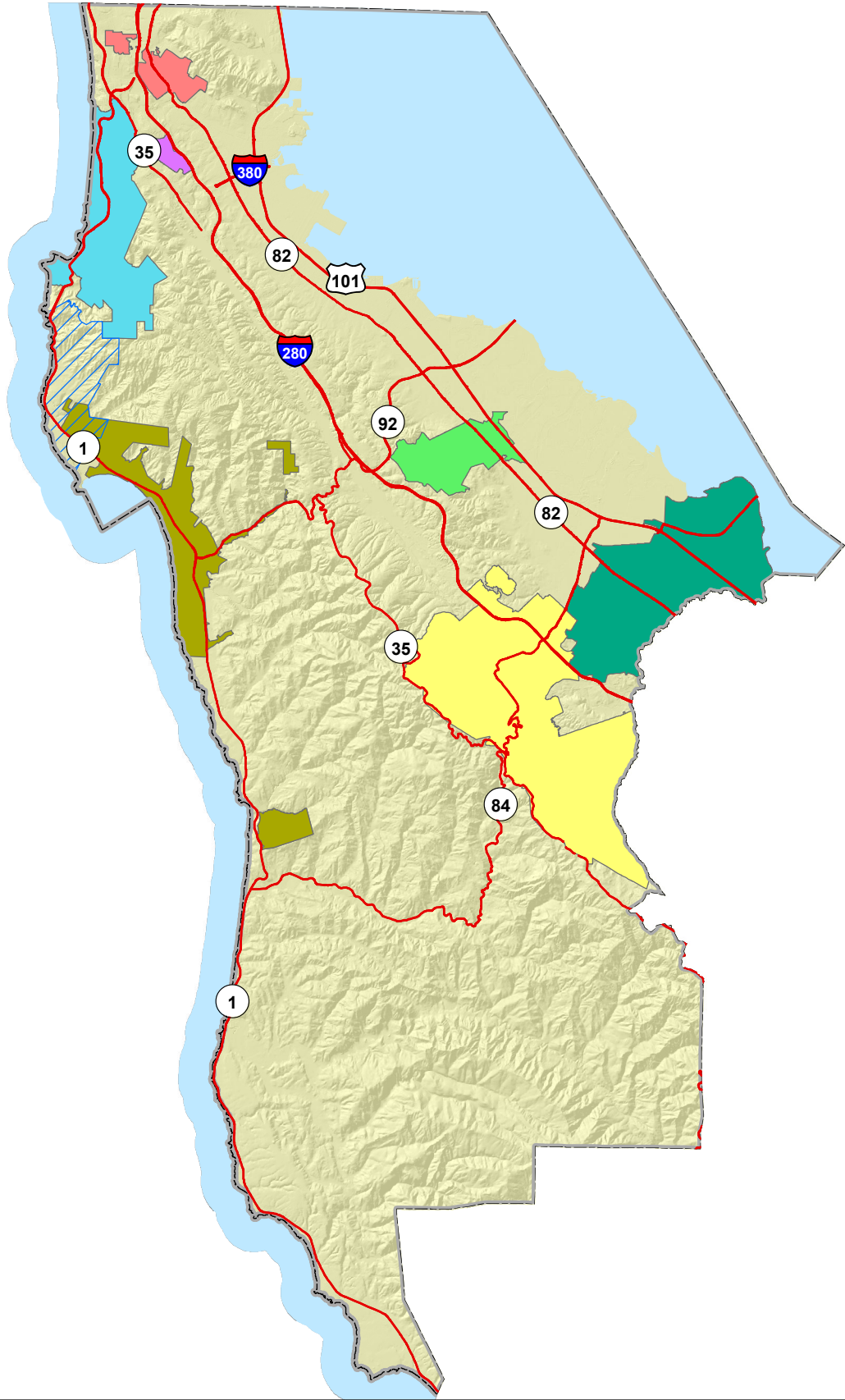
- The *2016 San Mateo County Hazard Mitigation Plan* annexes
- A catalog of mitigation best practices and adaptive capacity
- The guiding principle, goals and objectives developed for the update to the plan
- A list of jurisdiction-specific issues noted during the risk assessment
- Information on the FEMA Hazard Mitigation Assistance grant program
- Information on past hazard events that have impacted the planning area
- County-wide and jurisdiction-specific maps for hazards of concern
- Special district boundary maps showing the sphere of influence for each special purpose district partner
- The risk assessment results developed for this plan
- Information on climate change and expected impacts in the planning area

- Jurisdiction-specific annex templates, with instructions for completing them
- FEMA guidance on plan integration
- The results of a public survey conducted as part of the public involvement strategy
- A copy of the presentation that was given at the workshop sessions.

Workshop

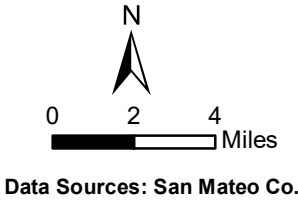
All partners were required to participate in a technical assistance workshop, where key elements of the template were discussed and the templates were subsequently completed by a designated point of contact for each partner and a member of the planning team. Multiple online workshops were held the week of June 14, 2021 and attended by at least one representative from each planning partner, addressed the following topics:

- The templates and the tool kit
- Natural events history
- Jurisdiction-specific issues
- Risk ranking
- Status of prior actions
- Developing your action plan
- Cost/benefit review
- Prioritization protocol
- Next steps.

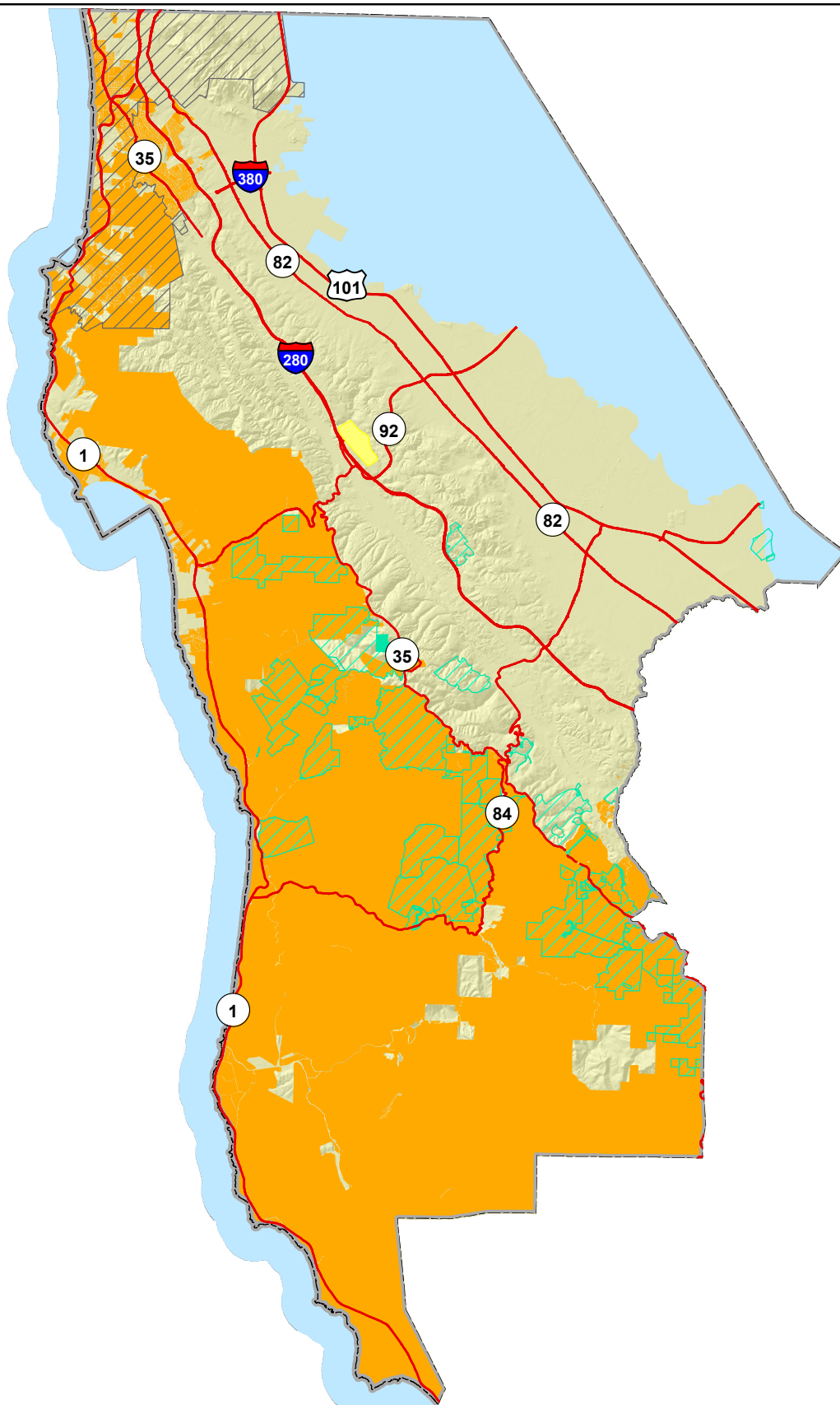


Special Purpose District Planning Partners, 1 of 2

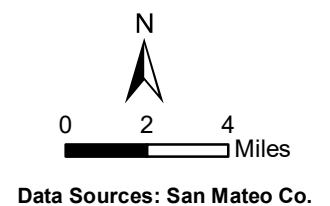
- | | | |
|-----------------|----------------|-----------------------|
| Highways | Colma FPD | Coastside County WD |
| County Boundary | Menlo Park FPD | Mid-Peninsula WD |
| | Woodside FPD | North Coast County WD |
| | Montara WSD | Westborough WD |



San Mateo County Community College District, San Mateo County Flood and Sea Level Rise Resiliency District, San Mateo County Harbor District, and San Mateo County Office of Education extend countywide.



Special Purpose District Planning Partners, 2 of 2



1. SAN MATEO COUNTY

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Daniel T. Belville, Director
Department of Emergency Management
San Mateo County, Regional Operations Center
501 Winslow Street
Redwood City, CA 94063
650-363-4118
dbelville@smcgov.org

Alternate Point of Contact

Carolyn Bloede, Director
Office of Sustainability
455 County Center, 4th Floor
Redwood City, C
888-442-2666
cbloede@smcgov.org

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Mitigation Planning Team Members

Name	Title
Paniz Amirnasiri	Management Analysis
Michael Barber	Senior Legislative Aide
Dan Belville	Director of Department of Emergency Management
Carolyn Bloede	Director of Office of Sustainability
Nicholas Calderon	Director of Parks and Recreation
Rumika Chaudry	GIS/IS Manager
Shruti Dhapodkar	Emergency Preparedness Project Manager
Hannah Doress	Resource Conservation Specialist
Andrew Eng	Community Program Analyst II
Katie Faulkner	Planner III
Marcus Griswold (Jan – May 2021)	Senior Resource Conservation Specialist (Through May 2021)
Chris Hunter	Chief of Staff, Board of Supervisors District 3
Emma Hunter	ABAHO Coordinator
Karishma Kumar	Community Program Supervisor
Joe LaClair	Planning Services Manager (Retired March 2021)
Scott Lombardi	Parks Superintendent
Ann Ludwig	Project Manager
Melissa Ross	Planning Services Manager (Beginning March 2021)
Jeff Norris	Emergency Services Coordinator
Hannah Ormshaw	Natural Resource Manager
Hilary Papendick	Resource Conservation Program Manager

Name	Title
Isabel Pares Ramos	Resource Conservation Specialist
Jim Porter	Director of Public Works
David Savory	ISD Data Specialist III
Belén Seara	HPP Management Analyst
Lena Silberman	Legislative Aide
Khoa Vo	Deputy Director of Public Works
Jeremy Wagner	Deputy Director of Agricultural Services Agricultural Commissioner/Sealer
Koren Widdel	Director of Agricultural Services Agricultural Commissioner/Sealer

1.2 JURISDICTION PROFILE

1.2.1 Location and Features

Whole County

San Mateo County, situated along the Central California coastline, encompasses the major portion of the San Francisco Peninsula. The County covers approximately 554 square miles, with land accounting for approximately 448 square miles and inland waters, and San Francisco Bay tidal areas accounting for the remainder. The County is roughly 42 miles in length and varies from seven to twenty miles in width. Approximately 55 miles of the County's western border is Pacific shoreline, and roughly 34 miles of the eastern border is Bay shoreline. The County is bounded on the north by the City and County of San Francisco and on the south and southeast by Santa Cruz and Santa Clara Counties.

Unincorporated Area

The County's unincorporated area includes urban pockets east of Route 280 and most of the rural area south and west of Route 280. The unincorporated County consists of approximately 309 square miles (68% of total County area), and there is wide variation in the size, location, and economic and social characteristics of the various unincorporated areas. General descriptions of the main unincorporated areas are provided below.

Urban Bayside Communities

North Fair Oaks

The largest unincorporated community is North Fair Oaks, which is located within Redwood City's sphere of influence. This area is fully urbanized, with moderate to high densities of development. North Fair Oaks has over 15,000 residents and more than 4,000 housing units. North Fair Oaks has a relatively high concentration of low and moderate-income households, as well as a wide variety of housing types and a variety of land uses, including significant commercial and industrial uses.

Colma

Unincorporated Colma is a small, urbanized pocket in the northern part of the County, adjoining incorporated Colma and Daly City. Colma has seen significant amounts of relatively high-density residential development over the past decade, with several multifamily mixed-income apartment and condominium projects, a senior housing project, and several other projects, all located around the redeveloped Colma BART station.

Emerald Lake Hills

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

Other

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

Urban Coastal Communities

There are several unincorporated coastal communities north of Half Moon Bay, within the urban area of the County's urban/rural boundary. These communities include Montara, Moss Beach, El Granada, Princeton, and Miramar. These communities are an exception to the primarily rural nature of the coastal unincorporated areas, and have housing and development issues, including infrastructure constraints and other issues unique to the coast.

Rural Areas and Communities

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

Summary

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

- Brisbane Quarry
- Broadmoor
- Burlingame Hills
- Burlingame Hills
- Butano Falls Tract
- California Golf Club
- Country Club Park
- Dearborn Park
- Dearborn Park
- Moss Beach
- North Fair Oaks
- North San Gregorio
- North Skyline
- Olympic Country Club
- Palomar Park
- Peninsula Golf and Country Club
- Pescadero West
- Pescadero East

- Devonshire
- Devonshire
- El Granada
- Emerald Lake Hills
- Harbor/Industrial
- Kensington Square
- La Honda
- Ladera
- Loma Mar
- Los Trancos Woods
- Menlo Oaks
- Miramar
- Mobile Home Parks
- Montara
- Pillar Point Harbor
- Princeton
- Rural Midcoast
- San Bruno Mountain Park
- San Francisco International Airport
- San Francisco Jail
- San Francisco Watershed Lands
- San Gregorio
- San Mateo Highlands
- Sequoia Tract
- South Skyline
- Stanford Lands
- Unincorporated Colma
- Weekend Acres
- West Menlo Park

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

- The Coastsides area experiences a marine climate, characterized by cool, foggy summers and relatively wet winters. Fog, the result of condensation over the ocean near the coast, provides moisture and cool air for the coastal terraces. These elements are largely responsible for the emergence of the Coastsides region as an agricultural area, featuring a number of specialty crops. Bayside climates are generally warm and sunny, particularly in the summer months when hot air from the valleys moving to the east warms the prevailing cool ocean breezes.
- The majority of annual precipitation in San Mateo County occurs from December through March. During this wet season, precipitation levels average from 3.00 to 4.5 inches per month. One of the key influences upon precipitation is elevation. The Bayside generally receives less precipitation than the same elevation on the Coastsides, because the Santa Cruz Mountain Range acts as a rain shield causing moisture-laden air moving in from the Coastsides to condense and deposit much of its moisture in the form of rain or fog as it reaches the higher, colder mountains.

1.2.2 History

Whole County

San Mateo County was formed in 1856, after the establishment of San Francisco County. San Mateo County later annexed part of northern Santa Cruz County in 1868. Redwood City, the county seat, incorporated in 1867. The next to incorporate was the City of San Mateo in 1894. The outbreak of World War II fueled a new wave of

growth along the Peninsula. After the war, thousands of new homes were built as the county's population swelled from 115,000 in 1940 to 235,000 in 1950. The county's population grew to 556,000 by 1970, a gain of 112,000 during the 1960s. The County continued to grow in the 1980s and 1990s due to the development of computer software, internet, gaming, and biotechnology companies. Population growth in the County slowed in the early 2000's and then picked up again in the 2010's to reach approximately 773,000 by 2020.

Unincorporated Area

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

1.2.3 Governing Body Format

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

The San Mateo County Board of Supervisors assumes responsibility for the adoption of this plan; the County Department of Emergency Management will oversee its implementation.

1.3 CURRENT TRENDS

1.3.1 Population

According to the California Department of Finance, the population of the unincorporated area of San Mateo County as of January 2020 was 66,083. Since 2016, the population has grown at an average annual rate of 0.48 percent.

1.3.2 Development

Between 2016 and 2020 the majority of building permits issued for new construction in unincorporated San Mateo County were for residential uses, along with a smaller number of permits issued for commercial and governmental uses.

During this time period the County issued building permits for approximately 500 new residential units. These building permits were split between single family houses, accessory dwelling units, and multi-family homes. The majority of newly permitted units were located in the urban Bayside. About a quarter of new units were located in the urban Midcoast and only a few new units were permitted in the rural areas of the unincorporated county.

In addition to new residential units, about 175 building permits were issued to replace an existing home with a newly constructed home. These permits were mostly located in the built-out urban Bayside communities, and often involved splitting an existing parcel into two to build two new houses in the place of one existing home.

While there were few multi-family projects overall, these projects contributed a significant number of new permitted units. Multi-family projects were mostly concentrated in North Fair Oaks, in addition to projects in El Granada and Sequoia Tract.

Table 1-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 1-2. Recent and Expected Future Development Trends

Criterion						Response
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>						No
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>						No
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>						Yes In 2011 the County adopted the North Fair Oaks Community Plan, a long-range policy document that establishes goals and policies for land use, housing, health and wellness, parks and recreation, circulation, and infrastructure for North Fair Oaks. The Plan provides for changes to allowed land uses and development in specifically designated areas of the community to allow for a greater diversity and intensity of uses. Rezoning to implement these revised land use regulations was completed between 2015 and 2019. North Fair Oaks is moderately susceptible to liquefaction, and in the future climate change will increase the risks of extreme heat and sea level rise.
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?		2016	2017	2018	2019	2020
	Single Family	85	103	101	114	91
	Multi-Family	3	1	1	1	1
	Other	8	2	5	9	4
	Total	96	106	107	124	96
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.						<ul style="list-style-type: none">• Special Flood Hazard Areas: 16• Landslide: 95• High Liquefaction Areas: 8• Tsunami Inundation Area: 37• Wildfire Risk Areas: 125
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.						The 2015 San Mateo County Housing Element included an inventory of developable and redevelopable sites which estimated a capacity for an additional 1,648 residential units (p.226). This included vacant parcels and non-vacant residential parcels that are redevelopable at higher intensities without changes to existing zoning and/or land use designations. Unincorporated San Mateo County’s Regional Housing Needs Allocation (RHNA) for the period from 2014 to 2022 was 913 units, which left a potential surplus of 735 units. As of 2020, 551 of the 913 RHNA units had been issued permits.

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- Development and permitting capabilities are presented in Table 1-4.
- An assessment of fiscal capabilities is presented in Table 1-5.
- An assessment of administrative and technical capabilities is presented in Table 1-6.
- An assessment of education and outreach capabilities is presented in Table 1-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-8.
- Classifications under various community mitigation programs are presented in Table 1-9.
- The community’s adaptive capacity for the impacts of climate change is presented in Table 1-10.

Table 1-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes	No	Yes	Yes
<i>Comment: San Mateo County provides uniform administration and enforcement of the International Building Code, Uniform Housing Code, Uniform Dwelling Construction Code, Uniform Code for Abatement of Dangerous Buildings, Uniform Building Security Code, Uniform Sign Code, Uniform Plumbing Code, Uniform Swimming Pool-Spa and Hot Tub Code, National Electrical Code, and supplements and appendices thereto. The San Mateo County Building Regulations were last updated in January 2020.</i>				
Zoning Code	Yes	No	No	Yes
<i>Comment: San Mateo County Zoning Regulations were last amended in May 2021.</i>				
Subdivisions	Yes	No	No	Yes
<i>Comment: San Mateo County Subdivision Regulations were last updated in July 2020.</i>				
Stormwater Management	Yes	Yes	Yes	Yes
<i>Comment: Stormwater Management and Discharge Regulations were last updated in September 2008, Chapter 4.100. Municipal Regional Stormwater Permit (MRP) was last updated November 19, 2015.</i>				
Post-Disaster Recovery	Yes	No	No	No
<i>Comment: The County has authorities outlined in the County Emergency Operations Plan which allows for emergency actions and ordinances for proclaimed incidents.</i>				
Real Estate Disclosure	No	Yes	Yes	No
<i>Comment: CA. State Civil Code 1102 requires full disclosure on natural hazard exposure of the sale/re-sale of any and all real property.</i>				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Growth Management	Yes	No	Yes	Yes
Comment: Chapters 7 through 9 (on General Land Use, Urban Land Use, and Rural Land Use) of the San Mateo County General Plan contain information regarding growth management in San Mateo County. The current edition of the General Plan was originally adopted in November 1986 and has been periodically updated since that time. The entire Housing Element was updated in 2015, and the latest update was in May 2021 for a Land Use Map Amendment.				
Site Plan Review	Yes	No	No	Yes
Comment: The County's site plan review criteria are part of the zoning regulations, which were last amended in May 2021.				
Environmental Protection	Yes	No	Yes	Yes
Comment: County Planning Department reviews projects regarding their impact on the environment through the regulations of the California Environmental Quality Act. County Health System's Environmental Health Division handles a wide variety of services, including hazardous materials plans, toxic waste, well water quality, and septic systems.				
Flood Damage Prevention	Yes	No	No	Yes
Comment: The County's Flood Hazard Areas Code is part of the Zoning Regulations (Chapter 35.5) which were last updated on August 30, 1988. The Zoning Regulations were last amended in May 2021.				
Emergency Management	Yes	Yes	Yes	Yes
Comment: The San Mateo Operational Area Emergency Services Council is the Accredited Disaster Council for the county as defined in California Emergency Services Act. It comprises all local governments in the geographic area of the County. A joint powers agreement adopted on October 17, 2014 and revised in 2021 reflects the transition from operation under the Sheriff to the County Manager's Office.				
Climate Change	Yes	No	Yes	Yes
Comment: The County passed a Climate Emergency Declaration in 2019. SB 97 requires that California Environmental Quality Act (CEQA) Guidelines address greenhouse gas emissions. Other state policies include AB 32 and SB 375 and regulations of the Climate Action Plan. SB379 requires local governments to address climate change in the Safety Element.				
Other	Yes	No	Yes (Partial)	Yes
Comment: The County references the Water Efficient Landscape Ordinance revisions in the California Code of Regulations.				
Planning Documents				
General Plan	Yes	No	Yes	Yes
Is the plan compliant with Assembly Bill 2140? No, the Safety Element needs to be updated to include language specific to the LHMP within the Safety Element of the General Plan to provide a cross reference.				
Comment: The General Plan was first adopted in November 1986 and has been periodically updated since that time. The entire Housing Element was updated in 2015, and the latest update was in May 2021 for a Land Use Map Amendment.				
Capital Improvement Plan	Yes	No	No	Yes
How often is the plan updated? Updated every year in September Revisions budget book.				
Comment:				
Disaster Debris Management Plan	Yes	Yes	No	Yes
Comment: The county and its jurisdictional subdivisions are in the process of creating a disaster debris management plan. This plan will be compatible with State and Federal plans for debris management and will likely have connection with other plans for disaster recovery. Unincorporated county plan was written in 2019.				
Floodplain or Watershed Plan	Yes	Yes	No	Yes
Comment: The San Mateo County Water Pollution Prevention Program maintains multiple watershed studies on their website. The San Mateo County Stormwater Resource Plan is a multi-faceted and comprehensive approach to watershed resource planning and stormwater runoff management. The studies are published by different entities, including the County, and all plans listed have been published within the past 15 years. The County manages TMDLs for San Pedro Creek, San Vicente Creek, Pillar Point Harbor and Pescadero-Butano Creek. San Gregorio Watershed Management Plan, June 2010; Solutions to Flooding on Pescadero Creek Road, October 2014; Midcoast Groundwater Study Phase III, June 2010; and other environmental plans are maintained on the San Mateo County Resource Conservation District Website.				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Stormwater Plan	Yes	Yes	Yes	Yes
Comment: The Stormwater Enforcement Response Plan for the Municipal Stormwater Program was last updated by the Planning and Building Department and Department of Public Works in September 2019. The County's Green Infrastructure Plan was adopted in 2019.				
Urban Water Management Plan	No	Yes	Yes	No
Comment: San Mateo County's urban water suppliers are responsible for preparing Urban Water Management Plans every five years.				
Habitat Conservation Plan	Yes	No	No	Yes
Comment: The San Bruno Mountain Habitat Conservation Plan was last updated by the Parks Department in 2021.				
Economic Development Plan	Yes	No	No	Yes
Comment: The San Mateo County Economic Development Association promotes business issues that enhance and sustain the economic prosperity of the region and local communities. The association developed a report on "Trends Affecting Workforce Development in San Mateo County and the San Francisco Peninsula" in May 2014.				
Shoreline Management Plan	Yes	No	No	Yes
Comment: San Mateo County updated its Local Coastal Program Policies (LCP) in 2012.				
Community Wildfire Protection Plan	No	Yes	No	Yes
Comment: CAL Fire in cooperation with the other fire agencies throughout the county administers the overarching Vegetation Management Programs and Community Wildfire Protection Plans. This includes mapping Fire Hazards Severity Zones, enforcing defensible spaces laws, and enforcing building code requirements in areas with wildland-urban interface and in Fire Hazards Severity Zones. Local agencies may have additional ordinances and plans that apply in their jurisdiction				
Forest Management Plan	No	Yes	No	No
Comment: CAL Fire administers the California Forest Improvement Program and the Forest Practice Act.				
Climate Action Plan	Yes	No	Yes	Yes
Comment: The San Mateo County Energy Efficient Climate Action Plan was developed in June 2013 and will be updated in the summer of 2021. SB 97 requires California Environmental Quality Act (CEQA) Guidelines to address greenhouse gas emissions. Other state policies include AB 32 and SB 375 and regulations of the Climate Action Plan.				
Emergency Operations Plan	Yes	No	Yes	Yes
Comment: The County Emergency Operations Plan was last updated in May 2015.				
Threat & Hazard Identification & Risk Assessment (THIRA)	Yes	No	No	Yes
Comment: The County Sheriff's Office last updated the County of San Mateo Hazard Vulnerability Assessment in January 2015 and participated in a regional update of the THIRA in the spring of 2020 conducted by the Bay Area UASI.				
Post-Disaster Recovery Plan	Yes	No	No	No
Comment: While the County does not have a standalone plan, within the San Mateo County Emergency Operations Plan from 2015, there is a section of the plan that discusses the post-disaster recovery for the County.				
Continuity of Operations Plan	Yes	No	No	No
Comment: The County has a Continuity of Operations plan drafted under contract in June of 2016. Some of the elements of the plan were utilized to maintain operations of necessary functions of the county during the 2020 pandemic.				
Public Health Plan	Yes	No	Yes	No
Comment: Strategies for Building Healthy, Equitable Communities Strategic Plan (2015); Vision for a SMC Food and Farm Bill (2017) SMC Community Health and Needs Assessment (2019); No Place Like Home Plan (2019); Community Collaboration for Children's Success Neighborhood Action Plans (2019); Community Assessment for Public Health Emergency-CASPER (forthcoming)				
Other	Yes	No	No	Yes
Comment: San Mateo County Parks' five-year wildfire fuel management program to improve forest resiliency and reduce wildfire risks primarily in parks that are near private dwellings, also called the wildland urban interface, was presented to the Board of Supervisors on February 23, 2021.				

Table 1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? • If no, who does? If yes, which department?	Yes Planning and Building
Does your jurisdiction have the ability to track permits by hazard area?	Yes
Does your jurisdiction have a buildable lands inventory?	Yes

Table 1-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes, Sewer
Incur Debt through General Obligation Bonds	No
Incur Debt through Special Tax Bonds	Yes
Incur Debt through Private Activity Bonds	Yes
Withhold Public Expenditures in Hazard-Prone Areas	No
State-Sponsored Grant Programs	Yes, State Homeland Security Grant, California Health Benefit Exchange—Covered California Navigator Grant, State Emergency Solutions Grant
Development Impact Fees for Homebuyers or Developers	Yes
Other	Yes, Special District Funds

Table 1-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	County Planning and Building
Engineers or professionals trained in building or infrastructure construction practices	Yes	County Planning and Building, County Public Works
Planners or engineers with an understanding of natural hazards	Yes	County Planning and Building, County Public Works
Staff with training in benefit/cost analysis	Yes	County Managers Office, County Controllers Office
Surveyors	Yes	Public Works Surveying Unit
Personnel skilled or trained in GIS applications	Yes	Information Services—GIS; Planning and Building
Scientist familiar with natural hazards in local area	Yes	County Public Works has biologists on staff and if needed, may contract with consulting firms
Emergency manager	Yes	County Manager's Office and the Department of Emergency Management
Grant writers	Yes	County Managers Office, San Mateo County Sheriff's Office and multiple agencies and organizations throughout the County

Table 1-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes, San Mateo County Sheriff's Office, County Managers Office
Do you have personnel skilled or trained in website development?	Yes, Information Services Department
Do you have hazard mitigation information available on your website? • If yes, briefly describe.	Yes Flood Hazard Resources Page, County Sheriff's Officer Disaster Preparedness Webpage, Local Hazard Mitigation page, Climate Ready SMC, Water Pollution Prevention Program Website, County Health System Page
Do you use social media for hazard mitigation education and outreach? • If yes, briefly describe.	Yes San Mateo County Main Facebook Page, San Mateo County Sheriff's Office YouTube Page
Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, briefly describe.	No
Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, briefly describe.	Yes DEM has frequently participated in community outreach events, has a website describing natural and technological hazards and their impacts as well as preparation actions individuals can use to reduce the impact these disasters could have on them.
Do you have any established warning systems for hazard events? • If yes, briefly describe.	Yes SMCAAlert (San Mateo County Alert System)

Table 1-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	County Planning and Building
Who is your floodplain administrator? (department/position)	Director of Planning/Zoning Administrator
Are any certified floodplain managers on staff in your jurisdiction?	No
What is the date that your flood damage prevention ordinance was last amended?	January 2020
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	The floodplain management program meets minimum requirements.
When was the most recent Community Assistance Visit or Community Assistance Contact?	7/10/2009
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state what they are.	No
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If no, state why.	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes Training in floodplain programs and policies.
Does your jurisdiction participate in the Community Rating System (CRS)? • If yes, is your jurisdiction interested in improving its CRS Classification? • If no, is your jurisdiction interested in joining the CRS program?	Yes Yes

Criterion	Response
How many flood insurance policies are in force in your jurisdiction? ^a	292
• What is the insurance in force?	\$89,054,700
• What is the premium in force?	\$346,499
How many total loss claims have been filed in your jurisdiction? ^a	178
• What were the total payments for losses?	\$2,138,018

a. According to FEMA statistics as of March 31, 2021

Table 1-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes	06081	Date
DUNS#	Yes	073132177	N/A
Community Rating System	Yes	9	10/1/10
Building Code Effectiveness Grading Schedule	Yes	2	7/9/15
Public Protection	Yes	4-10 ^a	N/A
Storm Ready (Renewals conducted through 2020 and a new enhanced accreditation is underway in 2021/22)	Yes	N/A	2007
Fire Safe	Yes	N/A	N/A
Tsunami Ready (renewal is underway in 2021/2022)	Yes	N/A	2007

a. Specific rating varies between locations in the unincorporated land of San Mateo County

Table 1-10. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating ^a
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	High
Comment: County has completed a Sea Level Rise Vulnerability Assessment; modelled extreme heat and landslide changes due to climate change; and launched Climate Ready.	
Jurisdiction-level monitoring of climate change impacts	Medium
Comment: The County currently monitors climate change impacts in a several different ways, including photo monitoring of king tide flooding and collecting information from community members about the impacts they experience related to extreme heat, poor air quality, flooding & sea level rise, and drought. Information Services Department & SMC Labs monitor extreme heat and temperature. The Resiliency District has stream gauges to monitor flooding with support from County of San Mateo Department of Public Works. Additional work is needed to document climate change impacts in a systematic and coordinated way.	
Technical resources to assess proposed strategies for feasibility and externalities	Medium
Comment: The County has staff experienced in climate vulnerability assessment and mitigation planning.	
Jurisdiction-level capacity for development of greenhouse gas emissions inventory	High
Comment: The County leads and facilitates RICAPS focused on bringing cities and the County together to support Climate Action Plan development.	
Capital planning and land use decisions informed by potential climate impacts	Medium
Comment: The County has a Sea Level Rise Policy for capital investments and has included climate change in its capital plans.	
Participation in regional groups addressing climate risks	High/
Comment: The County participates in a number of regional workgroups including BAYCAN, ARCA, USDN and ad hoc regional groups, and facilitates a Countywide climate network.	

Criterion	Jurisdiction Rating ^a
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes	Medium
<p>Comment: Authority to consider climate change impacts during public decision-making processes comes from a number of different sources. The Energy and Climate Change Element of the General Plan that includes a policy framework to adapt to the impact of climate change. The Sea Level Rise Policy for County-Owned Assets requires sea level rise to be considered in all County-owned and operated assets, design and construction projects, leases, and property acquisitions and dispositions. The Climate Emergency Declaration calls for the County to create Climate Action Plans and coordinate with the cities and other local partners in addressing the climate crisis.</p> <p>The Subdivision Regulations require tentative maps and tentative parcel maps to show the location of flooding from Sea Level Rise.</p> <p>Going forward, Senate Bill 379 requires the County to review and update the safety element as necessary to address climate adaptation and resiliency strategies. The County is currently working on additional strategies to incorporate consideration of climate change impacts into wider range of public decision-making processes.</p>	
Identified strategies for greenhouse gas mitigation efforts	High
<p>Comment: The County completed a Climate Action Plan for Government Operations in 2020 and a Climate Action Plan for unincorporated areas in 2021.</p>	
Identified strategies for adaptation to impacts	Medium
<p>Comment: The County has developed strategies in the General Plan and is completing the Safety Element in 2021 to include adaptation strategies.</p>	
Champions for climate action in local government departments	Medium
<p>Comment: The County facilitates interdepartmental workgroups on GHG reduction and adaptation planning.</p>	
Political support for implementing climate change adaptation strategies	High
<p>Comment: The County supported the formation of the Flood and Sea Level Rise District. The Board of Supervisors supports a number of climate change efforts including launching the Sea Level Rise Vulnerability Assessment, Climate Ready SMC, and passing a policy to address sea level rise for all County assets,</p>	
Financial resources devoted to climate change adaptation	Medium
<p>Comment: A number of County departments currently devote staff time and other resources to climate change adaptation. Examples of financial resources devoted to climate change adaptation include the Sea Change SMC Community Resilience Grants to cities and community organizations to support sea level rise resilience planning, the Climate Ready SMC Community Adaptation Planning Pilots that supported inclusive climate planning efforts led by a city and a community organization, and a competitive RFP for community-based climate resilience projects focused on heat, fire, air quality and power outages. Additional financial resources will be needed in the future to continue the process of adapting to climate change.</p>	
Local authority over sectors likely to be negative impacted	Medium
<p>Comment: The County focuses on collaboration with cities in its boundaries and coordinates through shared funding and the Climate Ready SMC initiative</p>	
Public Capacity	
Local residents knowledge of and understanding of climate risk	Medium
<p>Comment: Many local residents have knowledge and understanding of climate risk but community members regularly request hazard and climate resilience resources tailored to their communities. The County has an ongoing effort to work with community-based organizations to understand the impacts of climate change in communities throughout the County and to gather input on viable adaptation efforts.</p>	
Local residents support of adaptation efforts	Medium
<p>Comment: Local residents support adaption efforts in general, but specific projects will still need public outreach to gain understanding and support.</p>	

Criterion	Jurisdiction Rating ^a
Local residents' capacity to adapt to climate impacts <i>Comment:</i> Currently local residents have mixed capacity to adapt to climate change. Community capacity to adapt to climate change impacts depends on numerous social and economic vulnerability factors such as income, availability of resources in language, at literacy level or accessible to people with disabilities, ability to afford or find needed resources and baseline conditions in each community.	Medium
Local economy current capacity to adapt to climate impacts <i>Comment:</i> The local economy does have some capacity to adapt to climate change, but the magnitude of adaptation needed requires additional coordination and support. The County is currently working to increase the capacity of the local economy to adapt to climate impacts, and resiliency capacity has increased during the Covid-19 pandemic.	Medium
Local ecosystems capacity to adapt to climate impacts <i>Comment:</i> Local ecosystems will have challenges to adapting to climate change in the future. The County is currently exploring ways to protect and facilitate the adaptation of local ecosystems, but more progress is needed.	Medium

a. High = Capacity exists and is in use; Medium = Capacity may exist but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- **General Plan**—Chapter 15 “Natural Hazards” integrates hazard mitigation into the County General Plan through the consideration of hazards most likely to impact the County. Hazards are grouped broadly under Geotechnical, Fire, or Flooding Hazards, with subsections providing more details on the variety of each type of hazard that can occur. Chapter 17 “Energy and Climate Change” provides the County’s policy framework to adapt to the impact of climate change and sustain ongoing resilience in the natural and built environments. Consideration of hazards is also incorporated into Chapter 7 General Land Use, Chapter 8 Urban Land Use, and Chapter 9 Rural Land Use, and Chapter 16 Man-Made Hazards.
- **Local Coastal Program** – The Local Coastal Program (LCP) contains a hazards component with policies for the regulation of development in hazard areas in the Coastal Zone. These hazards areas include fault zones, land subject to dangers from liquefaction and other severe seismic impacts, unstable slopes, landslides, coastal cliff instability, flooding, tsunamis, fire, and steep slopes (over 30%).
- **Building Regulations** – the Building Regulations of the County of San Mateo contain several regulations related to hazards, including:
 - Regulations for flood resistant construction in flood hazard areas
 - A Fire Code with local amendments for fuel breaks, access roads, and more

- Regulations for excavating, grading, filling and clearing to reduce or eliminate the hazards of earth slides, mud flows, rock falls, undue settlement, erosion, siltation, and flooding, or other special conditions.
- **Zoning Regulations** – the San Mateo County Zoning Regulations contain a number of regulations related to hazards, including:
 - Geologic Hazard District regulations
 - Flood Hazard Areas regulations
 - Development review criteria for the Resource Management District, Resource Management-Coastal Zone District, and the Planned Agricultural District that includes regulations for hazards to public safety and special hazard areas (flood plain, tsunami inundation, seismic fault/fracture, and slope instability areas)
 - Development design criteria for the Timberland Preserve Zone for special hazard areas (floodplain hazard area, seismic hazards areas, and slope instability hazard areas)
- **Subdivision Regulations** – The San Mateo County Subdivision Regulations include several provisions that address hazards, such as a requirement for a development footprint analysis for most subdivisions. The development footprint analysis comprehensively evaluates site development constraints and potential impacts, including the avoidance of hazards such as steep/unstable slopes, fault traces, and flood prone areas. Hazards to be mitigated, remediated, or avoided shall be depicted on a map of the parent parcel and, through consultation with County staff, delineated as “nondevelopment areas”. Hazard mitigation is accomplished by modifying the number, size, and/or configuration of proposed new lots, utility corridors, and access ways within the subdivision to avoid or minimize the intrusion of buildings, roadways, and utility infrastructure into these areas. In addition, tentative maps and tentative parcel maps are required to show the location of special flood hazard areas, flooding from Sea Level Rise, projections of landward erosion over the life of the development, and all non-development areas resulting from the development footprint analysis. Findings for approval/denial of a Tentative Map or Tentative Parcel Map include extra considerations for land located in a state responsibility area or a very high fire hazard severity zone.
- **Environmental Protection** - The County of San Mateo Planning and Building Department Initial Study Environmental Evaluation Checklist includes hazard related questions on the topics of climate change, geology/soils, hazards and hazardous materials, hydrology/water quality, and wildfire.
- **Climate Action Plan**—The San Mateo County Climate Action Plan investigates climate change projections on the County and likely impacts from such changes, particularly as they relate to hazardous weather events. The Plan also includes adaption strategies for these climate change impacts. A Climate Change Vulnerability Assessment, released in December 2011, examines the County’s vulnerability to climate change for agriculture/silviculture, the coastal zone and coastal ecosystems, fire-threatened areas, public health, and water and wastewater infrastructure.
- **San Mateo County Resource Conservation District Plans**—The San Mateo County Resource Conservation District maintains numerous plans on its website, many of which tie to hazard mitigation through floodplain or watershed management. This provides the County a valuable resource to help it analyze its vulnerability in certain areas and identify necessary measures to increase resiliency.
- **Community Wildfire Protection Plan (CWPP)** – CAL FIRE, San Mateo County, Santa Cruz County, and The Resource Conservation District adopted the CWPP in April 2018. The Plan attempts to identify hazards as seen across the landscape and provide strategies to mitigate wildfire risk and restore healthier, more resilient ecosystems while protecting life and property. The CWPP also serves as a tool for the accrual of grant funding to aid in the implementation of wildfire prevention projects.

- **Emergency Operations Plan** - San Mateo County Emergency Operations Plan established policies and procedures and assigns responsibilities to ensure the effective management of emergency operations. The Emergency Operations Plan should be updated to include the latest hazard information and relevant mitigation actions from the 2021 Multijurisdictional Local Hazard Mitigation Plan.
- **Threat & Hazard Identification & Risk Assessment (THIRA)** - The THIRA helps communities understand their risks and determine the level of capability they need to address those risks. San Mateo County participated in a regional update of the THIRA in the spring of 2020 conducted by the Bay Area UASI.
- **Water Efficient Landscape Ordinance** - The County requires new and retrofitted landscape projects to follow the Water Efficient Landscape Ordinance in the California Code of Regulations, which promotes efficient water use and water retention and contributes to the mitigation of drought and flooding hazards.
- **Capital Improvement Plan**- The Capital Improvement Plan (CIP) includes one-time outlays of funds for construction, structural improvements, and non-structural renovations to County-owned facilities. It also includes major construction, renovation or rehabilitation of county infrastructure assets such as roads, utilities, and airports, which are budgeted separately in the Department of Public Works budget. The County also utilizes a five-year Facilities Capital Plan, which serves as a planning tool to track all capital projects and their estimated costs, giving policy makers an instrument to schedule future projects and anticipate potential financial challenges. The CIP currently considers known hazard areas.
- **Watershed Plan** - The San Mateo County [Stormwater Resource Plan](#) is a multi-faceted and comprehensive approach to watershed resource planning and stormwater runoff management. This plan recognizes need for watershed-based planning and incorporation of green infrastructure due to concerns with extended drought conditions and climate change.
- **Habitat Conservation Plan** - The San Bruno Mountain Habitat Conservation Plan provides a management and monitoring plan for the protection and management of: a) the habitat of the mission blue, callippe, silverspot, San Bruno elfin and bay checkerspot butterflies, and b) the overall native ecosystem of San Bruno Mountain. The plan includes discussions about wildfires and prescribed burns, and future updates could consider further incorporating hazard mitigation.

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- **General Plan**—San Mateo County last updated its General Plan in 1986, and anticipates updating the Safety Element, Housing Element, and Climate Change Element over the next few years. When the County next updates its General Plan to consider current trends, needs, and statistics, it will be able to enhance its integration with hazard mitigation. Such an update would provide a significant opportunity to incorporate the results of the hazard mitigation risk analysis and suggested projects into the Safety Element, as well as considering smart land use and development in the Housing and Land Use Elements.
- **Zoning & Building Regulations** – After updates to the General Plan, the zoning and building regulations will be reviewed for internal consistency and for opportunities to further enhance the integration of hazard mitigation into those regulations.
- **San Mateo County Climate Resilience Strategy**– San Mateo County anticipates creating a Climate Resilience Strategy to address climate adaptation following an update of the Climate Action Plan.
- **Stormwater Management** - San Mateo County currently manages stormwater through the Municipal Regional Stormwater Permit (MRP), the Storm Water Management and Discharge Control Regulations in

Chapter 4.100 of the San Mateo County Code of Ordinances, the Stormwater Enforcement Response Plan, the San Mateo Water Pollution Prevention Program, San Mateo County Drainage Policy, and the Green Infrastructure Plan. The County is in the process of developing a new stormwater ordinance and drainage manual to formalize and expand requirements to incorporate stormwater retention and low-impact development treatment into new and redevelopment projects to help mitigate downstream impacts of severe weather and prevent localized flooding and other hazards.

- **Disaster Debris Management Plan** - The county and its jurisdictional subdivisions are in the process of creating a disaster debris management plan. This plan will be compatible with State and Federal plans for debris management and will likely have connection with other plans for disaster recovery.
- **Economic Development** - The San Mateo County Economic Development Association promotes business issues that enhance and sustain the economic prosperity of the region and local communities. The association developed a report on “Trends Affecting Workforce Development in San Mateo County and the San Francisco Peninsula” in May 2014. Any future Economic Development Plans for San Mateo County should incorporate hazard mitigation.
- **Coordination with Other County Departments** – There are a number of efforts that are being undertaken by various County departments, including the Office of Sustainability, Environmental Health Department, Department of Public Works, Planning and Building Department, and San Mateo County’s Department of Emergency Services. The actions listed in the Local Hazard Mitigation Plan should be incorporated into these efforts when appropriate and conducive to reducing hazards and risk.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-11 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-11. Past Natural Hazard Events

Type of Event	FEMA Disaster #	Date	Damage Assessment
Wildfire Flare-ups	N/A	January 2021	Not Available
PG&E Power Shutoff	N/A	September-October 2020	Not Available
Wildfires	DR-4558	August 16-September 22, 2020	Not Available
COVID-19 Pandemic	DR-4482	January 20, 2020-Present	Not Available
PG&E Power Shutoff	N/A	September-November 2019	Not Available
PG&E Power Shutoff	N/A	October 2018	Not Available
Severe Winter Storms, Flooding, Mudslides	DR-4308	February 1-23, 2017	Not Available
Severe Winter Storms, Flooding, Mudslides	DR-4305	January 18-23, 2017	Not Available
Coastal Erosion	N/A	2016	Not Available
Windstorms	N/A	October-November 2014	Not Available
Windstorms	N/A	February 2014	Not Available
Drought	N/A	January 17, 2014-April 7, 2017	Not Available
Windstorms	N/A	April 2013	\$25,500
Flooding	N/A	December 2012	\$4,500,000
Severe Storms, Landslides	N/A	March 2012	\$64,000

Type of Event	FEMA Disaster #	Date	Damage Assessment
Tsunami, Seiche	DR-1968	March 11, 2011	\$89,500
Windstorms	N/A	March 2011	\$25,000
Windstorms	N/A	February 2011	\$62,917
Windstorms	N/A	November 2010	\$166,667
Explosion, Fire	FM-2856	September 10, 2010	Not Available
Severe Storms, Flooding, Wind	N/A	January 2010	\$1,167,917
Severe Storms, Flooding, Wind	N/A	October 2009	\$1,131,333
Windstorms	N/A	April 2009	\$43,714
Windstorms	N/A	January 2009	\$20,883
Coastal Erosion	N/A	2009-2011	Not Available
Windstorms	N/A	October 2008	\$50,000
Flooding	N/A	January 2008	\$200,000
Flooding, Mudslides	N/A	May 10, 2006	Not Available
Severe Storms, Flooding, Landslides, Mudslides	DR-1646	March 29-April 16, 2006	\$4,350,000
Flooding, Mudslides	N/A	February 3-April 1, 2006	Not Available
Severe Storms, Flooding, Mudslides, Landslides	DR-1628	December 17, 2005-January 3, 2006	\$10,000,000
Severe Winter Storms, Flooding	DR-1203	February 2-April 30, 1998	\$1,835,000
Coastal Erosion	N/A	1998	Not Available
Severe Storms, Flooding, Mudslides, Landslides	DR-1155	December 28, 1996-April 1, 1997	Not Available
Severe Winter Storms, Flooding, Landslides, Mudflows	DR-1046	February 13-April 19, 1995	Not Available
Severe Winter Storms, Flooding, Landslides, Mudflows	DR-1044	January 3-February 10, 1995	Not Available
Severe Freeze	DR-894	December 19, 1990-January 3, 1991	Not Available
Loma Prieta Earthquake	DR-845	October 17-December 18, 1989	Not Available
Flooding	N/A	February 1988	Not Available
Severe Storms, Flooding	DR-758	February 12-March 10, 1986	Not Available
Coastal Storms, Flooding, Slides, Tornadoes	DR-677	January 21-March 30, 1983	Not Available
Severe Storms, Flooding, Mudslides, High Tide	DR-651	December 19, 1981-January 8, 1983	Not Available
Drought	EM-3023	January 20, 1977	Not Available
Flooding	N/A	January-February 1973	Not Available
Flooding	N/A	October-November 1972	Not Available
Flooding	DR-145	February 25, 1963	Not Available
Severe Storms	DR-138	October 24, 1962	Not Available
Flooding	DR-122	March 6, 1962	Not Available
Flooding	DR-82	April 4, 1958	Not Available
Wildfires	DR-65	December 29, 1956	Not Available
Flooding	DR-47	December 23, 1955	Not Available
Flooding	DR-15	February 5, 1954	Not Available
Flooding	N/A	1861-1862	Not Available

1.6.2 Hazard Risk Ranking

Table 1-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the

likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 1-12. Hazard Risk Ranking (Social Equity Lens applied)

Rank	Hazard	Risk Ranking Score	Risk Category
1	Flood	117	High
2	Landslide/Mass Movements	117	High
3	Sea Level Rise / Climate Change	99	High
4	Earthquake	84	High
5	Wildfire	78	High
6	Dam Failure	72	High
7	Tsunami	30	Medium
8	Severe Weather	24	Medium
9	Drought	9	Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: 11
- Number of FEMA-identified Severe-Repetitive-Loss Properties: 1
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: 1

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Community disaster preparedness education and training efforts have not been completely successful in identifying and reaching individuals with access and functional needs or communities facing economic or culture barrier challenges (ex. farm laborers, people with disabilities, people with technology or language barriers).
- San Mateo County has more people and property value at risk from sea level rise than any other county in the state. When population projections are taken into account, the County is one of six counties in the nation (and the only one on the west coast) with over 100,000 people living in an area affected by 3 feet of sea level rise.
- Highway 1 is highly vulnerable to erosion due to sea level rise and is the only access road to many farms and south coast communities.
- Highways 1 and 92 in the Midcoast are often very congested with traffic on the weekends, which could significantly impact evacuations during an emergency.

- Several coastal communities rely mostly on wells, which are increasingly impacted by drought conditions.
- The South Coast is vulnerable to PSPS events and lack facilities with generators and charging stations. Additionally, most of the Latinx population in the area are farm workers who work outdoors and are heavily impacted by wildfire smoke and heat.
- In the Fair Oaks community, 49% of the people live below 200% of the Federal Poverty Level. In Pescadero and other areas on the South Coast, 54% of the people live below 200% of the Federal Poverty Level. These communities lack basic infrastructure, such as sewage systems, flood control systems, and transportation alternatives making emergency preparedness critical for these communities and disaster recovery significantly more difficult.

Mitigation actions addressing these issues were prioritized for consideration in the action plan for this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

Table 1-13 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-13. Status of Previous Plan Actions

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-1 —Continue the County’s effort to enhance hazards mitigation planning by updating plans such as Emergency Operations Plan, Continuity of Government Operations, Department Operation Center and Joint Information Center Plans. Comment: Ongoing. The County’s DEM is working on implementing a Continuity of Government Operations, both agency-wide and department-wide. The DEM has also been working on their June 2019 DRAFT Emergency Operations Plan.			✓	SMC-9
Action SMC-2 —Leverage the County’s existing communication channels and Board of Supervisor policies across the agencies to educate the public, schools, other jurisdictions, professional associations, and businesses and industry about reducing climate change pollution and how to prepare for inevitable climate changes. Comment: Ongoing.			✓	SMC-16
Action SMC-3 —Identify, retrofit, upgrade, or replace deficient or vulnerable government facilities, such as the Pescadero Fire Station and the San Mateo County Sheriff’s Administrative Offices and the County’s Emergency Operation Center. Comment: The County has not begun constructing a new a Fire Station yet but the new Regional Operations Center (EOC) in Redwood City has been completed. The County has also applied for several grants, including a grant for upgrades to two existing storm water pumps.			✓	SMC-12
Action SMC-4 —Incorporate consideration of sea level rise into the development review and infrastructure planning processes including response strategies that increase resilience to projected sea level rise risks for both the life of an asset, and for new and existing development. Comment: Completed. Passed a Capital Policy in 2019. Implementing in 2021 with a consultant. Potential to be implemented in other cities/or planning.	✓			

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-5 —Support the ongoing preparedness and training of Community Emergency Responses Teams in the unincorporated areas of the County. Comment: Ongoing.			✓	SMC-5
Action SMC-6 —Incorporate the Local Hazard Mitigation Plan into the County's General Plan and update the County's General Plan Safety Element in response to evolving hazards and mitigation strategies. Comment: Ongoing.			✓	SMC-11
Action SMC-7 —Continue to incorporate mitigation principles into local event management during Incident Command Post and Department Operations Center Action Planning. Comment: Ongoing.			✓	SMC-9
Action SMC-8 —Update and enhance the GIS data systems and mapping for all hazards in the unincorporated County. Comment: Ongoing. A lot of datasets that make for the basis of mapping hazard data have been acquired in recent years. These include: Impervious surface data, fuel-ladder mapping data, fine-scale vegetation mapping, climate change sea-level scenarios, Survey grade contour lines, fine-resolution aerial imagery acquisition (2017), (2018) and LiDAR Data.			✓	CW-4 ^a
Action SMC-9 —Include an assessment and associated mapping of the County's vulnerability to location specific hazards and make appropriate recommendations for the use of these hazard areas in future updates to the County's General Plan. Comment: In progress. A GIS based tool is being developed by Tetra Tech to map County vulnerability to specific locations.			✓	CW-4 ^a
Action SMC-10 —Identify means to coordinate, collect and store damage assessment data in GIS format for each natural hazard event that causes death, injury and or property damage. Comment: Ongoing. County DEM is working on creating a real time map that would show disasters events. This data could be collected and stored for historic preservation. County Public Works is also tracking damage to public infrastructure during disaster events. They are capturing the location of the infrastructure, damage information, and pictures of the infrastructure. County GIS department has established capabilities to coordinate, collect, store and distribute damage assessment data through Esri Collector, Survey123 mobile applications. These systems have the capability to enable offline data collection in an event a hazard event occurs.			✓	CW-4 ^a
Action SMC-11 —Integrate the County's mitigation plan into current capital improvement plans to ensure that development does not encroach on known hazard areas. Comment: Ongoing. The County's CIP considers known hazard areas.			✓	SMC-12, 17
Action SMC-12 —Coordinate mitigation planning and project efforts within the planning area to leverage all resources available to the planning partnership, including working with existing joint powers authorities (JPAs) and exploring the possibility of creating new JPAs to facilitate mitigation strategies, policies, and actions. Comment: Ongoing. San Mateo County DEM continues to work with the San Mateo Operational Area Emergency Services Organization, a JPA for San Mateo County. Discontinuing exploration of new JPAs.			✓	SMC-15
Action SMC-13 —To the extent possible based on available resources, provide coordination and technical assistance in applications for grant funding that include assistance in benefit versus cost analysis for grant eligible projects. Comment: Ongoing. County DEM continues to support FEMA and other hazard mitigation grant applicants.			✓	CW-3 ^a

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-14 —Coordinate preparedness efforts with San Mateo County Sheriff's Office of Emergency Services, San Mateo County Emergency Management Association and its cities and agencies in the County/Operational Area and the 12 County San Francisco Bay Region. Comment: Ongoing. San Mateo County DEM has monthly meetings with other emergency services managers in San Mateo County through the San Mateo County Emergency Management Association. San Mateo County DEM continues to maintain preparedness efforts with cities and agencies in the County/Operational Area and the 12 County San Francisco Bay Region.			✓	SMC-15
Action SMC-15 —Coordinate with the private sector on prioritization of critical facilities before and during restoration of utility services. Comment: Ongoing. San Mateo County DEM continues to coordinate with the private sector on prioritization of critical facilities before and during restoration of utility services. This includes enhancing the role of a private-sector liaison within DEM.			✓	CW-5 a
Action SMC-16 —Harden emergency response communications, including, for example, building redundant capacity into Public Safety Answering Points for community alert and warning, replacing or hardening microwave and simulcast systems, adding digital encryption for programmable radios, and ensuring a plug-and-play capability for amateur radio. Comment: In progress. Information Services Department is working on upgrading microwave antenna systems in the County currently. In addition, the new Emergency Operations Center will house a new space for Public Safety Communications.			✓	SMC-12
Action SMC-17 —Support the San Mateo County Information Services Department in efforts to develop maintain, and enhance, the County's information technology efforts, including supporting multi-jurisdictional fiber backbone redundancy projects, back-up data centers, and the hardening or relocation of critical communication infrastructure. Comment: Ongoing.			✓	SMC-8
Action SMC-18 —Explore and analyze the potential development of community plans for the redevelopment of areas located in the unincorporated areas of the County after a disaster, with a focus on areas that have repetitive losses. Comment: Ongoing. The annual work plan for this action was completed during the reporting period.			✓	SMC-10
Action SMC-19 —Better inform residents of comprehensive mitigation activities, for all hazards of concern including elevation of appliances above expected flood levels, use of fire-resistant roofing and defensible space in high wildfire threat and wildfire-urban-interface areas, structural retrofitting techniques for older homes, and use of intelligent grading practices through workshops, publications, and media announcements and events. Comment: County staff enforces defensible space requirements and Building and Fire code requirements for structures in the County. CAL Fire and other fire agencies conduct weed abatement programs that remove dead or dangerous vegetation from high fire severity areas. The County is also in the process of updating the County's tree regulations. As part of this update, staff is reviewing defensible space requirements and possible policy enhancements. The County also tracks the number of repetitive loss properties. The County also requires elevation certificates for development in certain FEMA flood zones. These activities were ongoing in 2019.			✓	SMC-3
Action SMC-20 —Support efforts of San Mateo County Department Operations Centers to develop specific mitigation actions management by objectives post disaster action planning that includes FEMA's standard eligible funding categories for emergency protective measures including debris removal, hazardous materials spills/releases, emergency bridge and road repair, flood control, equipment purchase or rental and contractual services. Comment: San Mateo County DEM continues to support this effort and mitigation measure.			✓	SMC-9

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-21 —Support the practice of Unified Command and Management and as applicable, the continued improvements, development, and maintenance of interoperable communication systems for first responders from cities, counties, special districts, state, and federal agencies. Comment: Ongoing. County DEM continues to train and develop new policy and procedures in Unified Command and Management. County DEM holds several training exercises with agencies throughout the County on a yearly basis to enhance all agencies experience with Unified Command practices.			✓	SMC-9
Action SMC-22 —Develop and implement a methodology to systematically assess all hazards outlined in this Plan (including, but not limited to sea level rise, seismic risk, flood risk, protective design) and climate impacts in considering building acquisitions and sales, portfolio planning, major retrofits, capital improvement planning, and master planning for County owned and leased facilities. Comment: Ongoing. The Project Development Unit is currently working evaluating retrofits to existing County owned buildings and hazard mitigation measures for new County buildings. The County is proposing a Sea Level Rise policy for new and existing county buildings, land acquisitions, and facilities focused on vulnerability assessments and adaptation planning. In the future other climate impacts could be considered. Will start with consultant evaluation of County assets for various risks, which will include master planning.			✓	SMC-12, 17
Action SMC-23 —Look into potentially vulnerable public and private utility systems including sanitation/sewer, and fuel pumping stations. Comment: Ongoing. County Department of Public Works has applied for a grant to upgrade two existing flood control pump stations.			✓	SMC-22
Action SMC-24 —County staff in conjunction with State Agencies will continue to support vegetation management strategies and programs to address the potential vegetation management needs within the County. Comment: Ongoing. County staff in conjunction with State Agencies will continue to support vegetation management strategies and programs to address the potential vegetation management needs within the County. Parks: Pescadero Creek Park, Sam McDonald Park, new road/Fire Road – Quarry Park, El Granada. Parks is continually addressing fire fuel loads throughout the department and has focused fuel reduction efforts in Huddart Park along Kings Mountain Road, Wunderlich Park, and Quarry Park with Cal Fire and PG&E partnered fuel break. The Department is also currently in the civil design phase for a new Fire Road in Quarry Park along the Southern boundary. With the CZU Fire burning approximately 2700 acres in Pescadero Creek Park, staff is currently conducting post fire mitigation as well as increasing buffers on fire roads throughout the park. Similarly, efforts continue at San Bruno Mountain Park as well as Coyote Point Recreation Area and the Crystal Springs Regional Trail. These efforts include identifying and removing hazardous trees and excess fire fuel.			✓	SMC-31
Action SMC-25 —Identify and plan for the combined impacts of multiple hazards – for example extreme drought followed by flooding, and effects of these impacts on people, property, and the economy. Comment: Ongoing.			✓	SMC-14
Action SMC-26 —Explore installing additional monitoring equipment to track subsidence, erosion, and sea level change along San Mateo County shoreline. Complete a study on subsidence and erosion rates. Comment: Ongoing. Working to increase stream gages to detect flooding. Worked with USGS on additional landslide sensors. Don't have SLR monitoring equipment but in 21-22 consultant will give us options.			✓	SMC-15
Action SMC-27 —Continue to develop, maintain, and potentially enhance the County's classification under the Community Rating System, including use of monitoring equipment, radio base station with community alert and warning systems. This includes rain gages, flood level creek gages and safety signage for flood hazard areas on roadways. Comment: Ongoing. Will continue as part of the maintenance plan for the LHMP, but not as a separate mitigation action.		✓		

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-28 —Update and enhance existing flood hazard mapping to better reflect current conditions and potential sea level rise. Comment: Ongoing. The Office of Sustainability has developed a County Wide Sea Level Rise Assessment which includes mapping and is completing a HEC-RAS model of future creek flooding based on changes in precipitation and intersection with sea level rise water levels. The County is funding projects in Millbrae and Burlingame to create more localized sea level rise maps. And coordination with FSLRRD actions continues.			✓	SMC-15
Action SMC-29 —Continue the County's partnership with the San Francisquito Creek Joint Powers Authority (JPA) to improve flooding, sea level rise and other environmental recreational concerns along its waterways that lead to the San Francisco Bay. Comment: The San Mateo County Flood and Sea Level Rise Resiliency District continues to be a partner with the San Francisquito Creek Joint Powers Authority. Now the responsibility of the San Mateo County Flood and Sea Level Rise Resiliency District			✓	SMC-15
Action SMC-30 —Continue the County's partnership with neighboring jurisdictions to address flooding, sea level rise and other environmental recreational concerns along Colma and San Bruno Creek. Comment: County Department of Public Works applied for a grant for upgrades to two pump stations along San Bruno Creek. The County Flood and Sea Rise Resiliency District continues to work with neighboring jurisdictions regarding Colma and San Bruno Creek, flood and sea level rise challenges and local agency coordination including supporting the Colma Creek Flood Control Zone Citizen's Advisory Committee. C/CAG, Office of Sustainability and San Bruno are in the early stages of a regional stormwater project to reduce stormwater runoff moving through San Bruno Creek. Now the responsibility of the San Mateo County Flood and Sea Level Rise Resiliency District.			✓	SMC-15, 23
Action SMC-31 —The County will protect, preserve, and enhance natural features such as wetlands that serve as natural mitigation against the impacts of flooding, climate change and associated sea level rise. Comment: The County continues to implement policies and programs that have been adopted that support SMC-31. The County is also reviewing green infrastructure that will enhance natural features as part of flood control and sea level rise adaptation. The County is also reviewing a project call Flood Control 2.0 is a multi-agency effort funded by the EPA to advance approaches for integrating habitat restoration and flood management at the Bay edge. This new toolbox includes a suite of tools to help land managers develop management approaches for flood control channels and their surrounding landscapes that benefit both people and wildlife over the long-term. The County Office of Sustainability continues to work on sea level rise studies, projected changes in precipitation rates and events, and fire risk under climate change that will better inform the action as well. The County Office of Sustainability worked with Point Blue, Stanford and the San Francisco Estuary Institute to assess bayside wetland vulnerability to sea level rise and to develop high level nature-based adaptation strategies that can be explored for the entire county shoreline.			✓	SMC15, 21
Action SMC-32 —Conduct watershed analysis as necessary to address data needs that will be essential towards the development of drainage solutions in flood vulnerable areas. Comment: County Department of Public Works has completed the Bayfront Canal and Atherton Channel Watershed Flood Management Plan in 2019. Future related efforts in this region have been transferred to the San Mateo County Flood and Sea Level Rise Resiliency District. The County is developing high resolution maps of impervious surface and vegetation as well as maps of future flooding (2D HEC-RAS), heat and fire risk based on climate projections that could all be used as inputs for future watershed models. Now the responsibility of the San Mateo County Flood and Sea Level Rise Resiliency District.			✓	SMC-15
Action SMC-33 —Determine whether or not wastewater treatment plants are protected from floods, and if not, investigate the use of flood-control berms to not only protect from stream or river flooding, but also increase plant security. Comment: Not applicable to County as this infrastructure is managed by individual sanitary districts.		✓		

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-34 —Ensure that new subdivisions are designed to reduce or eliminate flood damage by requiring lots and rights-of-way are laid out for the provision of approved sewer and drainage facilities, providing on-site detention facilities whenever practicable. Comment: Ongoing. The County adopted revisions to the County's subdivision regulations in 2017 to incorporate changes made to the California Subdivision Map Act and to reflect pertinent case law. The new regulations require applicants to clearly identify hazard areas on the site as part of a pre-application process that identifies non-development areas to avoid hazards or how the development will mitigate identified hazards. In addition, the County is updating its drainage management approach by drafting a new Drainage Manual and Stormwater Ordinance to better regulate drainage and stormwater management when permitting development.			✓	SMC-11
Action SMC-35 —As funding opportunities become available, encourage home and apartment owners to participate in acquisition and relocation programs for areas within floodways and study the potential to develop a revolving fund, issue bonds or other funding mechanisms to support acquisition and relocation from floodways. Comment: Ongoing.			✓	SMC-3
Action SMC-36 —Develop a "Maintain-a-Drain" campaign encouraging businesses and residents to keep storm drains in their neighborhood free of debris. Comment: Completed. Storm drains marked, and outreach completed. The Office of Sustainability manages the "Adopt-a-Block" program which provides support to residents that volunteer to remove trash and debris from a specific block. During the reporting period, 2 sites were added.	✓			
Action SMC-37 —Encourage owners of properties in a floodplain to consider purchasing flood insurance. For example, point out that most homeowners' insurance policies do not cover a property for flood damage. Comment: Ongoing.			✓	SMC-3
Action SMC-38 —Conduct analysis and potential levee improvements and flood control projects for, Belmont Creek, Coyote Point area, Pescadero and Butano Creek, and other areas that are subject to repeat flooding events. Comment: The San Mateo County Flood and Sea Level Rise Resiliency District continues to collaboratively with adjoining agencies towards the development of drainage and flooding solutions in the areas of Bayfront Canal, the Vista Canal, and the Atherton Channel. The San Mateo County Flood and Sea Level Rise Resiliency District is collaborating with the County of San Mateo, Redwood City, Menlo Park. Now the responsibility of the San Mateo County Flood and Sea Level Rise Resiliency District.			✓	SMC-15, 21 and 23
Action SMC-39 —The County will work collaboratively with adjoining agencies towards the development of drainage and flooding solutions in the areas of the Bayfront Canal, the Vista Canal, and the Atherton Channel. Comment: Atherton, Woodside, California Coastal Conservancy, Cargill, and other stakeholders to identify flood and Caltrans, are studying the Belmont Creek and possible flood protection enhancements, including mitigating creek overflows and restore the natural habitat that the creek offers. Also, a Federal grant of 1.4 million dollars was awarded to the San Mateo County Resource Conservation District for Butano Creek restoration. This project seeks to restore salmon habitat and reduce flooding in the town of Pescadero. The County Office of Sustainability completed a Sea Level Rise Assessment and Adaptation Plan with County Parks. The Office is also completing a Sea Level Rise Vulnerability Assessment and Adaptation Plan for unincorporated lands from Half Moon Bay south to the county line, which include Pescadero and Butano Creeks. Now the responsibility of the San Mateo County Flood and Sea Level Rise Resiliency District.			✓	SMC 15, 21, 23

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-40 —Develop procedures for performing a watershed analysis to look at the impact of development on flooding potential downstream, including communities outside of the jurisdiction of proposed projects.	✓			SMC-15
Comment: County Public Works completed a watershed analysis for the Atherton Watershed. As part of the County's Green Infrastructure Plan effort, the County is drafting a Watershed and Stormwater Management element to add to its General Plan and is amending its Stormwater Ordinance to incorporate new drainage, stormwater management and treatment, and watershed assessment requirements. Also, the County, in partnership with Marin and San Francisco Counties, Golden Gate National Recreation Area, and others has acquired LiDAR data that will be used to generate an impervious surface layer for all areas in the three counties, facilitating better watershed assessment.				
Action SMC-41 —Continue to enforce zoning and building codes to prevent and control construction within the floodplain.			✓	SMC-3
Comment: County staff continues to enforce zoning and building codes to prevent and control construction within the floodplain				
Action SMC-42 —Continue to maintain compliance and good standing under the National Flood Insurance Program (NFIP).			✓	
Comment: Ongoing. The County will continue to maintain compliance and good standing under the National Flood Insurance Program (NFIP).				
Action SMC-43 —Reinforce roads/bridges from flooding through protection activities, including elevating the roads/bridges and installing/widening culverts beneath the roads/bridges or upgrading storm drains.			✓	SMC-12
Comment: County Department of Public Works is currently applying for a National Oceanic and Atmospheric Administration grant to assist in identifying areas that could be vulnerable to coastal erosion. Public Works is also evaluating solutions for Mirada Rd. and a pedestrian bridge in Miramar. County Parks is also working with Public Works to evaluate bridges in County and regional parks that are deficient and need repair and upgrades. County Parks is working with County Public Works on creating a five-year permit for maintenance work in County Park facilities. (Cloverdale Rd Br).				
Action SMC-44 —Continue to repair and make structural improvements to storm drains, pipelines and/or channels to enable them to perform to their design capacity in handling water flows.			✓	SMC-12
Comment: Ongoing. A grant application has been submitted to make structural improvements to two flood water pump stations.				
Action SMC-45 —Support and encourage efforts of other agencies as they plan for and arrange financing for seismic retrofits and other disaster mitigation strategies.			✓	CW-3 a and SMC- 15
Comment: Ongoing.				
Action SMC-46 —Require upgrade of infrastructure to withstand seismic shaking and differential settlement.			✓	SMC-12
Comment: Ongoing. All new development projects will require to meet California Building Standards. The newly created Project Development Unit will continue to explore upgrading existing infrastructure as well.				
Action SMC-47 —Seismically retrofit or replace County and local ramps and bridges that are categorized as structurally deficient by Caltrans, are located in high ground shaking areas, and/or are necessary for first responders to use during and/or immediately after a disaster or emergency.			✓	SMC-12
Comment: Ongoing. County Department of Public Works is currently undertaking an inventory of all bridges that are owned by the County. A list of deficient bridges will be created and then repairs to the bridges will be prioritized.				

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-48 —Develop and implement plans to increase the building owner's general knowledge of and appreciation for the value of seismic upgrading of the building's structural and nonstructural elements. http://myhazards.caloes.ca.gov/ campaign. Comment: Part of the County's education and outreach efforts. State has information regarding seismic upgrading of the building's structural and nonstructural elements on their website.			✓	SMC-3
Action SMC-49 —Study the feasibility of conducting an inventory of existing or suspected soft-story residential, commercial, and industrial structures. Comment: No progress.			✓	SMC-19
Action SMC-50 —Apply and make available updated mapping of seismic hazards from the California Geological Survey's Seismic Hazards Mapping Program when it becomes available http://myhazards.caloes.ca.gov/ campaign. Comment: Ongoing. County will apply and make available updated mapping when they are created by the California Geological Survey's Seismic Hazards Mapping Program. San Mateo County Planning has updated the Department GIS to show areas that have been mapped by this program. This program is ongoing.			✓	CW-4 ^a
Action SMC-51 —Protect and preserve coastline and existing infrastructure through permit review, emphasizing nature-based solutions for Bay and Coastside adaptation strategies, relying on the guidance in the recently updated Baylands Ecosystem Habitat Goals Report, and evolving science for coastal management options. Comment: Ongoing. Plan Princeton is a study being conducted by San Mateo County to update the land use plan for Princeton. The project will focus on the area west of and including Highway 1, between Pillar Point Harbor and Moss Beach. The purpose of this project is to make a comprehensive update to the policies, plans, and standards regulating the Princeton study area to study several issues, including identifying and evaluating potential solutions to shoreline erosion problems and protecting and restoring water quality and sensitive habitats. The County is also reviewing possible sand replenishment project on the Coastside as part of coastal management options. The County is also reviewing potential repairs to existing infrastructure along the coast and bayside. The County Office of Sustainability worked with Point Blue, Stanford and the San Francisco Estuary Institute to assess bayside wetland vulnerability to sea level rise and to develop high level nature-based adaptation strategies that can be explored for the entire county shoreline.			✓	SMC-10, 11, 12 and 15
Action SMC-52 —Protect and preserve coastline and new infrastructure through coastal restoration efforts, emphasizing nature-based solutions for Bay and Coastside adaptation strategies, relying on the guidance in the recently updated Baylands Ecosystem Habitat Goals Report, and evolving science for coastal management options. Comment: County now coordinates this work through FSLRRD.			✓	SMC-15

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-53 —Evaluate the feasibility of relocation, retrofit, or upgrade of existing County facilities to limit the impact of coastal erosion, including the Half Moon Bay Landfill, Mirada Road, and other facilities.			✓	SMC-12
Comment: Current work going on and implemented at Coyote Point, County Center, HMB Landfill, Pillar Point, Pescadero Marsh. A boulder revetment exists along Mirada Road (from Magellan Avenue to the pedestrian bridge south of Medio Avenue). The boulder revetment was installed to prevent erosion of the embankment and the undermining of Mirada Road by protecting the roadway and adjacent properties from exposure to destructive wave action during high tides and storm events. When the recent storms eroded an unprotected segment of road shoulder and bluff at the pedestrian bridge, the revetment was damaged at the bluff where the erosion occurred. Additionally, high energy waves and coastal conditions have caused boulders to shift from their original location towards the beach, leaving areas along Mirada Road unprotected, resulting in gaps in the revetment and movement of the roadway. The Department has completed the work on emergency revetment repairs by placing additional boulder rip rap. Furthermore, the County is evaluating long term solutions to stabilize and protect the Mirada Road. County Parks is exploring improvements to address sea level rise Coyote Point County Park. Office of Sustainability is working on creating a list of assets that are vulnerable to sea level rise and coastal erosion. Mirada Rd Ped Bridge to be replaced in existing alignment.				
Action SMC-54 —Increase efforts to reduce landslides, debris flows, slipouts and erosion in existing and future development by improving appropriate enforcement of codes and use of applicable standards.			✓	SMC-10, 11
Comment: Department of Public Works has worked on 25 projects that related to landslides, slip outs, and erosion due to severe weather in 2016-2017. Many of these projects were eligible for Public Assistance funding. County Planning and Building Department continues to enforce erosion control measures during construction to minimize soil loss. The County also enforces a grading moratorium during the rainy season to minimize erosion on private development projects. GIS zones labeled for any new parcels. Ongoing procedures in place for new building. In progress studies being conducted. The Office of Sustainability is working on an updated map of debris flow risks (landslides) for the County based on high resolution LiDAR data and future changes in climate. The study will include best practices for hazard reduction.				
Action SMC-55 —Encourage public and private water conservation plans, including consideration of rainwater catchment system.	✓			
Comment: County has supported rainwater catchment systems for private property. In addition, on July 15, 2015 California approved revisions to the Model Water Efficient Landscape Ordinance, which promotes efficient water use in new and retrofitted landscapes. The County has adopted the State's ordinance and has applied these requirements to development projects that have irrigated landscaping. The County Department of Health completed the San Mateo Plain Groundwater Basin Assessment to facilitate sustainable management of groundwater supplies by local authorities in the Basin.				
Action SMC-56 —Develop and implement a comprehensive program for watershed maintenance, optimizing forest health with water yield to balance water supply, flooding, fire, and erosion concerns.	✓			SMC-11, 15, 21
Comment: The County Board of Supervisors adopted its new Green Infrastructure Plan in September 2019. The GI Plan explains how the County will expand its efforts to incorporate green infrastructure into our unincorporated communities. The GI Plan includes strategies ranging from outreach and education, to modification of policies and ordinances. The Regional Water Board adopted a sediment TMDL for the Butano-Pescadero Creeks watershed that requires all property owners, including the County to take actions on its lands within the watershed to improve water quality, and these actions will optimize forest health, reduce flooding and erosion. Construction/Repair projects were completed during Fall 2018 on Old Haul Road at Keystone Creek and Harwood Creek, removing old crib-log crossings and reinforced the existing road for emergency access. These two projects prevented an estimated 11,000 cubic yards of sediment delivery into stream channels in the Pescadero/Butano Creek Watershed and proactively address TMDL compliance.				
Action SMC-57 —Continue to support existing County policy regarding the waving of fees for replacement domestic wells for wells that have failed due to drought conditions.			✓	SMC-32
Comment: Ongoing. Waving of fees for replacement domestic wells for wells that have failed due to drought conditions still ongoing by San Mateo County Environmental Health and San Mateo County Planning and Building Department.				

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-58 —Maintain a variety of crops in rural areas of the region to increase agricultural diversity and crop resiliency. Comment: Farmers in San Mateo County continue to maintain a variety of crops in rural areas of the region to increase agricultural diversity and crop resiliency. The county has provided funding to local UC Cooperative Extension to research local alternative crops, and universities and agri-businesses are working on plant genetics to increase crop resiliency. County Agricultural Commissioners, as well as USDA's National Agricultural Statistical Survey (NASS), conduct annual agricultural production surveys and provide summaries as to crop production and variety.	✓			
Action SMC-59 —Promote and maintain the public-private partnerships dedicated to preventing the introduction of agricultural pests into regionally-significant crops. Comment: The County Agricultural Commission has recommended determined this is no longer a viable mitigation action for SMC.		✓		
Action SMC-60 —Encourage livestock operators to develop an early warning system to detect animals with communicable diseases. Comment: The County Agricultural Commission has recommended determined this is no longer a viable mitigation action for SMC.		✓		
Action SMC-61 —Support efforts to understand ground water use and groundwater basins in San Mateo County. Comment: San Mateo Basin study complete. Data gathered on groundwater, wells, etc.	✓			
Action SMC-62 —Utilize the updated Fire Hazard Severity Zone map prepared by the California Division of Forestry and Fire Protection (Cal Fire) to target high priority areas for vegetation management, code inspections, and other fire mitigation activities. Comment: The County and CAL Fire continue to support this mitigation action. CAL FIRE has not produced its Fire Risk Assessment Maps, but the County continues to use the best available information for this program.			✓	SMC-15
Action SMC-63 —Carry out a public education program to increase awareness of fire risks and promote implementation of fire safe practices by the owners of new and existing residences in wildland fire areas, such as, but not limited to, vegetation management, fire resistant construction, onsite water storage, adequate access and other fire prevention measures. Comment: Ongoing. This action is carried out on an annual basis by CAL Fire and by Woodside Fire District.			✓	SMC-3
Action SMC-64 —Adopt a landscape ordinance, utilize landscape plan review, and code to ensure defensible space for structure and infrastructure. Comment: Ongoing. County staff is currently updating its tree regulations that would speak to defensible space for structure and infrastructure.			✓	SMC-11
Action SMC-65 —Locate structure or functions outside of tsunami hazard areas whenever possible. Comment: Ongoing. The County continues to enforce policies from the County's General Plan, Zoning Ordinance, Local Coastal Program, Building Code, and other requirements regarding the location of structures in tsunami hazard.			✓	SMC-10, 11
Action SMC-66 —Conduct a feasibility assessment for creation of a probabilistic Tsunami map for the San Mateo County planning area. Comment: Cal OES is currently working on updating the Tsunami maps for California as a whole. These maps will be used by County DEM staff once they become available. At that time, the County will evaluate if the County should undertake probabilistic Tsunami maps or utilize the maps created by the State and will update this action in a future annual update.		✓		

Action Item	Completed	Removed; No longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Action SMC-67 —Support green infrastructure projects that enhance resiliency to natural disasters and incorporate green design elements into hazard mitigation projects where feasible.			✓	SMC-21
Comment: Ongoing. Short Term (<5yrs.) In September 2019, the BOS adopted the San Mateo County Green Infrastructure Plan, a long-term strategy to incorporate green infrastructure within unincorporated county communities. County staff convene a monthly working group to coordinate green infrastructure implementation across all departments and all public projects are evaluated to determine the feasibility of incorporating green infrastructure. The Office of Sustainability received a \$500k U.S. EPA grant to develop preliminary designs of regional stormwater capture projects and is currently working with C/CAG, Redwood City and San Bruno to move this project forward. GI incorporated into CIP as appropriate.				
Action SMC-68 —Establish an operational area, multi-jurisdiction standing committee for integrating individuals with disabilities, and others with access and functional needs into public information, planning, training, exercise, and response.		✓		
Comment: The County will implement a different approach to reach these goals via SMC-3 and SMC-4.				
Action SMC-69 —The Daly City Department of Water & Wastewater Resources is continuing work on a comprehensive plan to identify storm drainage solutions in the Vista Grande Drainage Basin and complete repairs estimated at nearly \$3 million made to strengthen the Fort Funston Sewer Outfall and Force Main. A joint NEPA/CEQA Draft EIR was publicly released 04/29/16 on the project options associated with the Vista Grande Drainage Basin Improvement Project with comments due 07/01/16. Funding for this anticipated \$100 million improvement project has yet to be secured, and some funding is anticipated to be derived from the North San Mateo County Sanitation District, a subsidiary district of Daly City. It is anticipated that this project will rectify the issues associated with identified severe repetitive loss property located in unincorporated San Mateo County.			✓	SMC-15
Comment: No progress.				
a. Now listed in Volume 1 countywide action items				

1.8 HAZARD MITIGATION ACTION PLAN

Table 1-14 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction. Table 1-15 identifies the priority for each action. Table 1-16 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-14. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-1 —Support the County-wide initiatives identified in Volume 1 of the San Mateo County (SMC) Multijurisdictional Local Hazard Mitigation Plan (MJLHMP).							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	N/A	Low	General Fund	Short term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-2 — Actively participate in the SMC MJLHMP plan maintenance protocols outlined in Volume 1 of the MJLHMP.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	N/A	Low	General Fund	Short term	High
Action SMC-3 —Implement targeted outreach, education, preparedness, and mitigation initiatives to better prepare the County's residents, especially socially vulnerable populations, including those who are monolingual persons, have access and functional needs, and live in high hazard areas. Incorporate equity considerations into program decision making and implementation. Identify, evaluate, validate and implement communications and warning technologies, including radio and audible alerting strategies and systems, for vulnerable populations. Incorporate heat, poor air quality and pandemic warnings into the overarching all hazard alerting strategy, and implement detailed evacuation information into alerts.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 4, 5, 7, 8, 9, 11, 12	San Mateo County, Department of Emergency Management	SMC Community Affairs	Medium	General Fund, Grant Funding-FEMA HMA (BRIC, FMA and HMGP), HSGP, EMPG	Short term	High
Action SMC-4 —Involve diverse community members within socially vulnerable communities, including those with access & functional needs, in hazard risk and emergency planning.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 4, 5, 7, 8, 9, 10, 12	San Mateo County, Department of Emergency Management	SMC Communications and Community Affairs	Medium	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP), HSGP, EMPG	Short term	High
Action SMC-5 —Provide training to emergency planning personnel and Community Emergency Response Team, including support for the socially vulnerable, especially those with disabilities or special medical needs.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 4, 5, 7, 8, 9, 10, 12	San Mateo County, Department of Emergency Management	N/A	Low	General Fund, Grant Funding-EMPG, HSGP	Short term	High
Action SMC-6 — Actively implement and expand the use of the County's new ZoneHaven evacuation tool, which includes more than 300 evacuation zones. Develop the interface between the ZoneHaven evacuation tool with the SMCAAlert alert and warning tool to provide multilingual messages for rapidly evolving emergencies requiring evacuations. Develop a coordinated strategy to addresses evacuation of transit dependent people, people with disabilities and medical needs and others who cannot evacuate independently.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	N/A	Medium	General Fund, Grant Funding-EMPG, HSGP	Short term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-7 —Expand the County’s Evacuation Centers/Cooling Centers/Clean Air Centers/Respite Centers Program, which includes community facilities, as well as private sector facilities, such as hotel rooms. Publicize the availability of the centers in multiple languages, through SMCAAlert and social media, and by coordinating with other services providers and community-based organizations. Ensure that the facilities meet the needs of the most vulnerable community members, especially those with access and functional needs. Hazards Mitigated: Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	San Mateo County Human Services Agency	Medium	General Fund, Grant Funding-FEMA BRIC	Short term	High
Action SMC-8 —Identify Information Systems Department equipment and facilities that need to be relocated or improved and implement measures to reduce their vulnerability to natural hazards. This will improve county communications capacity, interoperability capabilities, systemwide reliability and disaster resilience to maintain critical post disaster operability. Hazards Mitigated: Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami, Communication Failures (Hazard of Interest)							
New & Existing	1, 2, 3, 5, 7, 8	San Mateo County, Department of Emergency Management	N/A	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short term	Medium
Action SMC-9 —Update plans such as the Emergency Operations, Continuity of Government Operations, Department Operation Center and Joint Information Center. Continue to incorporate mitigation principles into local event management during Incident Command Post and Department Operations Center Action Planning. Hazards Mitigated: Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	N/A	Low	General Fund	Short Term	High
Action SMC-10 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas. Prioritize structures that have experienced repetitive losses, and/or are located in high- or medium-risk hazard areas. Hazards Mitigated: Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13	San Mateo County, Planning & Building Department	N/A	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Long Term	High
Action SMC-11 —Integrate the hazard mitigation plan into other plans, ordinances, and programs that dictate land use decisions in the community, including the County’s General Plan, the Community Wildfire Protection Plan, the Green Infrastructure Plan, and the upcoming Climate Resilience Strategy, and develop appropriate implementation procedures following plan adoption. Hazards Mitigated: Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 14	San Mateo County, Planning & Building Department	Office of Sustainability	Low	General Fund	Short term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-12 —Identify, retrofit, upgrade or replace deficient or vulnerable facilities and infrastructure, such as the Pescadero Fire Station, bridges and roadways, and integrate the hazard mitigation plan into the County Capital Improvement Plan process. Assess hazards identified in the hazard mitigation plan when considering the lease or purchase of land and buildings for County use. Evaluate decisions for unintended inequitable investment, especially in previously redlined communities and low-income communities and propose future investments as appropriate.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 14	San Mateo County Public Works	Project Development Unit	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short term	High
Action SMC-13 —Establish the AgPass program through the County Agricultural Commissioner's Office. The program will administer an agricultural verification process and issue the identification to the producer to enter an evacuation zone, if deemed safe, to perform tasks to mitigate crop and livestock loss during a disaster.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 9, 12	San Mateo County, Agricultural Commissioner's Office	N/A	Medium	General Fund, Grant Funding-EMPG, HSGP	Short term	Medium
Action SMC-14 —Identify and plan for the combined impacts of multiple hazards – for example extreme drought followed by flooding, and effects of these impacts on people, property, and the economy.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 12, 14	San Mateo County, Department of Emergency Management	N/A	Medium	General Fund, Grant Funding-FEMA BRIC(C&CB)	Short Term	High
Action SMC-15 —Actively support the mitigation actions led by other SMC MJLHMP Annex Partners, such as FSLRRD, the County Office of Education, RCD and water and sewer districts, and stakeholders representing the unincorporated areas, including CAL FIRE, San Francisco Public Utilities Commission, and Caltrans, as well as the San Mateo Operational Area Emergency Services Organization (JPA) and the San Mateo County Emergency Management Association. Where needed, actively promote the development of new mitigation actions to address hazards in the unincorporated areas of San Mateo County. (See Attachment A to this annex)							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change, Landslide/Mass Movements, Earthquake, Dam Failure, Flood, Severe Weather, Wildfire, Drought, Tsunami							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 12, 14	San Mateo County, Department of Emergency Management	N/A	Low	General Fund	Short Term	High
Action SMC-16 —Complete the San Mateo County Climate Action Plan and the San Mateo County Sea Level Rise Vulnerability Assessment. When complete, coordinate the implementation with the Local Climate Adaptation Policy Guide for Local Governments (Cal OES) to reduce risks exacerbated by climate change and sea level rise impacts and to adapt to those impacts. Integrate climate adaptation actions across regional and local General Plans (including Safety and Housing elements), Local Coastal Programs, Housing Plans, mitigation planning efforts, and infrastructure planning and development.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 12	San Mateo County, Office of Sustainability	Planning & Building Department	Medium	General Fund, Grant Funding- FEMA BRIC(C&CB)	Short Term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-17 —Implement the County's Government Operations Climate Action Plan in all County Capital Projects.							
<u>Hazards Mitigated:</u> Sea Level Rise/Climate Change							
New & Existing	6	San Mateo County, Public Works	Office of Sustainability and Project Development Unit	Medium	General Fund,	Short Term	Medium
Action SMC-18 —In coordination with CAL FIRE and San Francisco Public Utilities Commission, develop strategies to protect watershed and drinking water reservoirs from debris flows that could occur following wildfires in the watershed areas.							
<u>Hazards Mitigated:</u> Landslide/Mass Movements							
New & Existing	6	San Mateo County, Public Works	SMC Department of Emergency Management	Medium	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short Term	High
Action SMC-19 —Conduct an inventory of existing or suspected soft-story residential, commercial, and industrial structures and develop recommendations for consideration by the Board of Supervisors.							
<u>Hazards Mitigated:</u> Earthquake							
Existing	6,9	San Mateo County, Planning & Building Department	N/A	Medium	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short Term	High
Action SMC-20 —Evaluate need to incorporate dam failure strategies into existing emergency plans utilizing information developed in the MJLHMP.							
<u>Hazards Mitigated:</u> Dam Failure							
New & Existing	1, 2, 4, 5, 7	San Mateo County, Department of Emergency Management	N/A	Medium	General Fund, Grant Funding-EMPG and HSGP	Short Term	High
Action SMC-21 —Implement the County's Green Infrastructure Plan to improve stormwater capture in County projects.							
<u>Hazards Mitigated:</u> Flood							
New & Existing	1, 2, 4, 6, 14	San Mateo County, Public Works	Office of Sustainability, Planning & Building	Medium	General Fund,	Short Term	High
Action SMC-22 —Identify and plan upgrades of County operated utility systems including fuel pump stations and generator capacity at pump stations.							
<u>Hazards Mitigated:</u> Flood							
Existing	6,9	San Mateo County, Public Works	N/A	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Long Term	High
Action SMC-23 —Continue the County's partnership with the San Francisco Creek Joint Powers Authority and neighboring jurisdictions to address flooding, sea level rise and other environmental concerns along waterways that lead to the San Francisco Bay and along Colma Creek and San Bruno Creek.							
<u>Hazards Mitigated:</u> Flood							
New & Existing	1, 2, 4, 5, 7, 14	San Mateo County, Public Works Department	N/A	Low	General Fund	Short term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-24 —Develop education campaigns and other outreach efforts to encourage owners of properties in a floodplain to purchase flood insurance.							
<u>Hazards Mitigated:</u> Flood							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12	San Mateo County, Department of Emergency Management	N/A	Low	General Fund	Short term	High
Action SMC-25 —Identify roads, bridges and storm drains that could be vulnerable to coastal erosion on County maintained roadways and public lands, continue to repair and make structural improvements, and develop a five-year permit for maintenance work in County parks to reinforce infrastructure from flooding through protection activities. Work with Caltrans to assess future realignment options of Highway 1 due to impacts from climate change and sea level rise.							
<u>Hazards Mitigated:</u> Flood							
New & Existing	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14	San Mateo County, Public Works Department	San Mateo County, Planning and Building and Parks Department	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short term	High
Action SMC-26 —Develop and implement a new stormwater ordinance and drainage manual to formalize and expand requirements to incorporate stormwater retention and low-impact development treatment into new and redevelopment projects to help mitigate downstream impacts of severe weather and prevent localized flooding and other hazards.							
<u>Hazards Mitigated:</u> Flooding & Severe Weather							
New & Existing	1, 2, 4, 6, 14	San Mateo County, Planning & Building	N/A	Medium	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short Term	High
Action SMC-27 —Work with PG&E to add Public Safety Power Shutoff (PSPS) Resource Centers on the Coastside.							
<u>Hazards Mitigated:</u> Severe Weather							
New & Existing	1, 2, 3, 4, 5, 8, 9, 10	San Mateo County, Department of Emergency Management	PG&E	Low	General Fund	Short Term	High
Action SMC-28 —Explore urban heat reduction solutions that prioritizes historically marginalized communities and elevate community-driven solutions, such as planting trees and installing shade, cooling, and other infrastructure in highly circulated streets.							
<u>Hazards Mitigated:</u> Severe Weather							
New & Existing	1, 2, 3, 4, 5, 6, 7, 8, 9, 14	San Mateo County, Health Department	Office of Sustainability	Medium	General Fund, Grant Funding- FEMA HMA (BRIC, FMA and HMGP),	Short Term	High
Action SMC-29 —Scale up programs that provide cooling devices to low-income residents while helping them to enroll or qualify for energy saving or renewable energy programs.							
<u>Hazards Mitigated:</u> Severe Weather							
New & Existing	1, 2, 3, 4, 5, 8, 9	San Mateo County, Department of Emergency Services	N/A	Medium	General Fund, Grant Funding-FEMA BRIC	Short Term	High
Action SMC-30 —Implement a community driven effort to map and validate extreme heat data and impacts in vulnerable communities.							
<u>Hazards Mitigated:</u> Severe Weather							
New & Existing	1, 2, 3, 4, 5, 8, 9	San Mateo County, Office of Sustainability	N/A	Medium	General Fund, Grant Funding-FEMA BRIC	Short Term	High

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a	Social Equity Lens Priority
Action SMC-31 —Expand vegetation management strategies and programs to develop, find funding and implement vegetation management projects within the unincorporated area, including County Parks and right of ways, and particularly in areas identified as evacuation zones. Work with CAL FIRE, other Annex Partners (such as RCD), and other stakeholders (such as San Francisco Public Utilities Commission and Caltrans) to implement this action. (See Attachment A to this annex)							
<u>Hazards Mitigated:</u> Wildfire							
New & Existing	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14	San Mateo County, Department of Emergency Management	N/A	High	General Fund, Grant Funding- FEMA HMA (BRIC, FMA, HMGF and FMAG),	Short term	High
Action SMC-32 —Support existing County policy and develop new policies as needed to reduce drought impacts on residents and business, including waiving of fees for replacement domestic wells that have failed due to drought conditions.							
<u>Hazards Mitigated:</u> Drought							
New & Existing	1, 2, 4, 5, 6, 14	San Mateo County, Health Department	San Mateo County, Planning & Building Dept.	Low	General Fund	Short term	High
Action SMC-33 —Utilize Cal OES Tsunami maps and evaluate if maps created by the State can be utilized for public education and Coastside signage. Also, evaluate signage for areas that flood similar to tsunamic signage, with an emphasis on flood prone areas and evacuation routes.							
<u>Hazards Mitigated:</u> Tsunami							
New & Existing	1, 2, 3, 4, 5, 7, 8, 9, 10, 11	San Mateo County, Department of Emergency Management	San Mateo County, Public Works	Low	General Fund	Short Term	High
Action SMC-34 —Strengthen core public health infrastructure for surveillance, laboratory and disease control to mitigate pandemic impacts.							
<u>Hazards Mitigated:</u> Health/Pandemic (Hazard of interest)							
New	1, 2, 4, 7, 9, 10, 11, 12	San Mateo County, Health Department	N/A	Medium	General Fund, CDC Grants,	Short term	High
Action SMC-35 —Increase situational awareness and trustful communication and engagement with the most vulnerable populations by coordinating culturally relevant public health messaging to reduce the risk of outbreaks and maintaining healthcare emergency communication infrastructure by coordinating relevant messaging.							
<u>Hazards Mitigated:</u> Health/Pandemic (Hazard of interest)							
New	1, 2, 4, 7, 9, 10, 11, 12	San Mateo County, Health Department	N/A	Medium	General Fund, CDC Grants	Short term	High
Action SMC-36 — Enhance preparedness of healthcare facilities through participation in the San Mateo County Healthcare Coalition and coordination of the hazard mitigation plan into the Coalition policy and planning process.							
<u>Hazards Mitigated:</u> Health/Pandemic (Hazard of interest)							
New	1, 2, 4, 7, 9, 10, 11, 12	San Mateo County, Health Department	N/A	Medium	General Fund, CDC Grants	Short term	High
Action SMC-37 — Rapidly eliminate outbreaks and spread of disease as new disease risks emerge and threaten the public's health.							
<u>Hazards Mitigated:</u> Health/Pandemic (Hazard of interest)							
New	1, 2, 4, 7, 9, 10, 11, 12	San Mateo County, Health Department	N/A	Medium	General Fund, CDC Grants	Short Term	High

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 1-15. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Eligible for Outside Funding?	Can Project Be Funded Under Existing Programs/Budgets?	Implementation Priority ^a	Outside Funding Source Pursuit Priority ^a	Social Equity Priority ^a
1	10	High	Low	Yes	Yes	Yes	High	High	High
2	10	High	Low	Yes	Yes	Yes	High	High	High
3	10	High	Medium	Yes	Yes	Yes	High	High	High
4	10	High	Medium	Yes	Yes	Yes	High	High	High
5	10	High	Low	Yes	Yes	Yes	High	High	High
6	10	High	Medium	Yes	Yes	Yes	High	High	High
7	10	High	Medium	Yes	Yes	Yes	High	High	High
8	6	High	High	Yes	Yes	No	Medium	Medium	Medium
9	10	High	Low	Yes	Yes	Yes	High	High	High
10	11	Medium	High	Yes	Yes	No	Medium	Medium	High
11	11	High	Low	Yes	Yes	Yes	High	High	High
12	11	High	High	Yes	Yes	No	Medium	High	High
13	4	High	Medium	Yes	Yes	Yes	High	High	Medium
14	10	High	Medium	Yes	Yes	Yes	High	High	High
15	10	High	Low	Yes	Yes	Yes	High	High	High
16	9	Medium	Medium	Yes	Yes	Yes	High	High	High
17	1	High	Medium	Yes	Yes	Yes	High	High	Medium
18	1	High	Medium	Yes	Yes	Yes	High	High	High
19	2	Medium	Medium	Yes	Yes	Yes	High	High	High
20	5	Medium	Medium	Yes	Yes	Yes	High	High	High
21	5	Medium	Medium	Yes	Yes	Yes	High	High	High
22	2	High	Medium	Yes	Yes	Yes	High	High	High
23	6	High	Low	Yes	Yes	Yes	High	High	High
24	10	High	Low	Yes	Yes	Yes	High	High	High
25	12	High	High	Yes	Yes	No	Medium	High	High
26	5	Medium	Medium	Yes	Yes	Yes	High	Medium	High
27	8	High	Low	Yes	Yes	Yes	High	High	High
28	10	Medium	Medium	Yes	Yes	Yes	High	High	High
29	7	High	Medium	Yes	Yes	Yes	High	High	High
30	7	Medium	Medium	Yes	Yes	Yes	High	Medium	High
31	12	High	High	Yes	Yes	No	Medium	High	High
32	6	Medium	Low	Yes	Yes	Yes	High	High	High
33	10	High	Low	Yes	Yes	Yes	High	High	High
34	8	High	Medium	Yes	Yes	Yes	High	High	High
35	8	High	Medium	Yes	Yes	Yes	High	High	High
36	8	High	Medium	Yes	Yes	Yes	High	High	High
37	8	High	Medium	Yes	Yes	Yes	High	High	High

a. See the introduction to this volume for explanation of priorities.

Table 1-16. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Flood	SMC-12, 21, 22, 23, 26	SMC-8, 10, 12, 15, 22, 23, 25	SMC-3, 4, 6, 24, 33	SMC-15, 21, 23, 25	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15, 22, 23, 25	SMC-11, 15, 16, 17, 21, 26	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15, 23
Landslide/Mass Movements	SMC-12, 18	SMC-8, 10, 12, 15, 18	SMC-3, 4, 6	SMC-15, 18	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15, 18	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15
Climate Change/Sea Level Rise	SMC-12	SMC-8, 10, 12, 15	SMC-3, 4, 6	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15
Earthquake	SMC-12	SMC-8, 10, 12, 15, 19	SMC-3, 4, 6	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15
Wildfire	SMC-12, 31	SMC-8, 10, 12, 15, 31	SMC-3, 4, 6, 31	SMC-15, 31	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15
Dam Failure	SMC-12	SMC-8, 10, 12, 15	SMC-3, 4, 6	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15, 21
Medium-Risk Hazards								
Tsunami	SMC-12	SMC-8, 10, 12, 15	SMC-3, 4, 6, 33	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15
Severe weather	SMC-12	SMC-8, 10, 12, 15	SMC-3, 4, 6	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 27, 29	SMC-12, 15	SMC-11, 15, 16, 17, 28, 29, 30	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15, 28, 29, 30
Low-Risk Hazards								
Drought	SMC-12, 32	SMC-8, 10, 12, 15	SMC-3, 4, 6, 32	SMC-15	SMC-3, 4, 5, 6, 7, 8, 9, 14, 15	SMC-12, 15	SMC-11, 15, 16, 17	SMC-1, 2, 3, 4, 5, 6, 9, 11, 14, 15

a. See the introduction to this volume for explanation of mitigation types.

1.9 PUBLIC OUTREACH

Table 1-17 lists public outreach activities for this jurisdiction.

Table 1-17. Public Outreach Activities

Dates	Activity	Participants/ Target Audience
February 22	Steering Committee Meeting #1	Steering Committee, Planning Partners & Public
March 15	Media Release announcing launch of MJLHMP Process and release of Survey #1	Public
March 20	South Coast Sustainable SC4 Amateur Radio Club	Coastside community; Public; 50 participants
March 22	Steering Committee Meeting #2	Steering Committee, Planning Partners & Public
March 25	Survey Outreach for Unhoused Populations	Senior Coastsiders (Public); 5 participants
March 25	Public Workshop #1: Risk Assessment and Story Map	Public
April 12	Monthly Meeting #1 (presentation from County staff)	Bay Area Community Health Advisory Council (Public); 22 participants; 90% African American
April 13	Email blast to listserv	Bay Area Community Health Advisory Council (Public); 155 people reached
April 19	Staff Meeting	Center for Independence of Individuals with Disabilities (CID) (Public)
April 24	Center for Independence of Individuals with Disabilities (CID) Emergency Preparedness Program/ Food Distribution Event	CID (Public); 8 participants
April 26	Steering Committee Meeting #3	Steering Committee, Planning Partners & Public
April 29	CID Support Group	Public; survey response support; 3 participants
April 30	CID Virtual Peer Support Group Meeting	Public; 1:1 accessibility support; 1 participant
May 10	Monthly Meeting #2 (presentation from County staff)	Bay Area Community Health Advisory Council (Public)
May 10	Presentation to SAM Board (County staff participating)	Public
May 13	Evergreen Seniors event (panel from various coastal jurisdictions)	Senior Coastsiders (Public); 12 participants
May 24	Steering Committee Meeting #4	Steering Committee, Planning Partners & Public
June 3	Wildfire Risk and Resilience in San Mateo County, sponsored by FSLRRD and the League of Women Voters	Public
June 4	Media Release announcing Survey #2 to Community Residents seeking input on Mitigation Actions	Public
June 7 & 10	Center for Independence of Individuals with Disabilities Staff Meeting and Peer Support Group	Outreach to Vulnerable Community Members; 15 participants
June 10	Nuestra Casa Environmental Justice Academy Focus Group	Outreach to Vulnerable Community Members; 25 participants (17 Spanish/8 English)
June 14	Bay Area Community Health Advisory Council Meeting	Outreach to Vulnerable Community Members; 22 participants; 90% African Americans
June 17	CID Support Group	Public; 6 participants
June 23	South Coast Sustainable Focus Group	Outreach to Vulnerable Community Members; 57 participants
June 23	Climate Resilient Communities Event	Public with focus on East Palo Alto, Belle Haven and North Fair Oaks Communities
June 24	South Coast Sustainable Focus Group	Puente; Public; 15 participants; farmworkers and Latinx; Spanish language translation
June 24	North Fair Oaks Community Council	Public
June 28	Steering Committee Meeting #5	Steering Committee, Planning Partners & Public
July 13	Pescadero Municipal Advisory Committee	Public
July 20	Presentation to the Menlo Park City Council on the Multi-Jurisdictional Local Hazard Mitigation Plan (County staff participating)	Public
July 26	Steering Committee Meeting #6	Steering Committee, Planning Partners & Public
August 12	Public Workshop #2: Review of DRAFT Multi-Jurisdictional Local Hazard Mitigation Plan	Steering Committee, Planning Partners & Public

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- **San Mateo County Building Regulations** – The building regulations were reviewed for the capability assessment and for identifying plan integration.
- **San Mateo County Zoning Regulations** – The zoning regulations were reviewed for the capability assessment and for identifying plan integration.
- **San Mateo County Subdivision Regulations** – The subdivision regulations were reviewed for the capability assessment and for identifying plan integration.
- **San Mateo County Code of Ordinances, Chapter 4.100** – The Code of Ordinances, Chapter 4.1 Storm Water Management and Discharge Control Regulations were reviewed for the capability assessment and for identifying plan integration.
- **San Francisco Bay Region Municipal Regional Stormwater NPDES Permit** – Municipal Regional Stormwater Permit was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Emergency Operations Plan** – The Emergency Operations Plan was reviewed for the capability assessment and for identifying plan integration.
- **The CA. State Civil Code section 1102** – The Civil Code was reviewed for was reviewed for the capability assessment.
- **The California Environmental Quality Act** – the application of CEQA was reviewed for the capability assessment and for identifying plan integration.
- **California Code of Regulations model Water Efficient Landscape Ordinance** – the Water Efficient Landscape Ordinance was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County General Plan** – The General Plan was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Capital Improvement Plan** – the Capital Improvement Plan was reviewed for the capability assessment and for identifying plan integration.
- **San Bruno Mountain Habitat Conservation Plan** - the Habitat Conservation Plan was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Local Coastal Program** – The Local Coastal Program was reviewed for the capability assessment and for identifying plan integration.
- **Santa Cruz And San Mateo Community Wildfire Protection Plan** – The Community Wildfire Protection Plan was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Energy Efficient Climate Action Plan** - The Climate Action Plan was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Emergency Operations Plan** - Emergency Operations Plan was reviewed for the capability assessment and for identifying plan integration.
- **Threat & Hazard Identification & Risk Assessment (THIRA)** – the THIRA was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Continuity of Operations Plan** – The Continuity of Operations Plan was reviewed for the capability assessment.

- **San Mateo County Public Health Plans** – public health plans (Strategies for Building Healthy, Equitable Communities Strategic Plan (2015); Vision for a SMC Food and Farm Bill (2017); SMC Community Health and Needs Assessment (2019); No Place Like Home Plan (2019); Community Collaboration for Children’s Success Neighborhood Action Plans (2019)) were reviewed for the capability assessment and for identifying plan integration.
- **The North Fair Oaks Community Plan** - The North Fair Oaks Community Plan was reviewed for recent and expected future development trends.
- **The San Mateo County Sea Level Rise Vulnerability Assessment** – The Sea Level Rise Vulnerability Assessment was reviewed to understand the County’s adaptive capacity for climate change.
- **San Mateo County Stormwater Resource Plan** – The Stormwater Resource Plan was reviewed for the capability assessment and for identifying plan integration.
- **The San Mateo County Green Infrastructure Plan** – The Green Infrastructure Plan was reviewed for the capability assessment and for identifying plan integration.
- **San Mateo County Drainage Policy** – The Drainage Policy was reviewed for the capability assessment and for identifying plan integration.

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.

1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

To better understand risk and vulnerability, the County could implement a program to digitally map historical hazard events and future hazard events and impacts. The County could also review the replacement cost multiplier used in the risk assessment for accuracy for this location.

Attachment A.

Project	Area Scope	Agency	Funding Source	Value	Start	Status
FIRE SAFE SMC						
HWY 35	Old La Honda Rd. to Hwy 84	Fire Safe	PG&E	\$80,000	Jul-21	Operational
	Hwy 35 - From Hwy 92 to Southern County line		CAL FIRE CCI	\$200,000		In Contracts
Fire Safe SMC Wildfire Resiliency	San Carlos Parks & Thornewood, Wod	Fire Safe	Coastal Conservancy	\$189,000	Aug-21	
SMC Hwy 35 Evacuation Route	25 miles of Hwy 35 in SMC	Fire Safe	Cal Fire	\$2,600,000	APPLIED	
WFPD Hazard Map	Hazard Risk Map WFPD, Wod, PV, SMC	Fire Safe/ WFPD	Cal Fire	\$42,000	APPLIED	
SMC Fire Prevention WUI Inspections	Palomar Park, Devonshire	Fire Safe	OOS	\$50,000	APPLIED	
SMC Wildfire Resiliency Projects	All WUI Areas within SMC	SMC	Measure K	\$1,068,000	PENDING	
SMC Neighborhood Chipping	Select Neighborhoods within SMC	Fire Safe/ RCD	Measure K/ Grant	\$100,000 approx.	NOW	
San Bruno Eucalyptus Removal	Crestmoor Dr./ Cal Trans Hwy 380	Fire Safe/ Cal Trans	State	\$150,000 approx.	NOW	
Community Wildfire Prep/ Response	WUI Neighborhoods TBD	S. Coast Sustainable	OOS	Unknown	NOW	
Wildfire Camera Installation	Select Sites East side of Hwy 35	Fire Safe/ PANO	PGE	TBD	PENDING	
Cuesta La Honda	Fuel Reduction Vacant Parcels/ Chipping	Fire Safe/ Cal Fire	Cal Fire/ Grant	TBD	PENDING	
Skywood Acres Neighborhood	Southeast Wunderlich/ Skywood	SMC Parks/ Fire Safe	Unknown	TBD	PENDING	
SMC Eucalyptus Removal	Strategic Coastal Eucalyptus Removal - MCC Maps	Fire Safe/ Cal Trans	State	TBD	PENDING	
RCD (Current Projects)						
Forest Health	Quarry Park Shaded Fuel Break	RCD/ SMC Parks	Coastal Conservancy	\$1M	AUG	
Forest Health	Forest Health across 440 acres (Huddart & Wunderlich County Park, Girl Scout Camp)	RCD/ SMC Parks/ Girl Scouts (Private Landowner),	CAL FIRE FH Grant	\$2.5M	NOW	
Fuel Reduction	Quarry Park/ El Granada Eucalyptus Removal SOW	RCD/ Residents	County	\$75,000	PENDING	
Vegetation Management	Quiroste Valley (Amah Mutsun Tribal Band)	RCD/ State Parks	State Parks	\$724,300	NOW	
Cuesta La Honda	Perimeter Shaded Fuel Break Cuesta LaHonda	RCD/ Cal Fire	CCI Grants	\$1M	FUTURE	CEQA started
Quarry Park	Eucalyptus Removal/ Forest Restoration	RCD/ SMC Parks	Unknown	Unknown	FUTURE	
Forest Health	Butano State Park 420 acres + LiDAR	RCD/ SP/ SMSN	CAL FIRE FH Grant	\$2.8M	PENDING	
Vegetation Management	Hypericum control (in permitting)	RCD/ Cal Fire/ etc.	Multiple/ County Ag	50,000	NOW	

Project	Area Scope	Agency	Funding Source	Value	Start	Status
SMC Neighborhood Chipping	Select Neighborhoods within SMC	Fire Safe/ RCD	FSA Grant	\$103,500	NOW	
(Projects in Development)						
Coastal Public Works Plan	Coastal Com Partnership Forest Health Projects	RCD/ Coastal Com	Unknown	Unknown	PENDING	
Coastal Regional Prioritization Group	Regional project prioritization	RCD/ SCRCD/ SMSN	Coastal Conservancy	\$40,000	NOW	
Post-fire technical assistance	CZU burn zone- culvert replacement, hazard tree assessment, erosion control, technical assistance	RCD/ NRCS	SMC, NRCS, FEMA (pending)	\$260,000	NOW	
Technical Assistance Fuels/ Habitat	Portola Valley Habitat and Fuels concerns	RCD	County		NOW	
Technical Assistance Fuels/ Habitat	El Granada Eucalyptus Removal	RCD	County		NOW	
Technical Assistance Fuels/ Habitat	Cuesta La Honda project development	RCD	County		NOW	
HWY 35 French Broom Mapping & BMP	Developing BMP for invasive species management	CAL FIRE/ RCD	CAL FIRE	\$20,000	NOW	
Other Agencies						
CAL FIRE / SMC FIRE Prescribed Burn	SFPUC Water Shed/ Crystal Springs	CAL FIRE/ SFPUC	Unknown	Unknown	Ongoing	CEQA almost completed
Alert Wildfire Cameras	Selected sites in San Mateo and neighboring counties	CAL FIRE/ Alert Wildfire	PGE/ CAL FIRE/ Donations	\$150,000+	Ongoing	18 Cameras Operational 6 pending
TomKat Ranch VMP	Fuel Reduction, Habitat management, Fire Access	CAL FIRE	CAL FIRE/ Private	\$50k	Ongoing	
Pomponio Ranch VMP	Fuel Reduction, Habitat management, Fire Access	CAL FIRE	CAL FIRE/ Private	\$50k	Ongoing	
SFPUC Cahil Ridge Fuel Break	Shaded Fuel Break	SFPUC	SMCF/ CAL FIRE Project Engines	\$75K	Ongoing	
SFPUC Polhemus Road	Defensible Space behind homes on SFPUC lands	SFPUC	SMCF/ CAL FIRE Project Engines	\$50K	Almost Complete	
SFPUC Dam Face Burns	Fuel Reduction, Dam Safety	SFPUC	CAL FIRE/ SMCF/ PUC/ CCC	\$50K	Ongoing	
SFPUC Hwy 35 SOD	SOD removal	SFPUC	SFPUC/ SMCF/ CAL FIRE Project Engines	\$400K	Ongoing	
SFPUC Peninsula Watershed Fuel Reduction	Ongoing Mowing and Mastication on SFPUC Lands	SFPUC	SFPUC Contracts	\$500K	Ongoing	
SFPUC Edgewood Park Fuel Break	Reclear Edgewood Park Southern Fuel Break from old FSC grant	PG&E/ SFPUC	SFPUC/ PG&E	\$400K	Almost Complete	
Junipero Sierra County Park	Fuel Reduction behind homes	SM Parks	SM Parks/ CAL FIRE/ SMCF	\$75K	Ongoing	
Truck Trail Maintenance	Access Road Maintenance/ Fuel Reduction	CAL FIRE	CAL FIRE	\$150K	Ongoing	

2021 Multijurisdictional Local Hazard Mitigation Plan

Appendix A. Planning Partner Expectations

A. PLANNING PARTNER EXPECTATIONS

The federal Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390), commonly known as the 2000 Stafford Act amendments, was approved by Congress on October 10, 2000. This act required state and local governments to develop hazard mitigation plans as a condition for federal grant assistance. Among other things, this legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide. DMA 2000 is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Prior to 2000, federal legislation provided funding for disaster relief, recovery, and some hazard mitigation planning. The DMA improves upon the planning process by emphasizing the importance of communities planning for disasters before they occur.

The Disaster Mitigation Act defines a “local government” as:

Any county, municipality, city, town, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity

Any local government wishing to pursue funding afforded under FEMA Hazard Mitigation Grant Programs must have an approved hazard mitigation plan in order to be eligible to apply for these funds.

One of the goals of the multi-jurisdictional approach to hazard mitigation planning is to achieve compliance with the Disaster Mitigation Act (DMA) for all participating members in the planning effort. DMA compliance must be certified for each member in order to maintain eligibility for the benefits under the DMA. Whether our planning process generates ten individual plans or one large plan that has a chapter for each partner jurisdiction, the following items must be addressed by each planning partner to achieve DMA compliance:

- Participate in the process. It must be documented in the plan that each planning partner “participated” in the process that generated the plan. There is flexibility in defining “participation.” Participation can vary based on the type of planning partner (i.e.: City vs. a Special Purpose District). However, the level of participation must be defined and the extent for which this level of participation has been met for each partner must be contained in the plan context.
- Consistency Review. Review of existing documents pertinent to each jurisdiction to identify policies or recommendations that are not consistent with those documents reviewed in producing the “parent” plan or have policies and recommendations that complement the hazard mitigation initiatives selected (i.e.: comp plans, basin plans or hazard specific plans).
- Action Review. For plan updates, a review of the strategies from your prior action plan to determine those that have been accomplished and how they were accomplished; and why those that have not been accomplished were not completed.

- Update Localized Risk Assessment. Personalize the Risk Assessment for each jurisdiction by removing hazards not associated with the defined jurisdictional area or redefining vulnerability based on a hazard’s impact to a jurisdiction. This phase will include:
 - A ranking of the risk
 - A description of the number and type of structures at risk
 - An estimate of the potential dollar losses to vulnerable structures
 - A general description of land uses and development trends within the community, so that mitigation options can be considered in future land use decisions.
- Capability assessment. Each planning partner must identify and review their individual regulatory, technical, and financial capabilities with regards to the implementation of hazard mitigation actions.
- Personalize mitigation recommendations. Identify and prioritize mitigation recommendations specific to each jurisdiction’s defined area.
- Create an Action Plan.
- Incorporate Public Participation. Each jurisdiction must present the Plan to the public for comment at least once, within two weeks prior to adoption.
- Plan must be adopted by each jurisdiction.

One of the benefits to multi-jurisdictional planning is the ability to pool resources. This means more than monetary resources. Resources such as staff time, meeting locations, media resources, technical expertise will all need to be utilized to generate a successful plan. In addition, these resources can be pooled such that decisions can be made by a peer group applying to the whole and thus reducing the individual level of effort of each planning partner. This will be accomplished by the formation of a steering committee made up of planning partners and other “stakeholders” within the planning area. The size and makeup of this steering committee will be determined by the planning partnership. This body will assume the decision-making responsibilities on behalf of the entire partnership. This will streamline the planning process by reducing the number of meetings that will need to be attended by each planning partner. The assembled Steering Committee for this effort will meet monthly on an as needed basis as determined by the planning team, and will provide guidance and decision making during all phases of the plan’s development.

With the above participation requirements in mind, each partner is expected to aid this process by being prepared to develop its section of the plan. To be an eligible planning partner in this effort, each planning partner shall provide the following:

- A. A “Letter of Commitment” or resolution to participate to the Planning Team (see Exhibit A).
- B. Designate a lead point of contact for this effort. This designee will be listed as the hazard mitigation point of contact for your jurisdiction in the plan.
- C. Support and participate in the selection and function of the Steering Committee selected to oversee the development of this plan.
- D. Provide support in the form of mailing list, possible meeting space, and public information materials, such as newsletters, newspapers, or direct mailed brochures, required to implement the public involvement strategy developed by the Steering Committee.
- E. Participate in the process. There will be many opportunities as this plan evolves to participate. Opportunities such as:
 - i) Steering Committee meetings

- ii) Public meetings or open houses
- iii) Workshops/ planning partner specific training sessions
- iv) Public review and comment periods prior to adoption

At each and every one of these opportunities, attendance will be recorded. Attendance records will be used to document participation for each planning partner. No thresholds will be established as minimum levels of participation. However, each planning partner should attempt to attend all possible meetings and events.

- F. There will be one mandatory workshop that all planning partners will be required to attend. This workshop will cover the proper completion of the jurisdictional annex template which is the basis for each partner's jurisdictional chapter in the plan. Failure to have a representative at this workshop will disqualify the planning partner from participation in this effort. The schedule for this workshop will be such that all committed planning partners will be able to attend.
- G. After participation in the mandatory template workshop, each partner will be required to complete their template and provide it to the planning team in the time frame established by the Steering Committee. Failure to complete your template in the required time frame may lead to disqualification from the partnership.
- H. Each partner will be expected to perform a "consistency review" of all technical studies, plans, ordinances specific to hazards to determine the existence of any not consistent with the same such documents reviewed in the preparation of the parent plan.
- I. Each partner will be expected to review the Risk Assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide the jurisdiction specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- J. Each partner will be expected to review and determine if the mitigation recommendations chosen in the parent plan will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the parent plan recommendations will need to be identified and prioritized, and reviewed to determine their benefits vs. costs.
- K. Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
- L. Each partner will be required to formally adopt the plan.

Templates and instructions to aid in the compilation of this information will be provided to all committed planning partners. Each partner will be expected to complete their templates in a timely manner and according to the timeline specified by the Steering Committee.

NOTE: Once this plan is completed, and DMA compliance has been determined for each partner, maintaining that eligibility will be dependent upon each partner implementing the plan implementation-maintenance protocol identified in the plan. At a minimum, this means completing the ongoing plan maintenance protocol identified in the plan. Partners that do not participate in this plan maintenance strategy may be deemed ineligible by the partnership, and thus lose their DMA eligibility.

Eligible entities that do not wish to participate in the multi-jurisdictional planning process or fail to meet the requirements contained in this document may choose to link to the plan in pursuit of future adoption after the completion of the current effort.

Exhibit A
Example Letter of Commitment

Dan Belville, Director
San Mateo County Office of Emergency Services
501 Winslow St.
Redwood City, CA 94063

Re: Letter of Commitment as a Participating Jurisdiction in the San Mateo County Multijurisdictional Hazard Mitigation Plan Update Plan 2021

Dear Office of Emergency Services,

As the Federal Emergency Management Agency's (FEMA) local hazard mitigation plan requirements under 44 CFR §201.6 identify criteria for multi-jurisdictional mitigation plans including the participation and collaboration of regional planning and mitigation partners, this letter of commitment is submitted to confirm the participation of <insert agency name> as a Planning Partner in the *San Mateo County Multijurisdictional Hazard Mitigation Plan Update Plan 2021*.

As a condition of participation, <insert agency name> agrees to meet the requirements for mitigation plans identified in 44 CFR §201.6, and to provide timely cooperation and participation to produce a FEMA-approved hazard mitigation plan with the County of San Mateo.

<insert agency name> understands that it must engage in the following planning processes, as detailed in FEMA's *Local Multi-Hazard Mitigation Planning Guidance* dated March 1, 2013. Planning processes include, but are not limited to the following:

- Review of existing 2016 San Mateo County Multijurisdictional Hazard Mitigation Plan
- Identification of local hazards, risk assessment, and vulnerability analysis
- Participation in the formulation of mitigation goals and actions
- Participation in community engagement and public outreach in the development of the plan
- Timely response to requests for information by the coordinating agency and consultants, and adherence to established deadlines
- Formal adoption of the hazard mitigation plan by the planning partner jurisdiction's governing body
- Tracking and monthly submission of personnel hours spent on the hazard mitigation planning effort

Sincerely,

Name _____

Title _____

Exhibit B
Planning Team Contact information

Name	Representing	Address	e-mail
Dan Belville	Department of Emergency Management	501 Winslow St., Redwood City, CA 94063	dbelville@smcgov.org
Rob Flaner	Tetra Tech, Inc.	90 S. Blackwood Ave Eagle, ID 83616	rob.flaner@tetrattech.com
Bart Spencer	Tetra Tech, Inc.	1999 Harrison St., Ste 500 Oakland, CA 946122	bart.spencer@tetrattech.com
Melissa Ross	SMC Building & Planning	555 County Center Redwood City, CA 94063	mross@smcgov.org
Rumika Chaundry	SMC GIS/IT	455 County Center Redwood City, CA 94063	rchaundry@smcgov.org
Hillary Papendick	Office of Sustainability	400 County Center Redwood City, CA 94063	hpapendick@smcgov.org
David Cosgrave	Coastside Fire District		david.cosgrave@fire.ca.gov
Ann Ludwig	Office of Emergency Services – contractor	501 Winslow St. Redwood City, CA 94063	c_aludwig@smcgov.org
Joe LaClair^a	SMC Planning Services	455 County Center Redwood City, CA 94063	Joe.laclair@gmail.com
Jena Wiser	Tetra Tech, Inc.		jeana.wiser@tetrattech.com
Carol Bauman	Tetra Tech, Inc.		carol.bauman@tetrattech.com
Des Alexander	Tetra Tech, Inc.		des.alexander@tetrattech.com

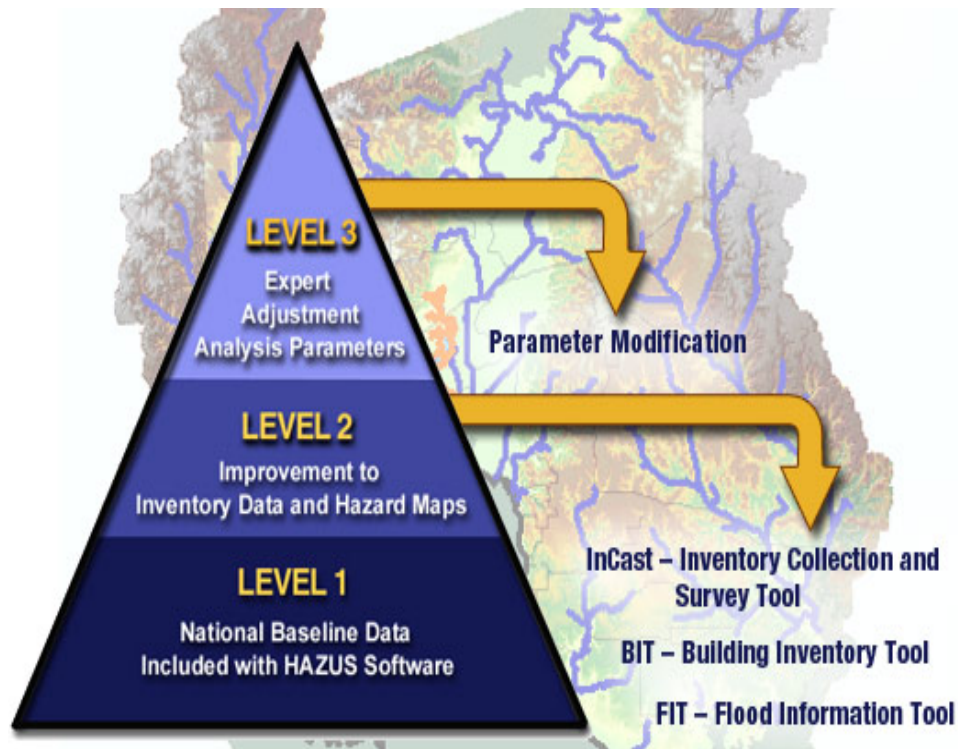
a. Retired towards the end of the planning process

Exhibit C. Overview of Hazus

Overview of Hazus (Multi-Hazard)

Hazus, is a nationally applicable standardized methodology and software program that contains models for estimating potential losses from earthquakes, floods, tsunamis, and hurricane winds. Hazus was developed by the Federal Emergency Management Agency (FEMA) under contract with the National Institute of Building Sciences (NIBS). NIBS maintains committees of wind, flood, earthquake and software experts to provide technical oversight and guidance to Hazus development. Loss estimates produced by Hazus are based on current scientific and engineering knowledge of the effects of hurricane winds, floods, and earthquakes.

Estimating losses is essential to decision-making at all levels of government, providing a basis for developing mitigation plans and policies, emergency preparedness, and response and recovery planning.



Hazus uses state-of-the-art geographic information system (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of hurricane winds, floods, tsunamis, and earthquakes on populations. The latest release, Hazus 4.0, is an updated version of Hazus that incorporates many new features which improve both the speed and functionality of the models. For information on software and hardware requirements to run Hazus 4.0, see Hazus Hardware and

Software Requirements.

Hazus Analysis Levels

Hazus provides for three levels of analysis:

- A Level 1 analysis yields a rough estimate based on the nationwide database and is a great way to begin the risk assessment process and prioritize high-risk communities.

- A Level 2 analysis requires the input of additional or refined data and hazard maps that will produce more accurate risk and loss estimates. Assistance from local emergency management personnel, city planners, GIS professionals, and others may be necessary for this level of analysis.
- A Level 3 analysis yields the most accurate estimate of loss and typically requires the involvement of technical experts such as structural and geotechnical engineers who can modify loss parameters based on the specific conditions of a community. This level analysis will allow users to supply their own techniques to study special conditions such as dam breaks and tsunamis. Engineering and other expertise is needed at this level.

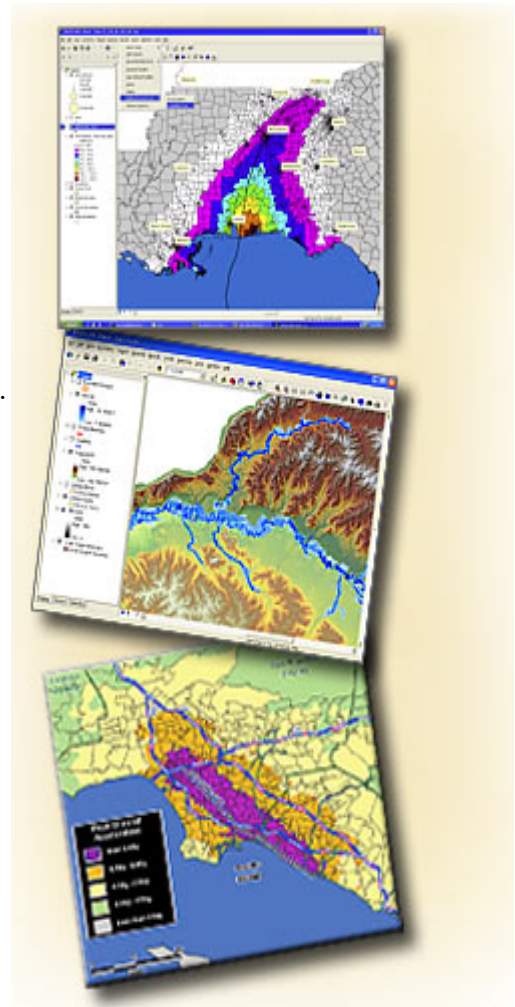
Three data input tools have been developed to support data collection. The Comprehensive Data Management System helps users collect and manage local building data for more refined analyses than are possible with the national level data sets that come with Hazus. The system has expanded capabilities for multi-hazard data collection. Hazus includes an enhanced Building Inventory Tool allows users to import building data and is most useful when handling large datasets, such as tax assessor records. The Flood Information Tool helps users manipulate flood data into the format required by the Hazus flood model. All Three tools are included in the Hazus MR1 Application DVD.

Hazus Models

The Hazus Hurricane Wind Model gives users in the Atlantic and Gulf Coast regions and Hawaii the ability to estimate potential damage and loss to residential, commercial, and industrial buildings. It also allows users to estimate direct economic loss, post-storm shelter needs and building debris. In the future, the model will include the capability to estimate wind effects in island territories, storm surge, indirect economic losses, casualties, and impacts to utility and transportation lifelines and agriculture. Loss models for other severe wind hazards will be included in the future. Details about the Hurricane Wind Model.

The Hazus Flood Model is capable of assessing riverine and coastal flooding. It estimates potential damage to all classes of buildings, essential facilities, transportation and utility lifelines, vehicles, and agricultural crops. The model addresses building debris generation and shelter requirements. Direct losses are estimated based on physical damage to structures, contents, and building interiors. The effects of flood warning are taken into account, as are flow velocity effects. Details about the Flood Model.

The Hazus Earthquake Model, The Hazus earthquake model provides loss estimates of damage and loss to buildings, essential facilities, transportation and utility lifelines, and population based on scenario or probabilistic earthquakes. The model addresses debris generation, fire-following, casualties, and shelter requirements. Direct losses are estimated based on physical damage to structures, contents, inventory, and building interiors. The earthquake model also includes the Advanced Engineering Building Module for single- and group-building mitigation analysis. Details about the Earthquake Model.



The Hazus Tsunami Model represents the first new disaster module for the Hazus software in almost 15 years and is the culmination of work completed on the Hazus Tsunami Methodology Development (FEMA, 2013) by a team of tsunami experts, engineers, modelers, emergency planners, economists, social scientists, geographic information system (GIS) analysts, and software developers. A Tsunami Oversight Committee provided technical direction and review of the methodology development. New features with the model include:

- **Territory Analysis:** This release represents the first time that analysis will be available for U.S. territories (Guam, American Samoa, Commonwealth of Northern Mariana Islands and U.S. Virgin Islands).
- **New Point Format:** The Hazus General Building Stock for the Tsunami release will use a new National Structure Inventory point format (details in User Release Notes available with download).
- **Case Studies:** The Tsunami Module will require user-provided data, so the Hazus Team has provided five case study datasets for users, which will be available on the MSC download site.
- **Two Types of Damage Analysis:** Users will be able to run both near-source (Earthquake + Tsunami) and distant-source (Tsunami only) damage analysis.

Additionally, Hazus can perform multi-hazard analysis by providing access to the average annualized loss and probabilistic results from the hurricane wind, flood, and earthquake models and combining them to provide integrated multi-hazard reports and graphs. Hazus also contains a third-party model integration capability that provides access and operational capability to a wide range of natural, man-made, and technological hazard models (nuclear and conventional blast, radiological, chemical, and biological) that will supplement the natural hazard loss estimation capability (hurricane wind, flood, tsunami and earthquake) in Hazus.

Appendix B. Procedures for Linking to Hazard Mitigation Plan

B. PROCEDURES FOR LINKING TO HAZARD MITIGATION PLAN

Not all eligible local governments are included in the 2021 Multijurisdictional Local Hazard Mitigation Plan. Some or all of these non-participating local governments may choose to “link” to the Plan at some point to gain eligibility for programs under the federal Disaster Mitigation Act (DMA). The following “linkage” procedures define the requirements established by the planning team for dealing with an increase in the number of planning partners linked to this plan. No currently non-participating jurisdiction within the defined planning area is obligated to link to this plan. These jurisdictions can choose to do their own “complete” plan that addresses all required elements of Section 201.6 or Section 201.7 of Chapter 44 of the Code of Federal Regulations (44 CFR).

INCREASING THE PARTNERSHIP THROUGH LINKAGE

Eligibility

Eligible jurisdictions located in the planning area may link to this plan at any point during the plan’s performance period (5 years after final approval). Eligibility will be determined by the following factors:

- The linking jurisdiction is a local or tribal government as defined by the Disaster Mitigation Act.
- The boundaries or service area of the linking jurisdiction is completely contained within the boundaries of the planning area established during the 2020-2021 hazard mitigation planning process.
- The linking jurisdiction’s critical facilities were included in the critical facility and infrastructure risk assessment completed during the 2020 – 2021 plan development process..

Requirements

It is expected that linking jurisdictions will complete the requirements outlined below and submit their completed template to the lead agency San Mateo County Department of Emergency Management for review within six months of beginning the linkage process:

- The eligible jurisdiction requests a “Linkage Package” by contacting the Point of Contact (POC) for the plan:
Dan Belville
San Mateo County Department of Emergency Management
501 Winslow St.
Redwood City, CA 94063
- The POC will provide a linkage procedure package that includes linkage information and a linkage tool-kit:

- Linkage Information
 - Procedures for linking to the multi-jurisdictional hazard mitigation plan
 - Planning partner's expectations for linking jurisdictions
 - A sample "letter of intent" to link to the multi-jurisdictional hazard mitigation plan
 - A copy of Section 201.6 and Section 201.7 of 44 CFR, which defines the federal requirements for a local and tribal hazard mitigation plans.
- Linkage Tool-Kit
 - Copy of Volume 1 and 2 of the plan
 - A special purpose district or tribe template and instructions
 - A catalog of hazard mitigation alternatives
 - A sample resolution for plan adoption
- The new jurisdiction will be required to review both volumes of the 2021 Multijurisdictional Local Hazard Mitigation Plan, which include the following key components for the planning area:
 - Goals and objectives
 - The planning area risk assessment
 - Comprehensive review of alternatives
 - Countywide actions
 - Plan implementation and maintenance procedures.

Once this review is complete, the jurisdiction will complete its specific annex using the template and instructions provided by the POC.

- The development of the new jurisdiction's annex must not be completed by one individual in isolation. The jurisdiction must develop, implement and describe a public involvement strategy and a methodology to identify and vet jurisdiction-specific actions. The original partnership was covered under a uniform public involvement strategy and a process to identify actions that covered the planning area described in Volume 1 and Volume 2 of this plan. Since new partners were not addressed by these strategies, they will have to initiate new strategies and describe them in their annex. For consistency, new partners are encouraged to develop and implement strategies similar to those described in this plan.
- The public involvement strategy must ensure the public's ability to participate in the plan development process. At a minimum, the new jurisdiction must solicit public opinion on hazard mitigation at the onset of the linkage process and hold one or more public meetings to present the draft jurisdiction-specific annex for comment at least two weeks prior to adoption by the governing body. The POC will have resources available to aid in the public involvement strategy, including:
 - The questionnaire utilized in the plan development
 - Presentations from public meeting workshops and the public comment period
 - Press releases used throughout the planning process
 - The plan website.
- The methodology to identify actions should include a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard and a description of the process by which chosen actions were identified. As part of this process, linking jurisdictions should coordinate the selection of actions amongst the jurisdiction's various departments.
- Once their public involvement strategy and template are completed, the new jurisdiction will submit the completed package to the POC for a pre-adoption review to ensure conformance with the multi-jurisdictional plan format and linkage procedure requirements.
- The POC will review for the following:

- Documentation of public involvement and action plan development strategies
 - Conformance of template entries with guidelines outlined in instructions
 - Chosen actions are consistent with goals, objectives, and mitigation catalog of the 2021 Multijurisdictional Local Hazard Mitigation Plan
 - A designated point of contact
 - A completed FEMA plan review crosswalk.
- Plans will be reviewed by the POC and submitted to California Governor’s Office of Emergency Services (Cal OES) for review and approval.
 - Cal OES will review plans for state compliance. Non-compliant plans are returned to the lead agency for correction. Compliant plans are forwarded to FEMA for review with annotation as to the adoption status.
 - FEMA reviews the linking jurisdiction’s plan in association with the approved plan to ensure DMA compliance. FEMA notifies the new jurisdiction of the results of review with copies to Cal OES and the approved plan lead agency.
 - Linking jurisdiction corrects plan shortfalls (if necessary) and resubmits to Cal OES through the approved plan lead agency.
 - For plans with no shortfalls from the FEMA review that have not been adopted, the new jurisdiction governing authority adopts the plan and forwards adoption resolution to FEMA with copies to lead agency and Cal OES.
 - FEMA regional director notifies the new jurisdiction’s governing authority of the plan’s approval.

The new jurisdiction plan is then included with the multi-jurisdiction hazard mitigation plan and the linking jurisdiction is committed to participate in the ongoing plan maintenance strategy identified in Chapter 21, Volume 1 of the hazard mitigation plan.

DECREASING THE PARTNERSHIP

The eligibility afforded under this process to the planning partnership can be rescinded in two ways. First, a participating planning partner can ask to be removed from the partnership. This may be done because the partner has decided to develop its own plan or has identified a different planning process for which it can gain eligibility. A partner that wishes to voluntarily leave the partnership shall inform the POC of this desire in writing. This notification can occur any time during the calendar year. A jurisdiction wishing to pursue this avenue is advised to make sure that it is eligible under the new planning effort, to avoid any period of being out of compliance with the Disaster Mitigation Act.

After receiving this notification, the POC shall immediately notify both Cal OES and FEMA in writing that the partner in question is no longer covered by the 2021 Multijurisdictional Local Hazard Mitigation Plan, and that the eligibility afforded that partner under this plan should be rescinded based on this notification.

The second way a partner can be removed from the partnership is by failure to meet the participation requirements specified in the “Planning Partner Expectations” package provided to each partner at the beginning of the process, or the plan maintenance and implementation procedures specified in Volume 1 of the plan. Each partner agreed to these terms by adopting the plan.

Eligibility status of the planning partnership will be monitored by the POC. The determination of whether a partner is meeting its participation requirements will be based on the following parameters:

- Are partners notifying the POC of changes in designated points of contact?
- Are the partners supporting the Steering Committee by attending designated meetings or responding to needs identified by the body?
- Are the partners continuing to be supportive as specified in the planning partners expectations package provided to them at the beginning of the process?

Participation in the plan does not end with plan approval. This partnership was formed on the premise that a group of planning partners would pool resources and work together to strive to reduce risk within the planning area. Failure to support this premise lessens the effectiveness of this effort. The following procedures will be followed to remove a partner due to the lack of participation:

- The POC will advise the Steering Committee of this pending action and provide evidence or justification for the action. Justification may include: failure to attend meetings determined to be mandatory by the Steering Committee, failure to act on the partner's action plan, or inability to reach designated point of contact after a minimum of five attempts.
- The Steering Committee will review information provided by POC, and determine action by a vote. The Steering Committee will invoke the voting process established in the ground rules established during the formation of this body.
- Once the Steering Committee has approved an action, the POC will notify the planning partner of the pending action in writing via certified mail. This notification will outline the grounds for the action, and ask the partner if it is their desire to remain as a partner. This notification shall also clearly identify the ramifications of removal from the partnership. The partner will be given 30 days to respond to the notification.
- Confirmation by the partner that they no longer wish to participate or failure to respond to the notification shall trigger the procedures for voluntary removal discussed above.
- Should the partner respond that they would like to continue participation in the partnership, they must clearly articulate an action plan to address the deficiencies identified by the POC. This action plan shall be reviewed by the Steering Committee to determine whether the actions are appropriate to rescind the action. Those partners that satisfy the Steering Committee's review will remain in the partnership, and no further action is required.
- Automatic removal from the partnership will be implemented for partners where these actions have to be initiated more than once in a 5-year planning cycle.

2021 Multijurisdictional Local Hazard Mitigation Plan

Appendix C. Annex Instructions and Templates

INSTRUCTIONS FOR COMPLETING CITY/COUNTY ANNEX TEMPLATE

Jurisdictional annex templates for the 2021 *San Mateo Multijurisdictional Local Hazard Mitigation Plan* update will be completed in three phases. **This document provides instructions for completing all phases of the template for cities and counties.**

The target timeline for completion is as follows:

- **Phase 1**—Team, Profile, Trends, and Previous Plan Status
 - **Deployed:** February 19, 2021
 - **Due:** March 19, 2021 by close of business
- **Phase 2**—Capability Assessment, Integration Review, and Information Sources
 - **Deployed:** April 2, 2021
 - **Due:** May 21, 2021 by close of business, Pacific Time
- **Phase 3**—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments
 - **Deployed:** June 11, 2021
 - **Mandatory Phase 3 Workshops:** Targeted for the week of June 14. We will schedule multiple workshops during that week to provide options for attendance
 - **Due:** July 23, 2021 by close of business, Pacific Time

Direct any questions about your Phase 3 template to:

Bart Spencer
Tetra Tech
Phone: (650) 324-1810
E-mail: bart.spencer@tetratech.com

Submit your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetratech.com

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

DO NOT convert this document to a PDF.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2016 planning effort, relevant information has been brought over to the 2021 template. Fields that require attention have been highlighted using the following color coding:

- **Green:** Text has been brought over from 2016 Plan and should be reviewed and updated as needed.
- **Blue:** This is a new field that will require information that was not included in 2016.

Un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

IMPORTANT! READ THIS FIRST

Phase 1 and Phase 2 templates were previously provided to your jurisdiction for completion.

If your jurisdiction returned the completed Phase 1 & 2 templates:

- The Phase 1 & 2 content you provided is already incorporated into your Phase 3 template.
- Review the template to see if we have inserted any comments requesting further work to be done on Phase 1 or 2
 - ***If any comments are included, address them.*** Then, begin your work on Phase 3 following the Phase 3 instructions beginning on page 12.
 - If no comments are included, then you **DO NOT** need to do any further work on the Phase 1 or Phase 2 content. ***Go directly to the instructions for Phase 3, beginning on page 12.***

If your jurisdiction has **NOT** yet done any work on the Phase 1 or Phase 2 template:

- Follow the instructions beginning on page 3 for providing the Phase 1 and Phase 2 information.
- Then proceed with the Phase 3 instructions beginning on page 12.

If your jurisdiction started work on the Phase 1 or 2 template but never completed and submitted it, copy the work you had completed so far into the new template. Then complete Phases 1, 2, and 3 following the instructions provided here.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your municipality (e.g., City of Pleasantville, West County). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction's name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM

Points of Contact

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Who Should Be on the Local Mitigation Planning Team

The Local Hazard Mitigation Planning Team is responsible for developing your jurisdiction's annex to the hazard mitigation plan. Team membership should represent agencies with authority to regulate development and enforce local ordinances or regulatory standards, such as building/fire code enforcement, emergency management, emergency services, floodplain management, parks and recreation, planning/ community development, public information, public works/ engineering, stormwater management, transportation, or infrastructure.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Provide information specific to your jurisdiction as indicated, in a style similar to the examples provided below. This should be information that will not be provided in the overall mitigation plan document.

Location and Features

Describe the community's location, size and prominent features, in a statement similar to the example below:

EXAMPLE: The City of Jones is in the northwest portion of Smith County, along the Pacific Coast in northern California. It is almost 150 miles northeast of San Francisco. The city's total area is 4.2 square miles, with boundaries generally extending north-south from State Highway 111 to the

Johnson River and east-west from Coast Road to East Frank Avenue. The City of Allen is to the north, unincorporated county is to the west, the City of Bethany is to the south, and the Pacific Ocean is to the west.

Jones is home to the University of Arbor, Bickerson Manufacturing, and the western portion of Soosoo National Park. Significant geographic features include the Watery River, which flows southwest across the city, Lake Splash in the city's northwest corner, and the foothills of the Craggy Mountains on the east side.

History

Describe the community's history, focusing on economy and development, and note its year of incorporation, in a statement similar to the example below:

EXAMPLE: The City of Jones was incorporated in 1858. The area was settled during the gold rush in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the area's major economic resources. By 1913, the Jones Teachers College, a predecessor to today's University of Arbor, was founded. Recently, the presence of the college has come to shape Jones' population into a young and educated demographic. In 1981 the City developed the Jones Marsh and Wildlife Sanctuary, an environmentally friendly sewage treatment enhancement system.

With numerous annexations since its original incorporation, the city's area has almost doubled. Today it features a commercial core in the center of the city, with mostly residential areas to the north and south, the university to the west and the national park on the east.

Governing Body Format

Describe the community's key governance elements and staffing, in a statement similar to the example below:

EXAMPLE: The City of Jones is governed by a five-member city council. The City consists of six departments: Finance, Environmental Services, Community Development, Public Works, Police, and the City Manager's Office. The City has 13 commissions and task forces, which report to the City Council. The City currently employs a total of 155 employees (full-time equivalent).

The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

CURRENT TRENDS

Population

Provide the most current population estimate for your jurisdiction based on an official means of tracking (e.g., the U.S. Census or state agency that develops population estimates). Describe the current estimate and recent population trends in a statement similar to the example below.

EXAMPLE: According to California Department of Finance, the population of Jones as of July 2020 was 17,280. Since 2010, the population has grown at an average annual rate of 1.2 percent, though that rate is declining, with an annual average of only 0.8 percent since 2016.

Development

In the highlighted text that says “Describe trends in general,” provide a brief description of your jurisdiction’s recent development trends in a statement similar to the example below:

EXAMPLE: Anticipated future development for Jones is low to moderate, consisting primarily of residential growth. Recent development has been mostly infill. There has been a focus on affordable housing and a push for more secondary mother-in-law units. Future growth in the City will be managed as identified in the City’s 2018 general plan. City actions, such as those relating to land use, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with the plan.

Complete the table titled “Recent and Expected Future Development Trends.” Note:

- The portion of the table requesting the number of permits by year is specifically looking for development permits for **new** construction. If your jurisdiction does not have the ability to differentiate between permit types, list the total number of permits and indicate “N/A” (not applicable) for the permit sub-types.
- If your jurisdiction does not have the ability to track permits by hazard area, delete the bullet list of hazard areas and insert a qualitative description of where development has occurred.

STATUS OF PREVIOUS PLAN ACTIONS

Note that this section only applies to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, enter an “X” in the box at the beginning of this section and do not complete the section. We will remove this section from your final annex.

Also note that this section is further back in the annex than the rest of the Phase 1 content. Some Phase 2 sections are included before it.

All action items identified in prior mitigation plans must be reconciled in this update. Action items must all be marked as **ONE** of the following; check the appropriate box (place an X) and provide information as follows:

- **Completed**—If an action has been completed since the prior plan was prepared, check the “Completed” box and **provide a date of completion in the comment section**. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and **note that it is ongoing in the comments**. If an action addresses an ongoing program you would like to continue to include in your action plan, see the “Carried Over to Plan Update” bullet below.
- **Removed**—If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. **Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., “Action no longer considered feasible due to lack of political support.”)**. If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update**—If an action is in progress, is ongoing, or has not been initiated and you would like to carry it over to the plan update, check the “Check if Yes” column under “Carried Over to Plan Update.” Selecting this option indicates that the action will be included in the mitigation action

plan for this update. If you are carrying over an action to the update, **include a comment describing any action that has been taken or why the action was not taken** (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress). Leave the last column, “Action # in Update,” blank at this point. This will be filled in after completing the updated action plan in Phase 3.

Ensure that you have provided **a status and a comment for each action.**

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, all action items from your jurisdiction’s previous hazard mitigation plan that are marked as “Carried Over to Plan Update” will need to be included in the action plan.

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

In the table titled “Planning and Regulatory Capability,” indicate “Yes” or “No” for each listed code, ordinance, requirement or planning document in each of the following columns:

- **Local Authority**—Enter “Yes” if your jurisdiction has prepared or adopted the identified item; otherwise, enter “No.” If yes, then enter the code, ordinance number, or plan name and its date of adoption in the comments column. ***Note: If you enter yes, be sure to provide a comment with the appropriate code, ordinance or plan and date of adoption.***
- **Other Jurisdiction Authority**—Enter “Yes” if another agency (e.g., a state agency or special purpose district) enforces or administers the identified item in a way that may impact your jurisdiction or if any state or federal regulations or laws would prohibit local implementation of the identified item; otherwise, enter “No.” ***Note: If you enter yes, be sure to provide a comment indicating the other agency and its relevant authority.***
- **State Mandated**—Enter “Yes” if state laws or other requirements enable or require the listed item to be implemented at the local level; otherwise, enter “No.” ***Note: If you enter yes, be sure to provide a comment describing the relevant state mandate.***
- **Integration Opportunity**—Enter “Yes” if there are obvious ways that the code, ordinance or plan can be coordinated with the hazard mitigation plan. Consider the following:
 - If you answered “Yes” in the Local Authority column for this item, then enter “Yes” for integration opportunity if any of the following are true:
 - The item already addresses hazards and their impacts and should be updated to reflect new information about risk from this hazard mitigation plan
 - The item does not address hazards and their impacts but is due for an update in the next 5 years and could be updated in a way that does address hazards and impacts
 - The item identifies projects for implementation and these could be reviewed to determine if they can be modified to help address hazard mitigation goals
 - The item identifies projects for implementation and some of these should be considered for inclusion in the hazard mitigation action plan for your jurisdiction
 - If you answered “No” in the Local Authority column for this item, then enter “Yes” for integration opportunity if your jurisdiction will develop the item over the next 5 years

Note: Each capability with a “Yes” answer to Integration Opportunity will be discussed in more detail later in the annex. You may wish to keep notes when assessing the Integration Opportunity or review the “Integration with Other Planning Initiatives” section below.
- **Comments**—Enter the code number and adoption date for any local code indicated as being in place; provide other comments as appropriate to describe capabilities for each entry. **DO NOT OVERLOOK THIS STEP**

For the categories “General Plan” and “Capital Improvement Plan,” answer the specific questions shown, in addition to completing the four columns indicating level of capability.

Development and Permit Capability

Complete the table titled “Development and Permitting Capabilities.”

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

National Flood Insurance Program Compliance

Complete the table titled “National Flood Insurance Program Compliance.”

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>

- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>

Adaptive Capacity for Climate Change

Consider climate change impact concerns such as the following:

- Reduced snowpack
- Increased wildfires
- Sea level rise
- Inland flooding
- Threats to sensitive species
- Loss in agricultural productivity
- Public health and safety.

With those impacts in mind, complete the table titled “Adaptive Capacity for Climate Change” by indicating your jurisdiction’s capacity for each listed criterion as follows:

- **High**—The capacity exists and is in use.
- **Medium**—The capacity may exist, but is not used or could use some improvement.
- **Low**—The capacity does not exist or could use substantial improvement.
- **Unsure**—Not enough information is known to assign a rating.

This is a subjective assessment, but providing a few words of explanation is useful. It is highly recommended that you complete this table with an internal planning team after reviewing the results of the other capability assessment tables.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the adaptive capacity criteria and consider including actions to improve the rating for those rated medium or low, to make use of the capacity for those rated high, or to acquire additional information for those rated unsure.

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into land use plans, site plan review, emergency operations plans).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration. The simplest way to do this is to review the Planning and Regulatory Capabilities table to see which items were marked as “Yes” under the Integration Opportunity column.

Existing Integration

In the highlighted bullet list, list items for which you entered “Yes” under the Integration Opportunity column of the “Planning and Regulatory Capability” table because the plan or ordinance already addresses potential impacts or includes specific projects that should be included as action items in the mitigation action plan. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Provide a brief description of how the plan or ordinance is integrated. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The City will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.
- **Building Code and Fire Code**—The City’s adoption of the 2016 California building and fire codes incorporated local modifications to account for the climatic, topographic and geographic conditions that exist in the City.
- **General Plan**—The general plan includes a Safety Element to protect the community from unreasonable risk by establishing policies and actions to avoid or minimize the following hazards:
 - Geologic and seismic hazards
 - Fire hazards
 - Hazardous materials
 - Flood control
 - Impacts from climate change.
- **Climate Action Plan**—The City’s Climate Action Plan includes projects for reducing greenhouse gas emissions and adapting to likely impacts of climate change. These projects were reviewed to identify cross-planning initiatives that serve both adaptation and mitigation objectives.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any remaining items that say “Yes” in the Integration Opportunity column in the Planning and Regulatory Capabilities table and explain the process by which integration could occur. Examples follow:

- **Zoning Code**—The City is conducting a comprehensive update to its zoning code. Additional mitigation and abatement measures will be considered for incorporation into the code.
- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The City does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the goals and objectives identified in the hazard mitigation plan.

After you have accounted for all items marked as “Yes” under the Integration Opportunity column, consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include: tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these programs manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

THIS COMPLETES PHASE 2

RISK ASSESSMENT

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the County, the state, and the federal government.

[illegible]

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community’s exposure) and how great an impact each hazard will have if it does occur (this is called the community’s vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. The risk ranking for each jurisdiction has been calculated in the “Loss Matrix” spreadsheet included in the annex preparation toolkit. The ranking is on the basis of risk ranking scores for each hazard that were calculated based on the hazard’s probability of occurrence and its potential impact on people, property and the economy.

The results for your jurisdiction have already been entered into the “Hazard Risk Ranking” table in your Phase 3 annex template. The hazard with the highest risk rating is listed at the top of table and was given a rank of 1; the hazard with the second highest rating is listed second with a rank of 2; and so on. Two hazards with equal risk ranking scores were given the same rank. Hazards were assigned to “High,” Medium,” or “Low” risk categories based on the risk ranking score. If you wish to review the calculations in detail, the appendix at the end of these instructions describes the calculation methodology that the spreadsheet uses.

Review the hazard risk ranking information that is included in your annex. If these results differ from what you know based on substantiated data and documentation, you may alter the ranking and risk categories based on this knowledge. If you do so, indicate the reason for the change in your template. For example:

“Drought was ranked as low; however, the jurisdiction’s economy is heavily reliant on water-using industries, such as agriculture or manufacturing, so this hazard should be ranked as medium.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as “high” or “medium.”

Jurisdiction-Specific Vulnerabilities

Repetitive Loss Properties

A repetitive loss property is any property for which FEMA has paid two or more flood insurance claims in excess of \$1,000 in any rolling 10-year period since 1978. In the space provided, the following information has been included in your annex based on data provided by FEMA:

- The number of any FEMA-identified repetitive-loss properties in your jurisdiction.
- The number of any FEMA-identified severe-repetitive-loss properties in your jurisdiction.
- The number (if any) of repetitive-loss or severe-repetitive-loss properties in your jurisdiction that have been mitigated. Mitigated for this exercise means that flood protection has been provided to the structure.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, if your jurisdiction has any repetitive loss properties, you should strongly consider including a mitigation action that addresses mitigating these properties.

Other Noted Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction's natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard, but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area, where flood insurance is generally not required.
- A magnitude 7.5 earthquake on the Smithburg Fault is estimated to produce nearly 1 million tons of structure debris.
- Over the past 10 years, the jurisdiction has experienced more than \$6 million in damage from severe storm events.
- More than 50 buildings are located in areas that would be permanently inundated with 12 inches of sea level rise.
- The results of the public survey indicated that 40 percent of Smithburg residents would not be able to be self-sufficient for 5 days following a major event.
- An urban drainage issue at a specific location results in localized flooding every time it rains.
- One area of the community frequently loses power due to a lack of tree maintenance.

- A critical facility, such as a police station, is not equipped with a generator.
- A neighborhood has the potential to have ingress and egress cut off as the result of a flood or earthquake (e.g. a bridge is the only access).
- Substantial number of buildings in one area of the community are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening public and/or private property.
- A large visitor population that may not be aware of tsunami risk.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of eligibility from outside funding sources (grants, non-profit funding, donations, etc.).
- Know what is and is not eligible for funding under various federal programs (see the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table below).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	Hazard Mitigation Grant Program (HMGP)	Pre-Disaster Mitigation (PDM)	Flood Mitigation Assistance (FMA)
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Historic Residential Structures	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Wind Retrofit for One- and Two-Family Residences	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildland fire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

* FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Material Previously Developed for This Annex**Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, Education and Outreach Table, and Community Classification Table**

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any capabilities listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.
- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section—National Flood Insurance Program Compliance table

Review the table and consider the following:

- If you have no certified floodplain managers and you have flood risk, consider adding an action to provide key staff members with training to obtain certification.
- If your flood damage prevention was last updated in or before 2004, you should identify an action to update your ordinance to ensure it is compliant with current NFIP requirements.
- If you have any outstanding NFIP compliance issues, be sure to add an action to address them.
- If flood hazard maps do not adequately address the flood risk within your jurisdiction, consider actions to request new mapping or conduct studies.
- If you wish to begin to participate in CRS or you already to participate and would like to improve your classification, consider this as an action.
- If the number of flood insurance policies in your jurisdiction is low relative to the number of structures in the floodplain, consider an action that will promote flood insurance in your jurisdiction.

Capability Assessment Section— Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated. For items that address land use, include them in the prepopulated action in your template that reads as follows:

“Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including _____.”

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog). Two examples are shown in the table below.

Table 3. Example Actions to Address Jurisdiction-Specific Vulnerabilities

Noted Vulnerability	Example Mitigation Action
About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area where flood insurance is generally not required.	Implement an annual public information initiative that targets residents in the 0.2 percent annual chance flood hazard area. Provide information on the availability of relatively low cost flood insurance policies.
An urban drainage issue results in localized flooding every time it rains.	Replace undersized culverts that are contributing to localized flooding. Priority areas include: <ul style="list-style-type: none"> • The corner of Main Street and 1st Street • Old Oak subdivision.

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following six actions have been prepopulated in your annex template; **these six actions should be included in every annex and should not be removed**:

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:
 - Enforce the flood damage prevention ordinance.
 - Participate in floodplain identification and mapping updates.
 - Provide public assistance/information on floodplain requirements and impacts.
- Identify and pursue strategies to increase adaptive capacity to climate change.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box on next page) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.

- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. If it is another outside funding source such as a non-profit funding source or a donation, include the source and any requirements for receiving the funding. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 16 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.
- Indicate the time line as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, outside funding sources, bonds, grants, and fee increases).

Action Numbering

Actions are to be numbered using the three-letter code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- San Mateo County—SMC-1, SMC-2...
- Atherton City—ATH-1, ATH-2...
- Belmont City—BEL-1, BEL-2...
- Brisbane City—BRS-1, BRS-2...
- Burlingame City—BRL-1, BRL-2...
- Colma City—CLM-1, CLM-2...
- Daly City—DLY-1, DLY-2...
- East Palo Alto City—EPA-1, EPA-2...
- Foster City—FOS-1, FOS-2...
- Half Moon Bay City—HMB-1, HMB-2...
- Hillsborough City—HLS-1, HLS-2...
- Menlo Park City—MPK-1, MPK-2...
- Millbrae City—MLB-1, MLB-2...
- Pacifica City—PAC-1, PAC-2...
- Portola Valley City—PTV-1, PTV-2...
- Redwood City—RDW-1, RDW-2...
- San Bruno City—SBR-1, SBR-2...
- San Carlos City—SCR-1, SCR-2...
- San Mateo City—SMT-1, SMT-2...
- South San Francisco City—SSF-1, SSF-2...
- Woodside City—WDS-1, WDS-2...
- Coastside Water —CSW-1, CSW-2...
- Colma Fire —CFD-1, CFD-2...
- Flood & Sea Level —FSL-1, FSL-2...
- Harbor District —HRB-1, HBR-2
- Highland Recreational —HLD-1, HLD-2...
- Jefferson Union HS —JEF-1, JEF-2...
- Menlo Park Fire —MPF-1, MPF-2...
- Mid-Pen Reg Open Space District —MPR-1, MPR-2...
- Mid-Peninsula Water —MPW-1, MPW-2...
- Montara Water & Sewer —MWS-1, MWS-2...
- North Coast Water —NCW-1, NCW-2...
- Office of Education —OED-1, OED-2...
- San Mateo Community College —SCC-1, SCC-2...
- San Mateo RCD —SRC-1, SRC-2...
- Westborough Water —WBW-1, WBW-2...
- Woodside Fire —WFD-1, WFD-2...

- Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
 - **Is the Action Eligible for Outside Funding Sources?**—Enter “Yes” or “No.” For grant funding, refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 16 of these instructions.
 - **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another outside source such as grants, non-profit funding, or donations?
 - **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known outside funding sources. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for outside funding from programs that have not yet been identified.
 - **Outside Funding Source Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets identified outside funding source eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible to be funded by outside sources.
 - Medium Priority—An action that meets identified outside funding source eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
 - Low Priority—An action that has not been identified as meeting any outside funding source eligibility requirements.

Actions identified as high-outside-funding-pursuit priority actions should be closely reviewed for consideration when outside funding source opportunities arise.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions								
Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10

Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County's engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

APPENDIX— Risk Ranking Calculation Methodology

The instructions below describe the methodology for how risk rankings were derived in the “Loss Matrix” spreadsheet provided with the annex preparation toolkit. The risk-ranking for each hazard assessed its probability of occurrence and its potential impact on people, property, and the economy. Refer to the Loss Matrix spreadsheet in order to follow along.

Probability of Occurrence

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although weight can be given to expected future probability of occurrence based on established return intervals and changing climate conditions. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category. Each hazard was assigned a probability factor as follows:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—There is no exposure to the hazard and no probability of occurrence (Probability Factor = 0)

Potential Impacts of Each Hazard

The impact of each hazard is divided into three categories: impacts on people, impacts on property, and impacts on the economy. These categories are also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:
 - High—25 percent or more of the population is exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the population is exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the population is exposed to the hazard (Impact Factor = 1)
 - No impact—None of the population is exposed to a hazard (Impact Factor = 0)
- **Property**—Values are assigned based on the percentage of the total *property value exposed* to the hazard event:
 - High—25 percent or more of the total replacement value is exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the total replacement value is exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the total replacement value is exposed to the hazard (Impact Factor = 1)

- No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)
- **Economy**—Values were assigned based on the percentage of the total *property value vulnerable* to the hazard event. Values represent estimates of the loss from a major event of each hazard in comparison to the total replacement value of the property exposed to the hazard. For some hazards, such as wildland fire and landslide, vulnerability may be considered to be the same or a portion of exposure due to the lack of loss estimation tools specific to those hazards.
 - High—Estimated loss from the hazard is 10 percent or more of the total replacement value (Impact Factor = 3)
 - Medium—Estimated loss from the hazard is 5 percent to 9 percent of the total replacement value (Impact Factor = 2)
 - Low—Estimated loss from the hazard is 4 percent or less of the total replacement value (Impact Factor = 1)
 - No impact—No loss is estimated from the hazard (Impact Factor = 0).

Impacts on People

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. For those hazards that do not have a defined extent and location the entire population or a portion of the population is considered to be exposed, depending on the hazard. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

Impacts on Property

The percent of the total value exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **blue highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought, but impacts to structures are expected to be minimal.

Impacts on the Economy

The loss estimates for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the loss estimate matrix in the **purple highlighted column**. For those hazards that have a defined extent and location, but do not have modelled loss results, loss estimates can be the same as exposure or a portion thereof. For example, a large percentage of the building stock may be exposed to landslide or wildland fire risk, but it would not be expected that one event that resulted in loss to all exposed structures would occur. For those hazards that do not have a defined extent and location, exposure is based on the hazard type.

Risk Rating for Each Hazard

A risk rating for each hazard was determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor \{people + property + economy\}}$$

This is the number that is shown in the risk ranking table in your template. Generally, score of 30 or greater receive a “high” rating, score between 15 and 30 receive a “medium” rating, and score of less than 15 receives a “low” rating.

**INSTRUCTIONS FOR COMPLETING
ANNEXES WITH EQUITY LENS FOR
CITIES AND COUNTY**

INSTRUCTIONS FOR COMPLETING CITY/COUNTY ANNEX TEMPLATE/ WITH AN EQUITY LENS

Note Regarding Equity Lensing. The Core Planning Team and Steering Committee for the 2021 San Mateo County Multijurisdictional Local Hazard Mitigation Plan update have decided to add another layer of resolution to the risk assessment and action planning portions of this plan update, applying an “equity lens”. An equity lens is defined as a critical thinking approach to undoing institutional and structural biases, which evaluates burdens, benefits, and outcomes to underserved communities. Application of the equity lens to risk ranking and action plan prioritization was determined to be “optional” for all planning partners. These instructions have been enhanced to include the equity lens options for Risk Ranking and Action Plan prioritization.

Jurisdictional annex templates for the 2021 San Mateo Multijurisdictional Local Hazard Mitigation Plan update will be completed in three phases. **This document provides instructions for completing all phases of the template for cities and counties.**

The target timeline for completion is as follows:

- **Phase 1**—Team, Profile, Trends, and Previous Plan Status
 - **Deployed:** February 19, 2021
 - **Due:** March 19, 2021 by close of business
- **Phase 2**—Capability Assessment, Integration Review, and Information Sources
 - **Deployed:** April 2, 2021
 - **Due:** May 21, 2021 by close of business, Pacific Time
- **Phase 3**—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments
 - **Deployed:** June 11, 2021

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

DO NOT convert this document to a PDF.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2016 planning effort, relevant information has been brought over to the 2021 template. Fields that require attention have been highlighted using the following color coding:

- **Green:** Text has been brought over from 2016 Plan and should be reviewed and updated as needed.
- **Blue:** This is a new field that will require information that was not included in 2016.

Un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

-
- **Mandatory Phase 3 Workshops:** Targeted for the week of June 14. We will schedule multiple workshops during that week to provide options for attendance
 - **Due: July 23, 2021 by close of business, Pacific Time**

Direct any questions about your Phase 3 template to:

Bart Spencer
Tetra Tech
Phone: (650) 324-1810
E-mail: bart.spencer@tetrattech.com

Submit your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetrattech.com

IMPORTANT! READ THIS FIRST

Phase 1 and Phase 2 templates were previously provided to your jurisdiction for completion.

If your jurisdiction returned the completed Phase 1 & 2 templates:

- The Phase 1 & 2 content you provided is already incorporated into your Phase 3 template.
- Review the template to see if we have inserted any comments requesting further work to be done on Phase 1 or 2
 - ***If any comments are included, address them.*** Then, begin your work on Phase 3 following the Phase 3 instructions beginning on page 13.
 - If no comments are included, then you **DO NOT** need to do any further work on the Phase 1 or Phase 2 content. ***Go directly to the instructions for Phase 3, beginning on page 13.***

If your jurisdiction has **NOT** yet done any work on the Phase 1 or Phase 2 template:

- Follow the instructions beginning on page 3 for providing the Phase 1 and Phase 2 information.
- Then proceed with the Phase 3 instructions beginning on page 13.

If your jurisdiction started work on the Phase 1 or 2 template but never completed and submitted it, copy the work you had completed so far into the new template. Then complete Phases 1, 2, and 3 following the instructions provided here.

PHASE 1 INSTRUCTIONS**CHAPTER TITLE**

In the chapter title at the top of Page 1, type in the complete official name of your municipality (e.g., City of Pleasantville, West County). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction's name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM**Points of Contact**

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating, and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Who Should Be on the Local Mitigation Planning Team

The Local Hazard Mitigation Planning Team is responsible for developing your jurisdiction's annex to the hazard mitigation plan. Team membership should represent agencies with authority to regulate development and enforce local ordinances or regulatory standards, such as building/fire code enforcement, emergency management, emergency services, floodplain management, parks and recreation, planning/ community development, public information, public works/ engineering, stormwater management, transportation, or infrastructure.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Provide information specific to your jurisdiction as indicated, in a style similar to the examples provided below. This should be information that will not be provided in the overall mitigation plan document.

Location and Features

Describe the community's location, size, and prominent features, in a statement similar to the example below:

EXAMPLE: The City of Jones is in the northwest portion of Smith County, along the Pacific Coast in northern California. It is almost 150 miles northeast of San Francisco. The city's total area is 4.2 square miles, with boundaries generally extending north-south from State Highway 111 to the

Johnson River and east-west from Coast Road to East Frank Avenue. The City of Allen is to the north, unincorporated county is to the west, the City of Bethany is to the south, and the Pacific Ocean is to the west.

Jones is home to the University of Arbor, Bickerson Manufacturing, and the western portion of Soosoo National Park. Significant geographic features include the Watery River, which flows southwest across the city, Lake Splash in the city's northwest corner, and the foothills of the Craggy Mountains on the east side.

History

Describe the community's history, focusing on economy and development, and note its year of incorporation, in a statement similar to the example below:

EXAMPLE: The City of Jones was incorporated in 1858. The area was settled during the gold rush in the 1850s as a supply center for miners. As the gold rush died down, timber and fishing became the area's major economic resources. By 1913, the Jones Teachers College, a predecessor to today's University of Arbor, was founded. Recently, the presence of the college has come to shape Jones' population into a young and educated demographic. In 1981 the City developed the Jones Marsh and Wildlife Sanctuary, an environmentally friendly sewage treatment enhancement system.

With numerous annexations since its original incorporation, the city's area has almost doubled. Today it features a commercial core in the center of the city, with mostly residential areas to the north and south, the university to the west and the national park on the east.

Governing Body Format

Describe the community's key governance elements and staffing, in a statement similar to the example below:

EXAMPLE: The City of Jones is governed by a five-member city council. The City consists of six departments: Finance, Environmental Services, Community Development, Public Works, Police, and the City Manager's Office. The City has 13 commissions and task forces, which report to the City Council. The City currently employs a total of 155 employees (full-time equivalent).

The City Council assumes responsibility for the adoption of this plan; the City Manager will oversee its implementation.

CURRENT TRENDS

Population

Provide the most current population estimate for your jurisdiction based on an official means of tracking (e.g., the U.S. Census or state agency that develops population estimates). Describe the current estimate and recent population trends in a statement similar to the example below.

EXAMPLE: According to California Department of Finance, the population of Jones as of July 2020 was 17,280. Since 2010, the population has grown at an average annual rate of 1.2 percent, though that rate is declining, with an annual average of only 0.8 percent since 2016.

Development

In the highlighted text that says, “Describe trends in general,” provide a brief description of your jurisdiction’s recent development trends in a statement similar to the example below:

EXAMPLE: Anticipated future development for Jones is low to moderate, consisting primarily of residential growth. Recent development has been mostly infill. There has been a focus on affordable housing and a push for more secondary mother-in-law units. Future growth in the City will be managed as identified in the City’s 2018 general plan. City actions, such as those relating to land use, annexations, zoning, subdivision and design review, redevelopment, and capital improvements, must be consistent with the plan.

Complete the table titled “Recent and Expected Future Development Trends.” Note:

- The portion of the table requesting the number of permits by year is specifically looking for development permits for **new** construction. If your jurisdiction does not have the ability to differentiate between permit types, list the total number of permits and indicate “N/A” (not applicable) for the permit sub-types.
- If your jurisdiction does not have the ability to track permits by hazard area, delete the bullet list of hazard areas and insert a qualitative description of where development has occurred.

STATUS OF PREVIOUS PLAN ACTIONS

Note that this section only applies to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, enter an “X” in the box at the beginning of this section and do not complete the section. We will remove this section from your final annex.

Also note that this section is further back in the annex than the rest of the Phase 1 content. Some Phase 2 sections are included before it.

All action items identified in prior mitigation plans must be reconciled in this update. Action items must all be marked as **ONE** of the following: check the appropriate box (place an X) and provide information as follows:

- **Completed**—If an action has been completed since the prior plan was prepared, check the “Completed” box and **provide a date of completion in the comment section**. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and **note that it is ongoing in the comments**. If an action addresses an ongoing program you would like to continue to include in your action plan, see the “Carried Over to Plan Update” bullet below.
- **Removed**—If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. **Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., “Action no longer considered feasible due to lack of political support.”)**. If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update**—If an action is in progress, is ongoing, or has not been initiated and you would like to carry it over to the plan update, check the “Check if Yes” column under “Carried Over to Plan Update.” Selecting this option indicates that the action will be included in the mitigation action

plan for this update. If you are carrying over an action to the update, **include a comment describing any action that has been taken or why the action was not taken** (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress). Leave the last column, “Action # in Update,” blank at this point. This will be filled in after completing the updated action plan in Phase 3.

Ensure that you have provided **a status and a comment for each action.**

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, all action items from your jurisdiction’s previous hazard mitigation plan that are marked as “Carried Over to Plan Update” will need to be included in the action plan.

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

In the table titled “Planning and Regulatory Capability,” indicate “Yes” or “No” for each listed code, ordinance, requirement, or planning document in each of the following columns:

- **Local Authority**—Enter “Yes” if your jurisdiction has prepared or adopted the identified item; otherwise, enter “No.” If yes, then enter the code, ordinance number, or plan name and its date of adoption in the comment’s column. *Note: If you enter yes, be sure to provide a comment with the appropriate code, ordinance or plan and date of adoption.*
- **Other Jurisdiction Authority**—Enter “Yes” if another agency (e.g., a state agency or special purpose district) enforces or administers the identified item in a way that may impact your jurisdiction or if any state or federal regulations or laws would prohibit local implementation of the identified item; otherwise, enter “No.” *Note: If you enter yes, be sure to provide a comment indicating the other agency and its relevant authority.*
- **State Mandated**—Enter “Yes” if state laws or other requirements enable or require the listed item to be implemented at the local level; otherwise, enter “No.” *Note: If you enter yes, be sure to provide a comment describing the relevant state mandate.*
- **Integration Opportunity**—Enter “Yes” if there are obvious ways that the code, ordinance, or plan can be coordinated with the hazard mitigation plan. Consider the following:
 - If you answered “Yes” in the Local Authority column for this item, then enter “Yes” for integration opportunity if any of the following are true:
 - The item already addresses hazards and their impacts and should be updated to reflect new information about risk from this hazard mitigation plan
 - The item does not address hazards and their impacts but is due for an update in the next 5 years and could be updated in a way that does address hazards and impacts
 - The item identifies projects for implementation, and these could be reviewed to determine if they can be modified to help address hazard mitigation goals
 - The item identifies projects for implementation and some of these should be considered for inclusion in the hazard mitigation action plan for your jurisdiction
 - If you answered “No” in the Local Authority column for this item, then enter “Yes” for integration opportunity if your jurisdiction will develop the item over the next 5 years

Note: Each capability with a “Yes” answer to Integration Opportunity will be discussed in more detail later in the annex. You may wish to keep notes when assessing the Integration Opportunity or review the “Integration with Other Planning Initiatives” section below.
- **Comments**—Enter the code number and adoption date for any local code indicated as being in place; provide other comments as appropriate to describe capabilities for each entry. **DO NOT OVERLOOK THIS STEP**

For the categories “General Plan” and “Capital Improvement Plan,” answer the specific questions shown, in addition to completing the four columns indicating level of capability.

Development and Permit Capability

Complete the table titled “Development and Permitting Capabilities.”

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

National Flood Insurance Program Compliance

Complete the table titled “National Flood Insurance Program Compliance.”

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>

- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>

Adaptive Capacity for Climate Change

Consider climate change impact concerns such as the following:

- Reduced snowpack
- Increased wildfires
- Sea level rise
- Inland flooding
- Threats to sensitive species
- Loss in agricultural productivity
- Public health and safety.

With those impacts in mind, complete the table titled “Adaptive Capacity for Climate Change” by indicating your jurisdiction’s capacity for each listed criterion as follows:

- **High**—The capacity exists and is in use.
- **Medium**—The capacity may exist but is not used or could use some improvement.
- **Low**—The capacity does not exist or could use substantial improvement.
- **Unsure**—Not enough information is known to assign a rating.

This is a subjective assessment but providing a few words of explanation is useful. It is highly recommended that you complete this table with an internal planning team after reviewing the results of the other capability assessment tables.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the adaptive capacity criteria and consider including actions to improve the rating for those rated medium or low, to make use of the capacity for those rated high, or to acquire additional information for those rated unsure.

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into land use plans, site plan review, emergency operations plan).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration. The simplest way to do this is to review the Planning and Regulatory Capabilities table to see which items were marked as “Yes” under the Integration Opportunity column.

Existing Integration

In the highlighted bullet list, list items for which you entered “Yes” under the Integration Opportunity column of the “Planning and Regulatory Capability” table because the plan or ordinance already addresses potential impacts or includes specific projects that should be included as action items in the mitigation action plan. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Provide a brief description of how the plan or ordinance is integrated. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The City will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.
- **Building Code and Fire Code**—The City’s adoption of the 2016 California building, and fire codes incorporated local modifications to account for the climatic, topographic, and geographic conditions that exist in the City.
- **General Plan**—The general plan includes a Safety Element to protect the community from unreasonable risk by establishing policies and actions to avoid or minimize the following hazards:
 - Geologic and seismic hazards
 - Fire hazards
 - Hazardous materials
 - Flood control
 - Impacts from climate change.
- **Climate Action Plan**—The City’s Climate Action Plan includes projects for reducing greenhouse gas emissions and adapting to likely impacts of climate change. These projects were reviewed to identify cross-planning initiatives that serve both adaptation and mitigation objectives.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any remaining items that say “Yes” in the Integration Opportunity column in the Planning and Regulatory Capabilities table and explain the process by which integration could occur. Examples follow:

- **Zoning Code**—The City is conducting a comprehensive update to its zoning code. Additional mitigation and abatement measures will be considered for incorporation into the code.
- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The City does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the goals and objectives identified in the hazard mitigation plan.

After you have accounted for all items marked as “Yes” under the Integration Opportunity column, consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these programs manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

THIS COMPLETES PHASE 2

RISK ASSESSMENT

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the County, the state, and the federal government.

[illegible]

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community’s exposure) and how great an impact each hazard will have if it does occur (this is called the community’s vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. The risk ranking for each jurisdiction has been calculated in the “Loss Matrix” spreadsheet included in the annex preparation toolkit. Two sets of ranking are provided. One ranking is the base ranking that utilizes the raw percentage of population exposed to each hazard to rank the impacts to population. The second ranking uses the social vulnerability metrics established by FEMA’s National Risk Index (NRI) to add an equity lens to the impact on population factor for the risk ranking application. Those planning partners applying the equity lens option should utilize the “Social Equity Version” for risk ranking provided in the loss matrix. The ranking is on the basis of risk ranking scores for each hazard that were calculated based on the hazard’s probability of occurrence and its potential impact on people, property and the economy.

The results for your jurisdiction have already been entered into the “Hazard Risk Ranking” table in your Phase 3 annex template. The hazard with the highest risk rating is listed at the top of table and was given a rank of 1; the hazard with the second highest rating is listed second with a rank of 2; and so on. Two hazards with equal risk ranking scores were given the same rank. Hazards were assigned to “High,” Medium,” or “Low” risk categories based on the risk ranking score. If you wish to review the calculations in detail, the appendix at the end of these instructions describes the calculation methodology that the spreadsheet uses.

Review the hazard risk ranking information that is included in your annex. If these results differ from what you know based on substantiated data and documentation, you may alter the ranking and risk categories based on this knowledge. If you do so, indicate the reason for the change in your template. For example:

“Drought was ranked as low; however, the jurisdiction’s economy is heavily reliant on water-using industries, such as agriculture or manufacturing, so this hazard should be ranked as medium.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as “high” or “medium.”

Jurisdiction-Specific Vulnerabilities

Repetitive Loss Properties

A repetitive loss property is any property for which FEMA has paid two or more flood insurance claims in excess of \$1,000 in any rolling 10-year period since 1978. In the space provided, the following information has been included in your annex based on data provided by FEMA:

- The number of any FEMA-identified repetitive-loss properties in your jurisdiction.
- The number of any FEMA-identified severe-repetitive-loss properties in your jurisdiction.
- The number (if any) of repetitive-loss or severe-repetitive-loss properties in your jurisdiction that have been mitigated. Mitigated for this exercise means that flood protection has been provided to the structure.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, if your jurisdiction has any repetitive loss properties, you should strongly consider including a mitigation action that addresses mitigating these properties.

Other Noted Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction’s natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area, where flood insurance is generally not required.
- A magnitude 7.5 earthquake on the Smithburg Fault is estimated to produce nearly 1 million tons of structure debris.
- Over the past 10 years, the jurisdiction has experienced more than \$6 million in damage from severe storm events.

- More than 50 buildings are located in areas that would be permanently inundated with 12 inches of sea level rise.
- The results of the public survey indicated that 40 percent of Smithburg residents would not be able to be self-sufficient for 5 days following a major event.
- An urban drainage issue at a specific location results in localized flooding every time it rains.
- One area of the community frequently loses power due to a lack of tree maintenance.
- A critical facility, such as a police station, is not equipped with a generator.
- A neighborhood has the potential to have ingress and egress cut off as the result of a flood or earthquake (e.g. a bridge is the only access).
- Substantial number of buildings in one area of the community are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening public and/or private property.
- A large visitor population that may not be aware of tsunami risk.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of eligibility from outside funding sources (grants, non-profit funding, donations, etc.).
- Know what is and is not eligible for funding under various federal programs (see the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table below).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	Hazard Mitigation Grant Program (HMGP)	Pre-Disaster Mitigation (PDM)	Flood Mitigation Assistance (FMA)
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Historic Residential Structures	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Wind Retrofit for One- and Two-Family Residences	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildland fire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

* FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted, or an improved Building Code Effectiveness Grading Schedule is required.

** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Material Previously Developed for This Annex

Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, Education and Outreach Table, and Community Classification Table

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any capabilities listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.
- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section—National Flood Insurance Program Compliance table

Review the table and consider the following:

- If you have no certified floodplain managers and you have flood risk, consider adding an action to provide key staff members with training to obtain certification.
- If your flood damage prevention was last updated in or before 2004, you should identify an action to update your ordinance to ensure it is compliant with current NFIP requirements.
- If you have any outstanding NFIP compliance issues, be sure to add an action to address them.
- If flood hazard maps do not adequately address the flood risk within your jurisdiction, consider actions to request new mapping or conduct studies.
- If you wish to begin to participate in CRS or you already to participate and would like to improve your classification, consider this as an action.
- If the number of flood insurance policies in your jurisdiction is low relative to the number of structures in the floodplain, consider an action that will promote flood insurance in your jurisdiction.

Capability Assessment Section— Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated. For items that address land use, include them in the prepopulated action in your template that reads as follows:

“Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including _____.”

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog). Two examples are shown in the table below.

Table 3. Example Actions to Address Jurisdiction-Specific Vulnerabilities

Noted Vulnerability	Example Mitigation Action
About 45 percent of the population lives in the 0.2 percent annual chance flood hazard area where flood insurance is generally not required.	Implement an annual public information initiative that targets residents in the 0.2 percent annual chance flood hazard area. Provide information on the availability of relatively low-cost flood insurance policies.
An urban drainage issue results in localized flooding every time it rains.	Replace undersized culverts that are contributing to localized flooding. Priority areas include: <ul style="list-style-type: none">• The corner of Main Street and 1st Street• Old Oak subdivision.

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following six actions have been prepopulated in your annex template; **these six actions should be included in every annex and should not be removed**:

- Where appropriate, support retrofitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions within the community.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements:
 - Enforce the flood damage prevention ordinance.
 - Participate in floodplain identification and mapping updates.
 - Provide public assistance/information on floodplain requirements and impacts.
- Identify and pursue strategies to increase adaptive capacity to climate change.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Develop and implement a program to capture perishable data after significant events (e.g. high-water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box on next page) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.

- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. If it is another outside funding source such as a non-profit funding source or a donation, include the source and any requirements for receiving the funding. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 17 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.
- Indicate the timeline as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, outside funding sources, bonds, grants, and fee increases).

Action Numbering

Actions are to be numbered using the three-letter code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- San Mateo County—SMC-1, SMC-2...
- Atherton City—ATH-1, ATH-2...
- Belmont City—BEL-1, BEL-2...
- Brisbane City—BRS-1, BRS-2...
- Burlingame City—BRL-1, BRL-2...
- Colma City—CLM-1, CLM-2...
- Daly City—DLY-1, DLY-2...
- East Palo Alto City—EPA-1, EPA-2...
- Foster City—FOS-1, FOS-2...
- Half Moon Bay City—HMB-1, HMB-2...
- Hillsborough City—HLS-1, HLS-2...
- Menlo Park City—MPK-1, MPK-2...
- Millbrae City—MLB-1, MLB-2...
- Pacifica City—PAC-1, PAC-2...
- Portola Valley City—PTV-1, PTV-2...
- Redwood City—RDW-1, RDW-2...
- San Bruno City—SBR-1, SBR-2...
- San Carlos City—SCR-1, SCR-2...
- San Mateo City—SMT-1, SMT-2...
- South San Francisco City—SSF-1, SSF-2...
- Woodside City—WDS-1, WDS-2...
- Coastside Water —CSW-1, CSW-2...
- Colma Fire —CFD-1, CFD-2...
- Flood & Sea Level —FSL-1, FSL-2...
- Harbor District —HRB-1, HBR-2
- Highland Recreational —HLD-1, HLD-2...
- Jefferson Union HS —JEF-1, JEF-2...
- Menlo Park Fire —MPF-1, MPF-2...
- Mid-Pen Reg Open Space District —MPR-1, MPR-2...
- Mid-Peninsula Water —MPW-1, MPW-2...
- Montara Water & Sewer —MWS-1, MWS-2...
- North Coast Water —NCW-1, NCW-2...
- Office of Education —OED-1, OED-2...
- San Mateo Community College —SCC-1, SCC-2...
- San Mateo RCD —SRC-1, SRC-2...
- Westborough Water —WBW-1, WBW-2...
- Woodside Fire —WFD-1, WFD-2...

-
- Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium, or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
 - **Is the Action Eligible for Outside Funding Sources?**—Enter “Yes” or “No.” For grant funding, refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 17 of these instructions.
 - **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another outside source such as grants, non-profit funding, or donations?
 - **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years) once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known outside funding sources. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for outside funding from programs that have not yet been identified.
 - **Outside Funding Source Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets identified outside funding source eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible to be funded by outside sources.
 - Medium Priority—An action that meets identified outside funding source eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
 - Low Priority—An action that has not been identified as meeting any outside funding source eligibility requirements.

Actions identified as high-outside-funding-pursuit priority actions should be closely reviewed for consideration when outside funding source opportunities arise.

- **Equity Lens Priority**- Enter “High,” “Medium” or “Low” as follows:
 - High Priority—The mitigation action is designed to reduce harm to multiple socially vulnerable groups in the County from one or more of the hazards identified in the LHMP.
 - Medium Priority— The mitigation action is designed to reduce harm to a single socially vulnerable population in the County from at least one hazard identified in the LHMP.

-
- **Low Priority**—The mitigation action fails to advance social equity in any measurable way in the County

An equity screening tool has been provided in **Appendix B** to these instructions that can be utilized to screen each action to help prioritize each action to the above criteria. The screening of each action using this tool is considered to be optional and not required for jurisdictions applying the equity lens to their action plan prioritization scheme.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

APPENDIX A— Risk Ranking Calculation Methodology

The instructions below describe the methodology for how risk rankings were derived in the “Loss Matrix” spreadsheet provided with the annex preparation toolkit. The risk-ranking for each hazard assessed its probability of occurrence and its potential impact on people, property, and the economy. Refer to the Loss Matrix spreadsheet in order to follow along.

Probability of Occurrence

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although weight can be given to expected future probability of occurrence based on established return intervals and changing climate conditions. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category. Each hazard was assigned a probability factor as follows:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—There is no exposure to the hazard and no probability of occurrence (Probability Factor = 0)

Potential Impacts of Each Hazard

The impact of each hazard is divided into three categories: impacts on people, impacts on property, and impacts on the economy. These categories are also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values for the impact on people is based on the percentage of the population in each of the five (5) classifications for social vulnerability from the National Risk Index (NRI). Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:
 - Very High—15 percent or more of the population is exposed to a hazard (Impact Factor = 5), less than 15% of the population exposed to a hazard (impact factor =4)
 - Relatively High—25 percent or more of the population is exposed to a hazard (Impact Factor = 4), less than 25 percent of the population exposed to a hazard (Impact Factor = 3).
 - Relatively Moderate—35 percent or more of the population is exposed to the hazard (Impact Factor = 3), less than 35 percent of the population exposed (Impact Factor =2).
 - Relatively Low—50 percent or more of the population is exposed to a hazard (Impact Factor = 2), less than 50 percent of the population exposed to a hazard (Impact Factor =1)
 - Very Low—75 percent or more of the population exposed to a hazard (Impact Factor =1), less than 75 percent of the population exposed (Impact Factor = 0).
 - No impact— No population exposed to the hazard.

The impact factors are additive. There could be multiple levels of exposure for each hazard under the five NRI social vulnerability indices. Please note that if 0 to 74 percent of the population is exposed to the “very low” classification, the risk ranking score will default to the base-line risk ranking score (Ranking result for the without equity lens option in the loss matrix).

- **Property**—Values are assigned based on the percentage of the total *property value exposed* to the hazard event:
 - High—25 percent or more of the total replacement value is exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the total replacement value is exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the total replacement value is exposed to the hazard (Impact Factor = 1)
 - No impact—None of the total replacement value is exposed to a hazard (Impact Factor = 0)
- **Economy**—Values were assigned based on the percentage of the total *property value vulnerable* to the hazard event. Values represent estimates of the loss from a major event of each hazard in comparison to the total replacement value of the property exposed to the hazard. For some hazards, such as wildland fire and landslide, vulnerability may be considered to be the same or a portion of exposure due to the lack of loss estimation tools specific to those hazards.
 - High—Estimated loss from the hazard is 10 percent or more of the total replacement value (Impact Factor = 3)
 - Medium—Estimated loss from the hazard is 5 percent to 9 percent of the total replacement value (Impact Factor = 2)
 - Low—Estimated loss from the hazard is 4 percent or less of the total replacement value (Impact Factor = 1)
 - No impact—No loss is estimated from the hazard (Impact Factor = 0).

Impacts on People

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. For those hazards that do not have a defined extent and location the entire population or a portion of the population is considered to be exposed, depending on the hazard. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

Impacts on Property

The percent of the total value exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **blue highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought but impacts to structures are expected to be minimal.

Impacts on the Economy

The loss estimates for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the loss estimate matrix in the **orange highlighted column**. For those hazards that have a defined extent and location, but do not have modelled loss results, loss estimates can be the same as exposure or a portion thereof. For example, a large percentage of the building stock may be exposed to landslide or wildland fire risk, but it would not be expected that one event that resulted in loss to all exposed structures would occur. For those hazards that do not have a defined extent and location, exposure is based on the hazard type.

Risk Rating for Each Hazard

A risk rating for each hazard was determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property, and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor \{people + property + economy\}}$$

This is the number that is shown in the risk ranking table in your template. Generally, score of 30 or greater receive a “high” rating, score between 15 and 30 receive a “medium” rating, and score of less than 15 receives a “low” rating.

APPENDIX B— Equity Lens Screening Tool			
	Procedural	Distributive	Structural
Programs/ Services	How was the target audience included in the design of the program? What actions will be taken to ensure that services and programs are physically and programmatically accessible and inclusive? What are the criteria for participation or receipt of benefits?	Is the program or service designed to meet the needs of underserved and underrepresented communities? If not, what would need to be changed to ensure their equitable participation? How will program dollars be allocated to ensure inclusive and accessible service delivery? Does the cost structure of the program result in disparate use? /Does the fee structure of the service result in increased burdens for low-income communities?	Does this program/service create unintended consequences for communities that are underserved and underrepresented? How will they be mitigated? Is there an opportunity to extend additional benefits through this program/service that can help support the healing of past harms to communities? Does the program empower and build capacity of a community?
Capital Investments	What are the criteria for prioritizing projects and investments? Does the data and information used consider the demographic, geographic and real-world experience of residents and businesses in the area? If data gaps exist, what are you using to guide decisions? What process will be used to get input from the community? How will you reach underserved populations?	Will the investment provide improved safety, health, access, or opportunity for the communities who need it most? How will the underserved people who currently live and work in the area benefit from the investment?	What measures will be taken to mitigate the potential impacts of involuntary displacement in the project? How will business or employment opportunity created through the project be extended to communities of color, people with disabilities, and low-income people? How will community benefits be negotiated?
Regulation	Has analysis been done on the impacts to communities of color, people with disabilities, low-income populations, seniors, children, renters, and other historically underserved or excluded groups? How will impacted communities be able to learn about and understand changes with the regulation? How will the regulation be enforced?	Will the regulation provide improved safety, health, access, or opportunity for the communities who need it most? How will the regulation alleviate any cost-burden for those who are already in a position where it is difficult to pay?	Does the regulation create or inhibit opportunity for communities of color, people with disabilities, and low-income populations? Will enforcement disproportionately negatively affect low-income communities or communities of color? How will this be mitigated?
Planning	How will impacted communities be involved in the planning process? What measures will be taken to ensure the process is fair and inclusive?	How does the plan prioritize and address the needs of the most impacted or vulnerable in the community? Does the plan improve safety, health, access, or opportunity for the communities who need it most? How will resources shift to ensure equitable implementation of the plan?	What measures will be taken to mitigate the potential impacts of involuntary displacement? How will policies support community development? What support is needed to build the community's ownership and self-determination with the plan?

- Procedural equity—ensuring that processes are fair and inclusive in the development and implementation of any program or policy
- Distributive equity—ensuring that resources or benefits and burdens of a policy or program are distributed fairly, prioritizing those with highest need first.
- Structural equity—a commitment and action to correct past harms and prevent future negative consequences by institutionalizing accountability and decision-making structures that aim to sustain positive outcomes

Table 2.0. Equity Screening Question Matrix

Evaluation Question	Response
1. What issue/problem/risk is the action designed to address? And what are the expected benefits?	Issue: Benefits:
2. Who is the target audience/beneficiary for this action? Who is affected if no action is taken?	
3. How would you classify the mitigation action? (Programs/Service; Capital Investment; Regulation; Planning). <i>Refer to questions in table above based on your answer to this question.</i>	
4. Will any community groups be involved in the design/implementation of this action? (i.e. potential partners)	
5. Will this action reduce risk from natural hazards for the following groups? How?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
6. How could this action benefit the following groups? Or How could this action be modified so that there are benefits?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
7. How could this action burden/negatively impact/leave out the following groups, for example through communication, transportation, physical or programmatic barriers?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
8. If you have identified burdens, barriers, or negative impacts, or opportunities for benefits please <u>revisit the action</u> to identify strategies to reduce or eliminate burdens or negative impacts; remove communication, transportation, physical or programmatic barriers; or enhance potential benefits.	
9. Have you identified a performance metric for evaluating progress on this action? How will you know when this action is complete? (please provide) Have you considered outcomes for communities of color, people with disabilities, low-income families, people with limited English proficiency, renters, seniors, and children?	

**ANNEX TEMPLATE FOR CITIES
AND COUNTY**

1. JURISDICTION NAME

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: xxx-xxx-xxxx
e-mail Address: xxx@xxx.xxx

Alternate Point of Contact

Name, Title
Street Address
City, State ZIP
Telephone: xxx-xxx-xxxx
e-mail Address: xxx@xxx.xxx

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Hazard Mitigation Planning Team Members

Name	Title

1.2 JURISDICTION PROFILE

1.2.1 Location and Features

[jurisdiction name] is in [general location description]

The current boundaries generally extend from [describe], encompassing an area of [area in square miles].

[general description of key features]

1.2.2 History

[jurisdiction name] was incorporated in [date]. [brief historical summary]

1.2.3 Governing Body Format

[general description].

The [name of adopting body] assumes responsibility for the adoption of this plan; [name of oversight agency] will oversee its implementation.

1.3 CURRENT TRENDS

1.3.1 Population

According to [identify data source], the population of [jurisdiction name] as of [month year] was [population]. Since [year], the population has grown at an average annual rate of [number] percent.

1.3.2 Development

DESCRIBE TRENDS IN GENERAL.

Identifying previous and future development trends is achieved through a comprehensive review of permitting since completion of the previous plan and in anticipation of future development. Tracking previous and future growth in potential hazard areas provides an overview of increased exposure to a hazard within a community. Table 1-2 summarizes development trends in the performance period since the preparation of the previous hazard mitigation plan, as well as expected future development trends.

Table 1-2. Recent and Expected Future Development Trends						
Criterion	Response					
Has your jurisdiction annexed any land since the preparation of the previous hazard mitigation plan? <i>If yes, give the estimated area annexed and estimated number of parcels or structures.</i>	Yes/No					
Is your jurisdiction expected to annex any areas during the performance period of this plan? <i>If yes, describe land areas and dominant uses.</i> <i>If yes, who currently has permitting authority over these areas?</i>	Yes/No					
Are any areas targeted for development or major redevelopment in the next five years? <i>If yes, briefly describe, including whether any of the areas are in known hazard risk areas</i>	Yes/No					
How many permits for new construction were issued in your jurisdiction since the preparation of the previous hazard mitigation plan?	2016	2017	2018	2019	2020	
	Single Family					
	Multi-Family					
	Other					
	Total					
Provide the number of new-construction permits for each hazard area or provide a qualitative description of where development has occurred.	<ul style="list-style-type: none">• Special Flood Hazard Areas: #• Landslide: #• High Liquefaction Areas: #• Tsunami Inundation Area: #• Wildfire Risk Areas: #					

Criterion	Response
Describe the level of buildout in the jurisdiction, based on your jurisdiction’s buildable lands inventory. If no such inventory exists, provide a qualitative description.	

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- Development and permitting capabilities are presented in Table 1-4.
- An assessment of fiscal capabilities is presented in Table 1-5.
- An assessment of administrative and technical capabilities is presented in Table 1-6.
- An assessment of education and outreach capabilities is presented in Table 1-7.
- Information on National Flood Insurance Program (NFIP) compliance is presented in Table 1-8.
- Classifications under various community mitigation programs are presented in Table 1-9.
- The community’s adaptive capacity for the impacts of climate change is presented in Table 1-10.

Table 1-3. Planning and Regulatory Capability

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Codes, Ordinances, & Requirements				
Building Code	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Zoning Code	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Subdivisions	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Stormwater Management	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Post-Disaster Recovery	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Real Estate Disclosure	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Growth Management	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Site Plan Review	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Environmental Protection	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Flood Damage Prevention	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Emergency Management	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Climate Change	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Other	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Planning Documents				
General Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>Is the plan compliant with Assembly Bill 2140?</i> Yes/No				
<i>Comment:</i> Enter Comment				
Capital Improvement Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>How often is the plan updated?</i>				
<i>Comment:</i> Enter Comment				
Disaster Debris Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Floodplain or Watershed Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Stormwater Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				
Urban Water Management Plan	Yes/No	Yes/No	Yes/No	Yes/No
<i>Comment:</i> Enter Comment				

	Local Authority	Other Jurisdiction Authority	State Mandated	Integration Opportunity?
Habitat Conservation Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Economic Development Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Shoreline Management Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Community Wildfire Protection Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Forest Management Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Climate Action Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Comprehensive Emergency Management Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Threat & Hazard Identification & Risk Assessment (THIRA) <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Post-Disaster Recovery Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Continuity of Operations Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Public Health Plan <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No
Other <i>Comment:</i> Enter Comment	Yes/No	Yes/No	Yes/No	Yes/No

Table 1-4. Development and Permitting Capability

Criterion	Response
Does your jurisdiction issue development permits? <i>If no, who does? If yes, which department?</i> Enter Response	Yes/No
Does your jurisdiction have the ability to track permits by hazard area?	Yes/No
Does your jurisdiction have a buildable lands inventory?	Yes/No

Table 1-5. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes/No
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service	Yes/No
<i>If yes, specify:</i> Enter Response	
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other	Yes/No
<i>If yes, specify:</i> Enter Response	

Table 1-6. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Engineers or professionals trained in building or infrastructure construction practices	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Planners or engineers with an understanding of natural hazards	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Staff with training in benefit/cost analysis	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Surveyors	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Personnel skilled or trained in GIS applications	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Scientist familiar with natural hazards in local area	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Emergency manager	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Grant writers	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	
Other	Yes/No
<i>If Yes, Department /Position:</i> Enter Response	

Table 1-7. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes/No
Do you have personnel skilled or trained in website development?	Yes/No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Enter Response	Yes/No

Table 1-8. National Flood Insurance Program Compliance

Criterion	Response
What local department is responsible for floodplain management?	Enter Response
Who is your floodplain administrator? (department/position)	Enter Response
Are any certified floodplain managers on staff in your jurisdiction?	Yes/No
What is the date that your flood damage prevention ordinance was last amended?	Enter Response
Does your floodplain management program meet or exceed minimum requirements? <i>If exceeds, in what ways?</i> Enter Response	Meets/Exceeds
When was the most recent Community Assistance Visit or Community Assistance Contact?	Enter Response
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <i>If so, state what they are.</i> Enter Response	Yes/No
Are any RiskMAP projects currently underway in your jurisdiction? <i>If so, state what they are.</i> Enter Response	Yes/No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <i>If no, state why.</i> Enter Response	Yes/No
Does your floodplain management staff need any assistance or training to support its floodplain management program? <i>If so, what type of assistance/training is needed?</i> Enter Response	Yes/No
Does your jurisdiction participate in the Community Rating System (CRS)? <i>If yes, is your jurisdiction interested in improving its CRS Classification?</i> Yes/No <i>If no, is your jurisdiction interested in joining the CRS program?</i> Yes/No	Yes/No
How many flood insurance policies are in force in your jurisdiction? ^a <i>What is the insurance in force?</i> \$ <input type="text"/> <i>What is the premium in force?</i> \$ <input type="text"/>	Enter Response

Criterion	Response
How many total loss claims have been filed in your jurisdiction? ^a	Enter Response
How many claims are still open or were closed without payment?	Enter Response
What were the total payments for losses? \$	
a. According to FEMA statistics as of MONTH XX, 20XX	

Table 1-9. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes/No		Date
DUNS #	Yes/No		Date
Community Rating System	Yes/No		Date
Building Code Effectiveness Grading Schedule	Yes/No		Date
Public Protection	Yes/No		Date
Storm Ready	Yes/No		Date
Firewise	Yes/No		Date
Tsunami Ready	Yes/No		Date

Table 1-10. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating ^a
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts	High/Medium/Low
Comment: Enter Comment	
Jurisdiction-level monitoring of climate change impacts	High/Medium/Low
Comment: Enter Comment	
Technical resources to assess proposed strategies for feasibility and externalities	High/Medium/Low
Comment: Enter Comment	
Jurisdiction-level capacity for development of greenhouse gas emissions inventory	High/Medium/Low
Comment: Enter Comment	
Capital planning and land use decisions informed by potential climate impacts	High/Medium/Low
Comment: Enter Comment	
Participation in regional groups addressing climate risks	High/Medium/Low
Comment: Enter Comment	
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes	High/Medium/Low
Comment: Enter Comment	
Identified strategies for greenhouse gas mitigation efforts	High/Medium/Low
Comment: Enter Comment	
Identified strategies for adaptation to impacts	High/Medium/Low
Comment: Enter Comment	
Champions for climate action in local government departments	High/Medium/Low
Comment: Enter Comment	

Criterion	Jurisdiction Rating ^a
Political support for implementing climate change adaptation strategies <i>Comment:</i> Enter Comment	High/Medium/Low
Financial resources devoted to climate change adaptation <i>Comment:</i> Enter Comment	High/Medium/Low
Local authority over sectors likely to be negative impacted <i>Comment:</i> Enter Comment	High/Medium/Low
Public Capacity	
Local residents knowledge of and understanding of climate risk <i>Comment:</i> Enter Comment	High/Medium/Low
Local residents support of adaptation efforts <i>Comment:</i> Enter Comment	High/Medium/Low
Local residents' capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Local economy current capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Local ecosystems capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low

- a. High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as general planning and capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan presented in this annex.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-11 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction. Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-11. Past Natural Hazard Events			
Type of Event	FEMA Disaster #	Date	Damage Assessment
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$
Insert event type		Date	\$

1.6.2 Hazard Risk Ranking

Table 1-12 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 1-12. Hazard Risk Ranking			
Rank	Hazard	Risk Ranking Score	Risk Category
1			High/Medium/Low
2			High/Medium/Low
3			High/Medium/Low
4			High/Medium/Low
5			High/Medium/Low
6			High/Medium/Low
7			High/Medium/Low
8			High/Medium/Low
9			High/Medium/Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. This section provides information on a few key vulnerabilities for this jurisdiction. Available jurisdiction-specific risk maps of the hazards are provided at the end of this annex.

Repetitive Loss Properties

Repetitive loss records are as follows:

- Number of FEMA-identified Repetitive-Loss Properties: XX
- Number of FEMA-identified Severe-Repetitive-Loss Properties: XX
- Number of Repetitive-Loss Properties or Severe-Repetitive-Loss Properties that have been mitigated: XX

Other Noted Vulnerabilities

The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Insert as appropriate.
- Insert as appropriate.
- Insert as appropriate.

Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

If your jurisdiction has no previous hazard mitigation plan, please enter an “X” in the box at right and do not complete this section.

Table 1-13 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-13. Status of Previous Plan Actions				
Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
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Insert Action Number & Text				
Comment: Enter Comment				

1.8 HAZARD MITIGATION ACTION PLAN

Table 1-14 lists the identified actions, which make up the hazard mitigation action plan for this jurisdiction.

Table 1-15 identifies the priority for each action. Table 1-16 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-14. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Enter Response						
Existing	Enter Response	Enter Response	Enter Response	High	HMGP, PDM, FMA	Short-term
Action xxx-2 —Integrate the hazard mitigation plan into other plans, ordinances and programs that dictate land use decisions in the community, including [redacted]						
<i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Ongoing
Action xxx-3 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-4 —Continue to maintain good standing and compliance under the NFIP through implementation of floodplain management programs that, at a minimum, meet the NFIP requirements: <ul style="list-style-type: none"> Enforce the flood damage prevention ordinance. Participate in floodplain identification and mapping updates. Provide public assistance/information on floodplain requirements and impacts. 						
<i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Ongoing
Action xxx-5 —Identify and pursue strategies to increase adaptive capacity to climate change including but not limited to the following: <ul style="list-style-type: none"> [redacted] 						
<i>Hazards Mitigated:</i> Enter Response						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-6 —Purchase generators for critical facilities and infrastructure that lack adequate backup power, including [redacted].						
<i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
Existing	Enter Response	Enter Response	Enter Response			
Action xxx-7 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-8 —Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-9—Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-10—Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-11—Description						
<i>Hazards Mitigated:</i> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 1-15. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	7	Medium	Low	Yes	No	Yes	High	Low
3	3	Low	Low	Yes	No	Yes	High	Low
4	6	Medium	Low	Yes	No	Yes	High	Low
5	7	Medium	Low	Yes	No	Yes	High	Medium
6	3	High	Medium	Yes	Yes	No	Medium	High
7								
8								
9								
10								
11								

a. See the introduction to this volume for explanation of priorities.

Table 1-16. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
Medium-Risk Hazards								
Low-Risk Hazards								

a. See the introduction to this volume for explanation of mitigation types.

1.9 PUBLIC OUTREACH

Table 1-17 lists public outreach activities for this jurisdiction.

Table 1-17. Local Public Outreach		
Local Outreach Activity	Date	Number of People Involved

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- [jurisdiction name] **Municipal Code**—The municipal code was reviewed for the full capability assessment and for identifying opportunities for action plan integration.
- [jurisdiction name] **Flood Damage Prevention Ordinance**—The flood damage prevention ordinance was reviewed for compliance with the National Flood Insurance Program.
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- <INSERT DOCUMENT AND DESCRIPTION OF HOW IT WAS USED>

1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

1.12 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section

**INSTRUCTIONS FOR COMPLETING
ANNEXES FOR SPECIAL-PURPOSE
DISTRICTS**

INSTRUCTIONS FOR COMPLETING SPECIAL-PURPOSE DISTRICT ANNEX TEMPLATE

Jurisdictional annex templates for the 2021 *San Mateo Multijurisdictional Local Hazard Mitigation Plan* update will be completed in three phases. **This document provides instructions for completing all phases of the template for special-purpose districts.**

The target timeline for completion is as follows:

- **Phase 1—Team, Profile, Trends, and Previous Plan Status**
 - **Deployed:** February 19, 2021
 - **Due:** March 19, 2021 by close of business
- **Phase 2—Capability Assessment, Integration Review, and Information Sources**
 - **Deployed:** April 2, 2021
 - **Due:** May 21, 2021 by close of business
- **Phase 3—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments**
 - **Deployed:** June 11, 2021
 - **Mandatory Phase 3 Workshops:** Targeted for the week of June 14. We will schedule multiple workshops during that week to provide options for attendance
 - **Due:** July 23, 2021 by close of business, Pacific Time

Direct any questions about your Phase 3 template to:

Bart Spencer
Tetra Tech
Phone: (650) 324-1810
E-mail: bart.spencer@tetratech.com

Submit your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetratech.com

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

DO NOT covert this document to a PDF.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2016 planning effort, relevant information has been brought over to the 2021 template. Fields that require attention have been highlighted using the following color coding:

- **Green:** Text has been brought over from 2016 Plan and should be reviewed and updated as needed.
- **Blue:** This is a new field that will require information that was not included in 2016.

Please un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

IMPORTANT! READ THIS FIRST

Phase 1 and Phase 2 templates were previously provided to your jurisdiction for completion.

If your jurisdiction returned the completed Phase 1 & 2 templates:

- The Phase 1 & 2 content you provided is already incorporated into your Phase 3 template.
- Review the template to see if we have inserted any comments requesting further work to be done on Phase 1 or 2
 - ***If any comments are included, address them.*** Then, begin your work on Phase 3 following the Phase 3 instructions beginning on page 12.
 - If no comments are included, then you **DO NOT** need to do any further work on the Phase 1 or Phase 2 content. ***Go directly to the instructions for Phase 3, beginning on page 12.***

If your jurisdiction has **NOT** yet done any work on the Phase 1 or Phase 2 template:

- Follow the instructions beginning on page 3 for providing the Phase 1 and Phase 2 information.
- Then proceed with the Phase 3 instructions beginning on page 12.

If your jurisdiction started work on the Phase 1 or 2 template but never completed and submitted it, copy the work you had completed so far into the new template. Then complete Phases 1, 2, and 3 following the instructions provided here.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your district (e.g. West County Fire Protection District #1, Johnsonville Flood Protection District). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction's name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM

Points of Contact

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating, and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Overview

Provide a brief summary description of the following:

- The purpose of the jurisdiction
- The date of inception
- The type of organization
- The number of employees
- Funding sources
- The type of governing body, and who has adoptive authority.

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District is a special district created in 1952 to provide water and sewer service. A five-member elected Board of Directors governs the District. The Board assumes responsibility for the adoption of this plan; the General Manager will oversee its implementation. The District currently employs a staff of 21. Funding comes primarily through rates and revenue bonds.*

Service Area

Provide a brief description of the following:

- Who the District’s customers are and an approximation of how many are currently served
- The area served, in square miles
- The geographic extent of the service area

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District serves unincorporated areas of Jones County east of the City of Smithburg, including the communities of Johnsonville, Creeks Corner, Jones Hill, Fields Landing, King Salmon, and Freshwater. The current total service area is 3.3 square miles. As of April 30, 2020, the District serves 7,305 water connections and 6,108 sewer connections.*

Assets

List District-owned assets in the categories shown on the table (and described in the sections below). Include an approximate value for each asset and a subtotal value for identified assets in each category.

Property

Provide an approximate value for any land owned by the District.

Equipment

List equipment owned by the District that is used in times of emergency or that, if incapacitated, could severely impact the service area (vehicles, generators, pumps, etc.). Provide an approximate replacement value for each item. Equipment of similar type may be listed as a single category (e.g., “3 diesel-powered generators”). For water and sewer districts, include mileage of pipeline under this category.

Critical Facilities

List District-owned facilities that are vital to maintain services to the service area. Include the address of each facility. Provide an approximate replacement value for each line. Critical facilities are generally defined as facilities owned by the District that are critical to District operations and to public health or safety and that are especially important following hazard events, including but not limited to the following:

- Structures or facilities that produce, use, or store hazardous materials (highly volatile, flammable, explosive, toxic and/or water-reactive materials)

- Hospitals, nursing homes, and housing facilities likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a natural hazard event
- Mass gathering facilities that may be used as evacuation shelters (such as schools or community centers)
- Transportation infrastructure such as roads, bridges and airports that provide sources for evacuation before, during and after natural hazard events
- Police stations, fire stations, government facilities, vehicle equipment and storage facilities, and emergency operation centers that are needed for response activities before, during and after a natural hazard event
- Public utility facilities such as drinking water, stormwater, and wastewater systems that are vital to providing normal services to damaged areas before, during and after natural hazard events.

The table below shows an example of assets to be listed in this section.

Sample Completed Table – Special District Assets	
Asset	Value
Property	
11.5 Acres	\$5,750,000
Equipment	
Total length of pipe 40 miles (\$1.32 million per mile X 40 miles)	\$52,800,000
4 Emergency Generators	\$250,000
Total:	\$53,050,000
Critical Facilities	
Administrative Buildings – 357 S. Jones Street	\$2,750,000
Philips Pump Station – 111 Fifth Avenue N.	\$377,000
Total:	\$3,127,000

NOTE: Placeholders in the table of assets request **ADDRESSES** for critical facilities. These addresses will not be included in the final published annex, but are needed in order to perform risk mapping and risk analysis for the hazard mitigation plan. Include the addresses in the table if convenient. If not, then provide a separate document listing all critical facilities and addresses for use in development of the hazard mitigation plan.

CURRENT TRENDS

Provide a brief description of previous growth trends in the service area and anticipated future increase or decrease in services (if applicable). This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District originally was formed to serve only the Johnsonville area. The District's service area expanded throughout the years to include the full area served today. Total customers have increased by 3 percent since 2010. Population in the service area is not projected to change significantly over the next 10 years, and the District has no plans to expand its service area.*

STATUS OF PREVIOUS PLAN ACTIONS

Note that this section applies only to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, enter an “X” in the box at the beginning of this section and do not complete the section. We will remove this section from your final annex.

Also note that this section is further back in the annex than the rest of the Phase 1 content. Some Phase 2 sections are included before it.

The hazard mitigation plan update must describe the status of all action items from each jurisdiction’s previous hazard mitigation plan. Each action item must be marked as ONE of the options below by checking the appropriate box (place an X) and providing the following information:

- **Completed**—If an action has been completed since the prior plan was prepared, check the “Completed” box and provide a date of completion in the comment section. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and note that it is ongoing in the comments. If an action addresses an ongoing program you would like to continue to include in your action plan, see the “Carried Over to Plan Update” bullet below.
- **Removed**—If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., “Action no longer considered feasible due to lack of political support.”). If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update**—If an action is in progress, is ongoing, or has not been initiated and you would like to carry it over to the plan update, check the “Check if Yes” column under “Carried Over to Plan Update.” Selecting this option indicates that the action will be included in the mitigation action plan for this update. If you are carrying over an action to the update, include a comment describing any action that has been taken or why the action was not taken (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress). Leave the last column, “Action # in Update,” blank at this point. This will be filled in after completing the updated action plan in Phase 3.

Ensure that you have provided a status and a comment for each action.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, all action items from your jurisdiction’s previous hazard mitigation plan that are marked as “Carried Over to Plan Update” will need to be included in the action plan.

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS**CAPABILITY ASSESSMENT**

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

List any federal, state, local or district ordinances, plans, or policies that apply to your jurisdiction and relate to hazard mitigation. Provide the date of last update and any comments as appropriate. The table below shows an example of items to be listed in this section.

Sample Completed Table – Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
District Design Standards	2010	
Capital Improvement Program	Updated annually	covers 5 year timeframe
Emergency Operations Plan	2000	
Facility Maintenance Manual	1990	
State Building Code	2016	
Division of State Architects		Review of all building and site design features is required prior to construction

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **FIPS Code**— <https://www.census.gov/geographies/reference-files/2018/demo/popest/2018-fips.html>
- **DUNS #**— <https://www.dnb.com/duns-number.html>
- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>
- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>
- **Tsunami Ready**— <https://www.weather.gov/tsunamiready/communities>

Adaptive Capacity for Climate Change

Consider climate change impact concerns such as the following:

- Reduced snowpack
- Increased wildfires
- Sea level rise
- Inland flooding
- Threats to sensitive species
- Loss in agricultural productivity
- Public health and safety.

With those impacts in mind, complete the table titled “Adaptive Capacity for Climate Change” by indicating your jurisdiction’s capacity for each listed criterion as follows:

- **High**—The capacity exists and is in use.
- **Medium**—The capacity may exist, but is not used or could use some improvement.
- **Low**—The capacity does not exist or could use substantial improvement.
- **Unsure**—Not enough information is known to assign a rating.

This is a subjective assessment, but providing a few words of explanation is useful. It is highly recommended that you complete this table with an internal planning team after reviewing the results of the other capability assessment tables.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the adaptive capacity criteria and consider including actions to improve the rating for those rated medium or low, to make use of the capacity for those rated high, or to acquire additional information for those rated unsure.

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into emergency operations plans).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration.

Existing Integration

In the highlighted bullet list, provide a brief description of integrated plans or ordinances and how each is integrated. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The District will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.
- **Emergency Operations Plan**—The results of the risk assessment were used in the development of the emergency operations plan.

- **Facilities Plan**—The results of the risk assessment and mapped hazard areas are used in facility planning for the District. Potential sites are reviewed for hazard risks, and appropriate mitigation measures are considered in building and site design.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any plans or programs that offer the potential for future integration and describe the process by which integration will occur. Examples follow:

- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The District does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the mitigation goals and objectives identified in the mitigation plan.

Consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include: tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these program manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

THIS COMPLETES PHASE 2

PHASE 3 INSTRUCTIONS

RISK ASSESSMENT

Jurisdiction-Specific Natural Hazard Event History

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the County, the state, and the federal government.

Table 1. Presidential Disaster Declarations for the Planning Area

[illegible]

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community’s exposure) and how great an impact each hazard will have if it does occur (this is called the community’s vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. Risk rankings for cities and the county have been calculated in the “Loss Matrix” spreadsheet included in the annex preparation toolkit. These rankings are on the basis of risk ranking scores for each hazard that were calculated based on the hazard’s probability of occurrence and its potential impact on people, property and the economy.

The risk ranking methodology used for cities and counties is not usable for special-purpose districts because the risk-related mapping generally does not align with the boundaries of districts. To rank risk for your District, use the following procedure:

- Find the risk ranking scores in the Loss Matrix spreadsheet (on the “Risk Ranking Summary” tab) for the county overall and for any cities whose area overlaps that of your District.
- For each hazard, generate a risk ranking score for your District by calculating the average of the scores for those other jurisdictions.
- Rank the hazards based on those average scores:
 - Assign the rank of 1 to the hazard with the highest risk ranking score, the rank of 2 to the hazard with the second highest ranking score; and so on.
 - Assign the same rank to any two hazards with equal risk ranking scores
- If the resulting ranking differs from what you know based on substantiated data and documentation, alter the scores and ranking as needed based on this knowledge.

- Assign each hazard to the risk category of “High,” Medium,” or “Low” based on the risk rating score:
 - Low for scores of 0 to 15
 - Medium for scores of 16 to 30
 - High for scores greater than 30

Enter the results of this analysis in the “Hazard Risk Ranking” table in the template; enter the hazards in order of ranking, with 1 at the top of the table.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as “high” or “medium.”

Jurisdiction-Specific Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction’s natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard, but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- Over the past 10 years, the jurisdiction has experienced more than \$1 million in damage to critical assets from severe storm events.
- 17 critical assets are in areas that would be permanently inundated with 12 inches of sea level rise.
- One significant District asset is not equipped with a generator and four District buildings are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening a District-owned treatment facility.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of eligibility from outside funding sources (grants, non-profit funding, donations, etc.).
- Know what is and is not eligible for funding under various federal programs (see the fact sheet on FEMA hazard mitigation grant programs in the toolkit and the table on the next page).

Material Previously Developed for This Annex

Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, and Education and Outreach Table

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any items listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.
- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section—Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	Hazard Mitigation Grant Program	Pre-Disaster Mitigation	Flood Mitigation Assistance
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildfire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

* FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated.

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog).

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following three actions have been prepopulated in your annex template; **these three actions should be included in every annex and should not be removed:**

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Identify and pursue strategies to increase adaptive capacity to climate change.
- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box at right) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.
- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. If it is another outside funding source such as a non-profit funding source or a donation, include the source and any requirements for receiving the funding. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 15 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.
- Indicate the time line as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Action Numbering

Actions are to be numbered using the three-letter code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- San Mateo County—SMC-1, SMC-2...
- Atherton City—ATH-1, ATH-2...
- Belmont City—BEL-1, BEL-2...
- Brisbane City—BRS-1, BRS-2...
- Burlingame City—BRL-1, BRL-2...
- Colma City—CLM-1, CLM-2...
- Daly City—DLY-1, DLY-2...
- East Palo Alto City—EPA-1, EPA-2...
- Foster City—FOS-1, FOS-2...
- Half Moon Bay City—HMB-1, HMB-2...
- Hillsborough City—HLS-1, HLS-2...
- Menlo Park City—MPK-1, MPK-2...
- Millbrae City—MLB-1, MLB-2...
- Pacifica City—PAC-1, PAC-2...
- Portola Valley City—PTV-1, PTV-2...
- Redwood City—RDW-1, RDW-2...
- San Bruno City—SBR-1, SBR-2...
- San Carlos City—SCR-1, SCR-2...
- San Mateo City—SMT-1, SMT-2...
- South San Francisco City—SSF-1, SSF-2...
- Woodside City—WDS-1, WDS-2...
- Coastside Water —CSW-1, CSW-2...
- Colma Fire —CFD-1, CFD-2...
- Flood & Sea Level —FSL-1, FSL-2...
- Harbor District —HRB-1, HBR-2
- Highland Recreational —HLD-1, HLD-2...
- Jefferson Union HS —JEF-1, JEF-2...
- Menlo Park Fire —MPF-1, MPF-2...
- Mid-Pen Reg Open Space District —MPR-1, MPR-2...
- Mid-Peninsula Water —MPW-1, MPW-2...
- Montara Water & Sewer —MWS-1, MWS-2...
- North Coast Water —NCW-1, NCW-2...
- Office of Education —OED-1, OED-2...
- San Mateo Community College —SCC-1, SCC-2...
- San Mateo RCD —SRC-1, SRC-2...
- Westborough Water —WBW-1, WBW-2...
- Woodside Fire —WFD-1, WFD-2...

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, outside funding sources, bonds, grants, and fee increases).
 - Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Action Eligible for Outside Funding Sources?**—Enter “Yes” or “No.” For grant funding, refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 15 of these instructions.
- **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants, non-profit funding, or donations?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known outside funding sources. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for outside funding from programs that have not yet been identified.
- **Outside Funding Source Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:

- **High Priority**—An action that meets identified outside funding source eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible to be funded by outside sources.
- **Medium Priority**—An action that meets identified outside funding source eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting any outside funding source eligibility requirements.

Actions identified as high-outside-funding-pursuit priority actions should be closely reviewed for consideration when outside funding source opportunities arise.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.
- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff

training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

**INSTRUCTIONS FOR COMPLETING
ANNEXES WITH EQUITY LENS
FOR SPECIAL-PURPOSE
DISTRICTS**

INSTRUCTIONS FOR COMPLETING SPECIAL-PURPOSE DISTRICT ANNEX TEMPLATE WITH EQUITY LENS

Note Regarding Equity Lensing. The Core Planning Team and Steering Committee for the 2021 San Mateo County Multijurisdictional Local Hazard Mitigation Plan update have decided to add another layer of resolution to the risk assessment and action planning portions of this plan update, applying an “equity lens”. An equity lens is defined as a critical thinking approach to undoing institutional and structural biases, which evaluates burdens, benefits, and outcomes to underserved communities. Application of the equity lens to risk ranking and action plan prioritization was determined to be “optional” for all planning partners. These instructions have been enhanced to include the equity lens options for Risk Ranking and Action Plan prioritization.

Jurisdictional annex templates for the 2021 San Mateo Multijurisdictional Local Hazard Mitigation Plan update will be completed in three phases. **This document provides instructions for completing all phases of the template for special-purpose districts.**

The target timeline for completion is as follows:

- **Phase 1**—Team, Profile, Trends, and Previous Plan Status
 - **Deployed:** February 19, 2021
 - **Due:** March 19, 2021 by close of business
- **Phase 2**—Capability Assessment, Integration Review, and Information Sources
 - **Deployed:** April 2, 2021
 - **Due:** May 21, 2021 by close of business
- **Phase 3**—Risk Assessment, Action Plan, Information Sources, Future Needs, and Additional Comments
 - **Deployed:** June 11, 2021

A Note About Formatting

The template for the annex is a Microsoft Word document in a format that will be used in the final plan. Partners are asked to use this template so that a uniform product will be completed for each partner.

Content should be entered directly into the template rather than creating text in another document and pasting it into the template. Text from another source may alter the formatting of the document.

DO NOT convert this document to a PDF.

The section and table numbering in the document will be updated when completed annexes are combined into the final document. Please do not adjust any of the numbering.

For planning partners who participated in the 2016 planning effort, relevant information has been brought over to the 2021 template. Fields that require attention have been highlighted using the following color coding:

- **Green:** Text has been brought over from 2016 Plan and should be reviewed and updated as needed.
- **Blue:** This is a new field that will require information that was not included in 2016.

Please un-highlight each field that you update so that reviewers will know an edit has been made.

New planning partners will need to complete the template in its entirety.

- **Mandatory Phase 3 Workshops:** Targeted for the week of June 14. We will schedule multiple workshops during that week to provide options for attendance
- **Due: July 23, 2021 by close of business, Pacific Time**

Direct any questions about your Phase 3 template to:

Bart Spencer
Tetra Tech
Phone: (650) 324-1810
E-mail: bart.spencer@tetrattech.com

Submit your completed Phase 3 template in electronic format to:

Megan Brotherton
Tetra Tech
Phone: (808) 339-9119
E-mail: megan.brotherton@tetrattech.com

IMPORTANT! READ THIS FIRST

Phase 1 and Phase 2 templates were previously provided to your jurisdiction for completion.

If your jurisdiction returned the completed Phase 1 & 2 templates:

- The Phase 1 & 2 content you provided is already incorporated into your Phase 3 template.
- Review the template to see if we have inserted any comments requesting further work to be done on Phase 1 or 2
 - ***If any comments are included, address them.*** Then, begin your work on Phase 3 following the Phase 3 instructions beginning on page 12.
 - If no comments are included, then you **DO NOT** need to do any further work on the Phase 1 or Phase 2 content. ***Go directly to the instructions for Phase 3, beginning on page 12.***

If your jurisdiction has **NOT** yet done any work on the Phase 1 or Phase 2 template:

- Follow the instructions beginning on page 3 for providing the Phase 1 and Phase 2 information.
- Then proceed with the Phase 3 instructions beginning on page 12.

If your jurisdiction started work on the Phase 1 or 2 template but never completed and submitted it, copy the work you had completed so far into the new template. Then complete Phases 1, 2, and 3 following the instructions provided here.

PHASE 1 INSTRUCTIONS

CHAPTER TITLE

In the chapter title at the top of Page 1, type in the complete official name of your district (e.g. West County Fire Protection District #1, Johnsonville Flood Protection District). Do not change the chapter number. Revise only the jurisdiction name. If your jurisdiction's name has already been entered, verify that wording and spelling are correct; revise as needed.

LOCAL HAZARD MITIGATION PLANNING TEAM

Points of Contact

Provide the name, title, mailing address, telephone number, and e-mail address for the primary point of contact for your jurisdiction. This should be the person responsible for monitoring, evaluating, and updating the annex for your jurisdiction. This person should also be the principle liaison between your jurisdiction and the Steering Committee overseeing development of this plan.

In addition, designate an alternate point of contact. This would be a person to contact should the primary point of contact be unavailable or no longer employed by the jurisdiction.

Note: Both of these contacts should match the contacts that were designated in your jurisdiction's letter of intent to participate in this planning process. If you have changed the primary or secondary contact, let the planning team know by inserting a comment into the document.

Participating Planning Team

Populate Table 1-1 with the names of staff from your jurisdiction who participated in preparing this annex or otherwise contributed to the planning process for this hazard mitigation plan.

JURISDICTION PROFILE

Overview

Provide a brief summary description of the following:

- The purpose of the jurisdiction
- The date of inception
- The type of organization
- The number of employees
- Funding sources
- The type of governing body, and who has adoptive authority.

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District is a special district created in 1952 to provide water and sewer service. A five-member elected Board of Directors governs the District. The Board assumes responsibility for the adoption of this plan; the General Manager will oversee its implementation. The District currently employs a staff of 21. Funding comes primarily through rates and revenue bonds.*

Service Area

Provide a brief description of the following:

- Who the District’s customers are and an approximation of how many are currently served
- The area served, in square miles
- The geographic extent of the service area

This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District serves unincorporated areas of Jones County east of the City of Smithburg, including the communities of Johnsonville, Creeks Corner, Jones Hill, Fields Landing, King Salmon, and Freshwater. The current total service area is 3.3 square miles. As of April 30, 2020, the District serves 7,305 water connections and 6,108 sewer connections.*

Assets

List District-owned assets in the categories shown on the table (and described in the sections below). Include an approximate value for each asset and a subtotal value for identified assets in each category.

Property

Provide an approximate value for any land owned by the District.

Equipment

List equipment owned by the District that is used in times of emergency or that, if incapacitated, could severely impact the service area (vehicles, generators, pumps, etc.). Provide an approximate replacement value for each item. Equipment of similar type may be listed as a single category (e.g., “3 diesel-powered generators”). For water and sewer districts, include mileage of pipeline under this category.

Critical Facilities

List District-owned facilities that are vital to maintain services to the service area. Include the address of each facility. Provide an approximate replacement value for each line. Critical facilities are generally defined as facilities owned by the District that are critical to District operations and to public health or safety and that are especially important following hazard events, including but not limited to the following:

- Structures or facilities that produce, use, or store hazardous materials (highly volatile, flammable, explosive, toxic and/or water-reactive materials)

- Hospitals, nursing homes, and housing facilities likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a natural hazard event
- Mass gathering facilities that may be used as evacuation shelters (such as schools or community centers)
- Transportation infrastructure such as roads, bridges and airports that provide sources for evacuation before, during and after natural hazard events
- Police stations, fire stations, government facilities, vehicle equipment and storage facilities, and emergency operation centers that are needed for response activities before, during and after a natural hazard event
- Public utility facilities such as drinking water, stormwater, and wastewater systems that are vital to providing normal services to damaged areas before, during and after natural hazard events.

The table below shows an example of assets to be listed in this section.

Sample Completed Table – Special District Assets	
Asset	Value
Property	
11.5 Acres	\$5,750,000
Equipment	
Total length of pipe 40 miles (\$1.32 million per mile X 40 miles)	\$52,800,000
4 Emergency Generators	\$250,000
Total:	\$53,050,000
Critical Facilities	
Administrative Buildings – 357 S. Jones Street	\$2,750,000
Philips Pump Station – 111 Fifth Avenue N.	\$377,000
Total:	\$3,127,000

NOTE: Placeholders in the table of assets request **ADDRESSES** for critical facilities. These addresses will not be included in the final published annex, but are needed in order to perform risk mapping and risk analysis for the hazard mitigation plan. Include the addresses in the table if convenient. If not, then provide a separate document listing all critical facilities and addresses for use in development of the hazard mitigation plan.

CURRENT TRENDS

Provide a brief description of previous growth trends in the service area and anticipated future increase or decrease in services (if applicable). This should be information that is specific to your jurisdiction and will not be provided in the overall, planning area-wide mitigation plan document. Provide a statement similar to the example below:

EXAMPLE: *The Johnsonville Community Services District originally was formed to serve only the Johnsonville area. The District’s service area expanded throughout the years to include the full area served today. Total customers have increased by 3 percent since 2010. Population in the service area is not projected to change significantly over the next 10 years, and the District has no plans to expand its service area.*

STATUS OF PREVIOUS PLAN ACTIONS

Note that this section applies only to jurisdictions that are conducting updates to previously approved hazard mitigation plans. If your jurisdiction has not previously participated in an approved plan, enter an “X” in the box at the beginning of this section and do not complete the section. We will remove this section from your final annex.

Also note that this section is further back in the annex than the rest of the Phase 1 content. Some Phase 2 sections are included before it.

The hazard mitigation plan update must describe the status of all action items from each jurisdiction’s previous hazard mitigation plan. Each action item must be marked as ONE of the options below by checking the appropriate box (place an X) and providing the following information:

- **Completed**—If an action has been completed since the prior plan was prepared, check the “Completed” box and provide a date of completion in the comment section. If an action has been initiated and is an ongoing program (e.g. annual outreach event), you may mark it as completed and note that it is ongoing in the comments. If an action addresses an ongoing program you would like to continue to include in your action plan, see the “Carried Over to Plan Update” bullet below.
- **Removed**—If action items are to be removed because they are no longer feasible, a reason must be given. Lack of funding does not mean that it is no longer feasible, unless the sole source of funding for an action is no longer available. Place a comment in the comment section explaining why the action is no longer feasible or barriers that prevented the action from being implemented (e.g., “Action no longer considered feasible due to lack of political support.”). If the wording and/or intent of a previously identified action is unclear, this can be a reason for removal. A change in community priorities may also be a reason for removal and should be discussed in the comments.
- **Carried Over to Plan Update**—If an action is in progress, is ongoing, or has not been initiated and you would like to carry it over to the plan update, check the “Check if Yes” column under “Carried Over to Plan Update.” Selecting this option indicates that the action will be included in the mitigation action plan for this update. If you are carrying over an action to the update, include a comment describing any action that has been taken or why the action was not taken (specifically, any barriers or obstacles that prevented the action from moving forward or slowed progress). Leave the last column, “Action # in Update,” blank at this point. This will be filled in after completing the updated action plan in Phase 3.

Ensure that you have provided a status and a comment for each action.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, all action items from your jurisdiction’s previous hazard mitigation plan that are marked as “Carried Over to Plan Update” will need to be included in the action plan.

THIS COMPLETES PHASE 1

PHASE 2 INSTRUCTIONS

CAPABILITY ASSESSMENT

Note that it is unlikely that one person will be able to complete all sections of the capability assessment alone. The primary preparer will likely need to reach out to other departments within the local government for information. It may be beneficial to provide these individuals with background information about this planning process, as input from them will be needed again during Phase 3 of the annex development.

Planning and Regulatory Capability

List any federal, state, local or district ordinances, plans, or policies that apply to your jurisdiction and relate to hazard mitigation. Provide the date of last update and any comments as appropriate. The table below shows an example of items to be listed in this section.

Sample Completed Table – Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
District Design Standards	2010	
Capital Improvement Program	Updated annually	covers 5 year timeframe
Emergency Operations Plan	2000	
Facility Maintenance Manual	1990	
State Building Code	2016	
Division of State Architects		Review of all building and site design features is required prior to construction

Fiscal Capability

Complete the table titled “Fiscal Capability” by indicating whether each of the listed financial resources is accessible to your jurisdiction. Enter “Yes” if the resource is fully accessible to your jurisdiction. Enter “No” if there are limitations or prerequisites that may hinder your use of this resource.

Administrative and Technical Capability

Complete the table titled “Administrative and Technical Capability” by indicating whether your jurisdiction has access to each of the listed personnel resources. Enter “Yes” or “No” in the column labeled “Available?”. If yes, then enter the department and position title. If you have contract support with these capabilities, you can still answer “Yes.” Indicate in the department row that this resource is provided through contract.

Education and Outreach Capability

Complete the table titled “Education and Outreach.”

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the above capability assessment tables and consider including actions to provide a capability that your jurisdiction does not currently have, update a capability that your jurisdiction does have, or implement an action that is recommended in an existing plan or program.

Community Classifications

Complete the table titled “Community Classifications” to indicate your jurisdiction’s participation in various national programs related to natural hazard mitigation. For each program enter “Yes” or “No” in the second column to indicate whether your jurisdiction participates. If yes, then enter the classification that your jurisdiction has earned under the program in the third column and the date on which that classification was issued in the fourth column; enter “N/A” in the third and fourth columns if your jurisdiction is not participating. If you do not know your current classification, information is available at the following websites:

- **FIPS Code**— <https://www.census.gov/geographies/reference-files/2018/demo/popest/2018-fips.html>
- **DUNS #**— <https://www.dnb.com/duns-number.html>
- **Community Rating System**— <https://www.fema.gov/floodplain-management/community-rating-system>
- **Building Code Effectiveness Grading Schedule**— <https://www.isomitigation.com/bcegs/iso-s-building-code-effectiveness-grading-schedule-bcegs.html>
- **Public Protection Classification**— <https://www.isomitigation.com/ppc/>
- **Storm Ready**— <https://www.weather.gov/stormready/communities>
- **Firewise**— <http://www.firewise.org/usa-recognition-program/map-of-active-participants.aspx>
- **Tsunami Ready**— <https://www.weather.gov/tsunamiready/communities>

Adaptive Capacity for Climate Change

Consider climate change impact concerns such as the following:

- Reduced snowpack
- Increased wildfires
- Sea level rise
- Inland flooding
- Threats to sensitive species
- Loss in agricultural productivity
- Public health and safety.

With those impacts in mind, complete the table titled “Adaptive Capacity for Climate Change” by indicating your jurisdiction’s capacity for each listed criterion as follows:

- **High**—The capacity exists and is in use.
- **Medium**—The capacity may exist, but is not used or could use some improvement.
- **Low**—The capacity does not exist or could use substantial improvement.
- **Unsure**—Not enough information is known to assign a rating.

This is a subjective assessment, but providing a few words of explanation is useful. It is highly recommended that you complete this table with an internal planning team after reviewing the results of the other capability assessment tables.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, review all the adaptive capacity criteria and consider including actions to improve the rating for those rated medium or low, to make use of the capacity for those rated high, or to acquire additional information for those rated unsure.

INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. FEMA recommends integration as follows:

- Integrate hazard mitigation plan goals with community objectives (e.g. incorporate the goals for risk reduction and safety into the policies of other plans).
- Use the risk assessment to inform plans and policies (e.g. incorporate risk assessment findings into emergency operations plans).
- Implement mitigation actions through existing mechanisms (e.g. include mitigation projects in the capital improvement plan).
- Think about mitigation before and after a disaster (e.g. build recovery planning on existing mitigation plans and goals).

After reviewing the plans, programs and ordinances identified in the capability assessment tables, identify all plans and programs that have already been integrated with the hazard mitigation plan, and those that offer opportunities for future integration.

Existing Integration

In the highlighted bullet list, provide a brief description of integrated plans or ordinances and how each is integrated. Consider listing items marked as Completed in the “Status of Previous Plan Actions” table if they were indicated as being ongoing actions. Examples are as follows:

- **Capital Improvement Plan**—The capital improvement plan includes projects that can help mitigate potential hazards. The District will act to ensure consistency between the hazard mitigation plan and the current and future capital improvement plans. The hazard mitigation plan may identify new possible funding sources for capital improvement projects and may result in modifications to proposed projects based on results of the risk assessment.
- **Emergency Operations Plan**—The results of the risk assessment were used in the development of the emergency operations plan.

- **Facilities Plan**—The results of the risk assessment and mapped hazard areas are used in facility planning for the District. Potential sites are reviewed for hazard risks, and appropriate mitigation measures are considered in building and site design.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, any plans that fall into the “Existing Integration” category should be reviewed and elements from them should be included in the action plan as appropriate.

Opportunities for Future Integration

List any plans or programs that offer the potential for future integration and describe the process by which integration will occur. Examples follow:

- **Capital Improvement Projects**—Capital improvement project proposals may take into consideration hazard mitigation potential as a means of evaluating project prioritization.
- **Post-Disaster Recovery Plan**—The District does not have a recovery plan and intends to develop one as a mitigation planning action during the next five years. The plan will build on the mitigation goals and objectives identified in the mitigation plan.

Consider other programs you may have in place in your jurisdiction that include routine consideration and management of hazard risk. Examples of such programs may include: tree pruning programs, right-of-way mowing programs, erosion control or stream maintenance programs, etc. Add any such programs to the integration discussion and provide a brief description of how these program manage (or could be adapted to manage) risk from hazards.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, an action to integrate any identified “Opportunities for Future Integration” should be considered for inclusion in the action plan.

INFORMATION SOURCES USED FOR THIS ANNEX

Note that this section will ultimately describe all information sources used to develop this annex, but that only the sources used for Phases 1 and 2 will be listed at this point. Additional sources will be added with the preparation of the Phase 3 annex.

This section should describe what resources you used to complete the annex and how you used them. Several items are started for you, but be sure to update and enhance any descriptions. Providing this information is a requirement to pass the state and FEMA review process.

THIS COMPLETES PHASE 2

PHASE 3 INSTRUCTIONS

RISK ASSESSMENT

Jurisdiction-Specific Natural Hazard Event History

In the table titled “Past Natural Hazard Events,” list in chronological order (most recent first) any natural hazard event that has caused damage to your jurisdiction. Include the date of the event and the estimated dollar amount of damage it caused. You are welcome to include any events, but special attention should be made to include major storms and federally declared disasters. Refer to the table below that lists hazard events in the planning area as recognized by the County, the state, and the federal government.

Table 1. Presidential Disaster Declarations for the Planning Area

[illegible]

We recommend including most large-scale disasters, unless you know that there were no impacts on your jurisdiction. Specifically, we recommend that you include these events if you have damage estimate information or can provide a brief description of impacts that occurred within your community. In addition to these events, refer to the NOAA storm events database included in the toolkit. We recommend conducting a search for the name of your jurisdiction in order to identify events with known impacts. Other potential sources of damage information include the following

- Preliminary damage estimates your jurisdiction filed with the county or state
- Insurance claims data
- Newspaper archives
- Emergency management documents (general plan safety element, emergency response plan, etc.)
- Resident input.

If you do not have estimates for costs of damage caused, list “Not Available” in the “Damage Assessment” column or list a brief description of the damage rather than a dollar value (e.g., Main Street closed as a result of flooding, downed trees and residential damage). Note that tracking such damage is a valid and useful mitigation action if your jurisdiction does not currently track such information.

Hazard Risk Ranking

Risk ranking identifies which hazards pose the greatest risk to the community, based on how likely it is for each hazard to occur (this is called the community’s exposure) and how great an impact each hazard will have if it does occur (this is called the community’s vulnerability). Every jurisdiction has differing degrees of risk exposure and vulnerability and therefore needs to rank risk for its own area. The risk ranking for each jurisdiction has been calculated in the “Loss Matrix” spreadsheet included in the annex preparation toolkit. Two sets of ranking are provided. One ranking is the base ranking that utilizes the raw percentage of population exposed to each hazard to rank the impacts to population. The second ranking uses the social vulnerability metrics established by FEMA’s National Risk Index (NRI) to add an equity lens to the impact on population factor for the risk ranking application. Those planning partners applying the equity lens option should utilize the “Social Equity Version” for risk ranking provided in the loss matrix. The ranking is on the basis of risk ranking scores for each hazard that were calculated based on the hazard’s probability of occurrence and its potential impact on people, property and the economy.

The risk ranking methodology used for cities and counties is not usable for special-purpose districts because the risk-related mapping generally does not align with the boundaries of districts. To rank risk for your District, use the following procedure:

- Find the risk ranking scores in the Loss Matrix spreadsheet (on the “Risk Ranking Summary” tab) for the county overall and for any cities whose area overlaps that of your District.
- For each hazard, generate a risk ranking score for your District by calculating the average of the scores for those other jurisdictions.
- Rank the hazards based on those average scores:
 - Assign the rank of 1 to the hazard with the highest risk ranking score, the rank of 2 to the hazard with the second highest ranking score; and so on.
 - Assign the same rank to any two hazards with equal risk ranking scores

- If the resulting ranking differs from what you know based on substantiated data and documentation, alter the scores and ranking as needed based on this knowledge.
- Assign each hazard to the risk category of “High,” Medium,” or “Low” based on the risk rating score:
 - Low for scores of 0 to 15
 - Medium for scores of 16 to 32
 - High for scores greater than 33

Enter the results of this analysis in the “Hazard Risk Ranking” table in the template; enter the hazards in order of ranking, with 1 at the top of the table.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, you will need to have at least one mitigation action for each hazard ranked as “high” or “medium.”

Jurisdiction-Specific Vulnerabilities

Review the results of the risk assessment included in the toolkit, your jurisdiction’s natural events history, and any relevant public comments/input, then develop a few sentences that discuss specific hazard vulnerabilities. You do not need to develop a sentence for every hazard, but identify a few issues you would like to highlight. Also list any known hazard vulnerabilities in your jurisdiction that may not be apparent from the risk assessment and other information provided.

Spending some time thinking about the results of the risk assessment and other noted vulnerabilities will be a big help in the development of your hazard mitigation action plan. The following are examples of vulnerabilities you could identify through this exercise:

- Over the past 10 years, the jurisdiction has experienced more than \$1 million in damage to critical assets from severe storm events.
- 17 critical assets are in areas that would be permanently inundated with 12 inches of sea level rise.
- One significant District asset is not equipped with a generator and four District buildings are unreinforced masonry or soft-story construction.
- An area along the river is eroding and threatening a District-owned treatment facility.

HAZARD MITIGATION ACTION PLAN INPUT

When preparing the hazard mitigation action plan in Phase 3, consider including actions to address the jurisdiction-specific vulnerabilities listed in this section.

HAZARD MITIGATION ACTION PLAN

Hazard Mitigation Action Plan Matrix

The hazard mitigation action plan is the heart of your jurisdictional annex. This is where you will identify the actions your jurisdiction would like to pursue with this plan.

Select Recommended Actions

All of the work that you have done thus far should provide you with ideas for actions. Throughout these instructions, green boxes labeled “Hazard Mitigation Action Plan Input” have indicated information that needs to be considered in the selection of mitigation actions. The following sections describe how to consider these and other information sources to develop a list of potential actions.

Be sure to consider the following factors in your selection of actions:

- Select actions that are consistent with the overall purpose, goals, and objectives of the hazard mitigation plan.
- Identify actions where benefits exceed costs.
- Include any action that your jurisdiction has committed to pursuing, regardless of eligibility from outside funding sources (grants, non-profit funding, donations, etc.).
- Know what is and is not eligible for funding under various federal programs (see the fact sheet on FEMA hazard mitigation grant programs in the toolkit and the table on the next page).

Material Previously Developed for This Annex

Capability Assessment Section—Planning and Regulatory Capability Table, Fiscal Capability Table, Administrative and Technical Capability Table, and Education and Outreach Table

Review these tables and consider the following:

- For any capability that you do not currently have, consider whether your jurisdiction should have this capability. If so, consider including an action to develop/acquire the capability.
- For any capability that you do currently have, consider whether this capability can be leveraged to increase or improve hazard mitigation in the jurisdiction.
- If any items listed in the Planning and Regulatory Capabilities table have not been updated in more than 10 years, consider an action to review and update the capability and, as appropriate, incorporate hazard mitigation principles or information obtained in the risk assessment.
- Consider including actions that are identified in other plans and programs (capital improvement plans, strategic plans, etc.) as actions in this plan.

Capability Assessment Section— Adaptive Capacity for Climate Change Table

Consider your responses to this section:

- For criteria that you listed as medium or low, think of ways you could improve this rating (see adaptive capacity portion of the mitigation best practices catalog).
- For criteria you listed as high, think about how you can leverage this capacity to improve or enhance mitigation or continue to improve this capacity.
- For criteria that you were unable to provide responses for, consider ways you could improve your understanding of this capacity (see mitigation best practices and adaptive capacity catalog).

Table 2. Federal Hazard Mitigation Grant Program Eligibility by Action Type

Eligible Activities	Hazard Mitigation Grant Program	Pre-Disaster Mitigation	Flood Mitigation Assistance
Mitigation Projects			
Property Acquisition and Structure Demolition	√	√	√
Property Acquisition and Structure Relocation	√	√	√
Structure Elevation	√	√	√
Mitigation Reconstruction	√	√	√
Dry Floodproofing of Non-residential Structures	√	√	√
Generators	√	√	
Localized Flood Risk Reduction Projects	√	√	√
Non-Localized Flood Risk Reduction Projects	√	√	
Structural Retrofitting of Existing Buildings	√	√	√
Non-structural Retrofitting of Existing Buildings and Facilities	√	√	√
Safe Room Construction	√	√	
Infrastructure Retrofit	√	√	√
Soil Stabilization	√	√	√
Wildfire Mitigation	√	√	
Post-Disaster Code Enforcement	√		
Advance Assistance	√		
5 Percent Initiative Projects*	√		
Aquifer and Storage Recovery**	√	√	√
Flood Diversion and Storage**	√	√	√
Floodplain and Stream Restoration**	√	√	√
Green Infrastructure**	√	√	√
Miscellaneous/Other**	√	√	√
Hazard Mitigation Planning	√	√	√
Technical Assistance			√
Management Costs	√	√	√

* FEMA allows increasing the 5% initiative amount under the Hazard Mitigation Grant Program up to 10% for a presidential major disaster declaration. The additional 5% initiative funding can be used for activities that promote disaster-resistant codes for all hazards. As a condition of the award, either a disaster-resistant building code must be adopted or an improved Building Code Effectiveness Grading Schedule is required.

** Indicates that any proposed action will be evaluated on its own merit against program requirements. Eligible projects will be approved provided funding is available.

Integration Review Section

Review the items you identified in this section and consider an action that specifically says what the plan, code, ordinance etc. is and how it will be integrated.

Risk Ranking Section

You must identify at least one mitigation action that is clearly defined and actionable (i.e. not a preparedness or response action) for every hazard that is categorized in the risk ranking as “high” or “medium” risk.

Jurisdiction-Specific Vulnerabilities Section

Review the vulnerability issues that you identified in this section and consider actions to address them (see mitigation best practices catalog).

Status of Previous Plan Actions Section

If your jurisdiction participated in a previous hazard mitigation plan, be sure to include any actions that were identified as “carry over” actions.

Other Sources

Mitigation Best Practices Catalog

A catalog that includes best practices identified by FEMA and other agencies, as well as recommendations from the steering committee and other stakeholders, is included in your toolkit. Review the catalog and identify actions your jurisdiction should consider for its action plan.

Public Input

Review input received during the process, specifically the public survey results included in your toolkit.

Common Actions for All Partners

The following three actions have been prepopulated in your annex template; **these three actions should be included in every annex and should not be removed**:

- Where appropriate, support retro-fitting, purchase or relocation of structures located in high hazard areas, prioritizing those structures that have experienced repetitive losses and/or are located in high or medium ranked hazard.
- Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.
- Purchase generators for critical facilities and infrastructure that lack adequate back-up power.

In addition, the core planning team recommends that every planning partner strongly consider the following actions:

- Identify and pursue strategies to increase adaptive capacity to climate change.
- Develop and implement a program to capture perishable data after significant events (e.g. high water marks, preliminary damage estimates, damage photos) to support future mitigation efforts including the implementation and maintenance of the hazard mitigation plan.
- Support the County-wide initiatives identified in Volume I of the hazard mitigation plan.
- Develop a post-disaster recovery plan and a debris management plan.
- Develop and/or update plans that support or enhance continuity of operations following disasters.

The specifics of all these common actions should be adjusted as needed for the particulars of each community.

Complete the Table

Complete the table titled “Hazard Mitigation Action Plan Matrix” for all the actions you have identified and would like to include in the plan:

- Enter the action number (see box at right) and description. **If the action is carried over from your previous hazard mitigation plan, return to the “Status of Previous Plan Actions” table you completed in Phase 1 and enter the new action number in the column labeled “Action # in Update.”**
- Indicate whether the action mitigates hazards for new and/or existing assets.
- Identify the specific hazards the action will mitigate (note: you must list each hazard by name; simply indicating “all hazards” is not deemed acceptable).
- Identify by number the mitigation plan objectives that the action addresses (see toolkit).
- Indicate who will be the lead in administering the action. This will most likely be a department within your jurisdiction (e.g. planning or public works). If you wish to indicate more than one department as responsible for the action, clearly identify one as the lead agency and list the others in the “supporting agency” column.
- Enter an estimated cost in dollars if known; otherwise, enter “High,” “Medium,” or “Low,” as determined for the prioritization process described in the following section.
- Identify funding sources for the action. If it is a grant, include the grant-providing agency as well as funding sources for any required cost share. If it is another outside funding source such as a non-profit funding source or a donation, include the source and any requirements for receiving the funding. Refer to your fiscal capability assessment to identify possible sources of funding and refer to the table on page 16 of these instructions for project eligibility for FEMA’s hazard mitigation assistance grant programs.
- Indicate the time line as “short-term” (1 to 5 years) or “long-term” (5 years or greater) or “ongoing” (a continual program)

Action Numbering

Actions are to be numbered using the three-letter code for your jurisdiction shown below, followed by a hyphen and the action’s sequential number:

- San Mateo County—SMC-1, SMC-2...
- Atherton City—ATH-1, ATH-2...
- Belmont City—BEL-1, BEL-2...
- Brisbane City—BRS-1, BRS-2...
- Burlingame City—BRL-1, BRL-2...
- Colma City—CLM-1, CLM-2...
- Daly City—DLY-1, DLY-2...
- East Palo Alto City—EPA-1, EPA-2...
- Foster City—FOS-1, FOS-2...
- Half Moon Bay City—HMB-1, HMB-2...
- Hillsborough City—HLS-1, HLS-2...
- Menlo Park City—MPK-1, MPK-2...
- Millbrae City—MLB-1, MLB-2...
- Pacifica City—PAC-1, PAC-2...
- Portola Valley City—PTV-1, PTV-2...
- Redwood City—RDW-1, RDW-2...
- San Bruno City—SBR-1, SBR-2...
- San Carlos City—SCR-1, SCR-2...
- San Mateo City—SMT-1, SMT-2...
- South San Francisco City—SSF-1, SSF-2...
- Woodside City—WDS-1, WDS-2...
- Coastside Water —CSW-1, CSW-2...
- Colma Fire —CFD-1, CFD-2...
- Flood & Sea Level —FSL-1, FSL-2...
- Harbor District —HRB-1, HBR-2
- Highland Recreational —HLD-1, HLD-2...
- Jefferson Union HS —JEF-1, JEF-2...
- Menlo Park Fire —MPF-1, MPF-2...
- Mid-Pen Reg Open Space District —MPR-1, MPR-2...
- Mid-Peninsula Water —MPW-1, MPW-2...
- Montara Water & Sewer —MWS-1, MWS-2...
- North Coast Water —NCW-1, NCW-2...
- Office of Education —OED-1, OED-2...
- San Mateo Community College —SCC-1, SCC-2...
- San Mateo RCD —SRC-1, SRC-2...
- Westborough Water —WBW-1, WBW-2...
- Woodside Fire —WFD-1, WFD-2...

Mitigation Action Priority

Complete the information in the table titled “Mitigation Action Priority” as follows:

- **Action #**—Indicate the action number from the Hazard Mitigation Action Plan Matrix table.
- **# of Objectives Met**—Enter the number of objectives the action will meet.
- **Benefits**—Enter “High,” “Medium” or “Low” as follows:
 - High—Action will provide an immediate reduction of risk exposure for life and property.
 - Medium—Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
 - Low—Long-term benefits of the action are difficult to quantify in the short term.
- **Cost**—Enter “High,” “Medium” or “Low” as follows:
 - High—Existing funding will not cover the cost of the action; implementation would require new revenue through an alternative source (for example, outside funding sources, bonds, grants, and fee increases).
 - Medium—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
 - Low—The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.
- **Do Benefits Exceed the Cost?**—Enter “Yes” or “No.” This is a qualitative assessment. Enter “Yes” if the benefit rating (high, medium or low) is the same as or higher than the cost rating (high benefit/high cost; high benefit/medium cost; medium benefit/low cost; etc.). Enter “No” if the benefit rating is lower than the cost rating (medium benefit/high cost, low benefit/medium cost; etc.)
- **Is the Action Eligible for Outside Funding Sources?**—Enter “Yes” or “No.” For grant funding, refer to the fact sheet on FEMA hazard mitigation grant programs in the annex preparation toolkit and the table on page 16 of these instructions.
- **Can Action Be Funded Under Existing Program Budgets?**—Enter “Yes” or “No.” In other words, is this action currently budgeted for, or would it require a new budget authorization or funding from another source such as grants, non-profit funding, or donations?
- **Implementation Priority**— Enter “High,” “Medium” or “Low” as follows:
 - High Priority—An action that meets multiple objectives, has benefits that exceed costs, and has a secured source of funding. Action can be completed in the short term (1 to 5 years).
 - Medium Priority—An action that meets multiple objectives, has benefits that exceed costs, and is eligible for funding though no funding has yet been secured for it. Action can be completed in the short term (1 to 5 years), once funding is secured. Medium-priority actions become high-priority actions once funding is secured.
 - Low Priority—An action that will mitigate the risk of a hazard, has benefits that do not exceed the costs or are difficult to quantify, has no secured source of funding, and is not eligible for any known outside funding sources. Action can be completed in the long term (1 to 10 years). Low-priority actions may be eligible for outside funding from programs that have not yet been identified.
- **Outside Funding Source Pursuit Priority**— Enter “High,” “Medium” or “Low” as follows:

- **High Priority**—An action that meets identified outside funding source eligibility requirements, has high benefits, and is listed as high or medium implementation priority; local funding options are unavailable or available local funds could be used instead for actions that are not eligible to be funded by outside sources.
- **Medium Priority**—An action that meets identified outside funding source eligibility requirements, has medium or low benefits, and is listed as medium or low implementation priority; local funding options are unavailable.
- **Low Priority**—An action that has not been identified as meeting any outside funding source eligibility requirements.

Actions identified as high-outside-funding-pursuit priority actions should be closely reviewed for consideration when outside funding source opportunities arise.

- **Equity Lens Priority**- Enter “High,” “Medium” or “Low” as follows:
 - **High Priority**—The mitigation action is designed to reduce harm to multiple socially vulnerable groups in the County from one or more of the hazards identified in the LHMP.
 - **Medium Priority**— The mitigation action is designed to reduce harm to a single socially vulnerable population in the County from at least one hazard identified in the LHMP.
 - **Low Priority**—The mitigation action fails to advance social equity in any measurable way in the County

An equity screening tool has been provided in **Appendix B** to these instructions that can be utilized to screen each action to help prioritize each action to the above criteria. The screening of each action using this tool is considered to be optional and not required for jurisdictions applying the equity lens to their action plan prioritization scheme.

Note: If a jurisdiction wishes to identify an action as high priority that is outside of the prioritization scheme for high priorities, a note indicating so should be inserted and a rationale should be provided.

Analysis of Mitigation Actions

In the table titled “Analysis of Mitigation Actions,” for each combination of hazard type and mitigation type, enter the numbers of all recommended actions that address that hazard type and can be categorized as that mitigation type. The mitigation types are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education & Awareness**—Actions to inform residents and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, wetland restoration and preservation, and green infrastructure.

- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.
- **Climate Resilience**—Actions that incorporate methods to mitigate and/or adapt to the impacts of climate change. Includes aquifer storage and recovery activities, incorporating future conditions projections in project design or planning, or actions that specifically address jurisdiction-specific climate change risks, such as sea-level rise or urban heat island effect.
- **Community Capacity Building**—Actions that increase or enhance local capabilities to adjust to potential damage, to take advantage of opportunities, or to respond to consequences. Includes staff training, memorandums of understanding, development of plans and studies, and monitoring programs.

This exercise demonstrates that the jurisdiction has selected a comprehensive range of actions. This table must show at least one action to address each “high” and “medium” ranked hazard. Planning partners should aim to identify at least one action for each mitigation type, but this is not required.

An example of a completed “Analysis of Mitigation Actions” table is provided below. Note that an action can be more than one mitigation type.

Sample Completed Table – Analysis of Mitigation Actions								
Hazard Type	Action Addressing Hazard, by Mitigation Type							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilience	Community Capacity Building
High-Risk Hazards								
Dam Failure	EX-2, 3, 4, 5, 6	EX-1, 6	EX-4, 6		EX-8, 11			EX-3, 4, 8, 9, 10
Drought	EX-2	EX-1	EX-4					EX-3, 4, 8, 9, 10
Medium-Risk Hazards								
Earthquake	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9
Flooding	EX-2, 3, 4, 5, 6, 7	EX-1, 6, 7	EX-4, 6	EX-9	EX-8, 11	EX-6		EX-3, 4, 8, 9, 10
Landslide	EX-2, 3, 4, 5, 7	EX-1, 7	EX-4		EX-8, 11			EX-3, 4, 8, 9, 10
Low-Risk Hazards								
Severe Weather	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4		EX-8, 9, 11		EX-8, 7	EX-3, 4, 8, 9, 10
Wildfire	EX-2, 3, 4, 5, 7	EX-1, 7, 9	EX-4, 9	EX-9	EX-8, 11			EX-3, 4, 8, 9, 10

PUBLIC OUTREACH

FEMA requirements for public outreach will be met by the County’s engagement efforts and are included in the main part of the plan. These may include public meetings, a StoryMap, surveys, etc. If individual jurisdictions want to have a more robust outreach for their local community, the public outreach table in each annex may be used to memorialize those local efforts.

This table should record local public outreach efforts made by your jurisdiction to inform the community of the plan update process. Examples may include local surveys on hazard awareness/preparedness, social media blasts, press releases, and outreach to local groups (CERT, senior citizen organizations, etc.) **This section is optional.**

INFORMATION SOURCES USED FOR THIS ANNEX

This section should describe what resources you used to complete the annex and how you used them. The sources used for Phases 1 and 2 should have been entered previously. List any additional sources used for the preparation of the Phase 3 annex. Review to ensure that all materials used in all three phases are identified. Providing this information is a requirement to pass the state and FEMA review process.

FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

In this section, identify any future studies, analyses, reports, or surveys your jurisdiction needs to better understand its vulnerability to identified or currently unidentified risks. These could be needs based on federal or state agency mandates. **This section is optional.**

ADDITIONAL COMMENTS

Use this section to add any additional information pertinent to hazard mitigation and your jurisdiction not covered in this template. **This section is optional.**

THIS COMPLETES PHASE 3

APPENDIX A— Risk Ranking Calculation Methodology

The instructions below describe the methodology for how risk rankings were derived in the “Loss Matrix” spreadsheet provided with the annex preparation toolkit. The risk-ranking for each hazard assessed its probability of occurrence and its potential impact on people, property, and the economy. Refer to the Loss Matrix spreadsheet in order to follow along.

Probability of Occurrence

A probability factor is assigned based on how often a hazard is likely to occur. The probability of occurrence of a hazard event is generally based on past hazard events in an area, although weight can be given to expected future probability of occurrence based on established return intervals and changing climate conditions. For example, if your jurisdiction has experienced two damaging floods in the last 25 years, the probability of occurrence is high for flooding and scores a 3 under this category. If your jurisdiction has experienced no damage from landslides in the last 100 years, your probability of occurrence for landslide is low, and scores a 1 under this category. Each hazard was assigned a probability factor as follows:

- High—Hazard event is likely to occur within 25 years (Probability Factor = 3)
- Medium—Hazard event is likely to occur within 100 years (Probability Factor = 2)
- Low—Hazard event is not likely to occur within 100 years (Probability Factor = 1)
- None—There is no exposure to the hazard and no probability of occurrence (Probability Factor = 0)

Potential Impacts of Each Hazard

The impact of each hazard is divided into three categories: impacts on people, impacts on property, and impacts on the economy. These categories are also assigned weighted values. Impact on people was assigned a weighting factor of 3, impact on property was assigned a weighting factor of 2 and impact on the economy was assigned a weighting factor of 1.

Impact factors for each category (people, property, economy) are described below:

- **People**—Values for the impact on people is based on the percentage of the population in each of the five (5) classifications for social vulnerability from the National Risk Index (NRI). Values are assigned based on the percentage of the total *population exposed* to the hazard event. The degree of impact on individuals will vary and is not measurable, so the calculation assumes for simplicity and consistency that all people exposed to a hazard because they live in a hazard zone will be equally impacted when a hazard event occurs. Impact factors were assigned as follows:
 - Very High—15 percent or more of the population is exposed to a hazard (Impact Factor = 5), less than 15% of the population exposed to a hazard (impact factor =4)
 - Relatively High—25 percent of more of the population is exposed to a hazard (Impact Factor = 4), less than 25 percent of the population exposed to a hazard (Impact Factor = 3).
 - Relatively Moderate—35 percent or more of the population is exposed to the hazard (Impact Factor = 3), less than 35 percent of the population exposed (Impact Factor =2).
 - a) Relatively Low—50 percent of more of the population is exposed to a hazard (Impact Factor = 2), less than 50 percent of the population exposed to a hazard (Impact Factor =1)
 - Very Low—75 percent of more of the population exposed to a hazard (Impact Factor =1), less than 75 percent of the population exposed (Impact Factor = 0).
 - No impact— No population exposed to the hazard.

The impact factors are additive. There could be multiple levels of exposure for each hazard under the five NRI social vulnerability indices. Please note that if 0 to 74 percent of the population is exposed to

the “very low” classification, the risk ranking score will default to the base-line risk ranking score (Ranking result for the without equity lens option in the loss matrix).

- **Property**—Values are assigned based on the percentage of the total *District Assets exposed* to the hazard event:
 - High—25 percent or more of the total replacement value of the District’s assets are exposed to a hazard (Impact Factor = 3)
 - Medium—10 percent to 24 percent of the total replacement value of the District’s assets are exposed to a hazard (Impact Factor = 2)
 - Low—9 percent or less of the total replacement value of the District’s assets are exposed to the hazard (Impact Factor = 1)
 - No impact—None of the total replacement value of the Districts are exposed to a hazard (Impact Factor = 0)
- **Economy**— How long it will take your District to become 100-percent operable after a hazard event? This is a subjective assessment based on the loss estimation you observe for your service area in the Los Matric.
 - High—Functional downtime of 365 days or more (Impact Factor = 3)
 - Medium—Functional downtime of 180 to 364 days (Impact Factor = 2)
 - Low—Functional downtime of 180 days or less (Impact Factor = 1)
 - No impact—No functional downtime is estimated from the hazard (Impact Factor = 0).

Impacts on People

The percent of the total population exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **green highlighted column**. For those hazards that do not have a defined extent and location the entire population or a portion of the population is considered to be exposed, depending on the hazard. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all people in the planning area would be exposed to drought, but impacts to the health and safety of individuals are expected to be minimal.

Impacts on Property

The percent of the total value exposed to each hazard of concern with a defined extent and location (e.g. floodplain) can be found in the loss estimate matrix in the **blue highlighted column**. For those hazards that do not have a defined extent and location (e.g. severe weather) the entire building stock is generally considered to be exposed. For the drought hazard, it is common for jurisdictions to list “low” or “none,” because all structures in the planning area would be exposed to drought but impacts to structures are expected to be minimal.

Impacts on the Economy

The loss estimates for each hazard of concern that was modeled (i.e. dam failure, flood, earthquake) can be found in the loss estimate matrix in the **orange highlighted column**. For those hazards that have a defined extent and location, but do not have modelled loss results, loss estimates can be the same as exposure or a portion thereof. For example, a large percentage of the building stock may be exposed to landslide or wildland fire risk, but it would not be expected that one event that resulted in loss to all exposed structures would occur. For those hazards that do not have a defined extent and location, exposure is based on the hazard type.

Risk Rating for Each Hazard

A risk rating for each hazard was determined by multiplying the assigned probability factor by the sum of the weighted impact factors for people, property, and the economy:

$$\text{Risk Rating} = \text{Probability Factor} \times \text{Weighted Impact Factor \{people + property + economy\}}$$

This is the number that is shown in the risk ranking table in your template. Generally, score of 30 or greater receive a “high” rating, score between 15 and 30 receive a “medium” rating, and score of less than 15 receives a “low” rating.

APPENDIX B— Equity Lens Screening Tool			
	Procedural	Distributive	Structural
Programs/ Services	How was the target audience included in the design of the program? What actions will be taken to ensure that services and programs are physically and programmatically accessible and inclusive? What are the criteria for participation or receipt of benefits?	Is the program or service designed to meet the needs of underserved and underrepresented communities? If not, what would need to be changed to ensure their equitable participation? How will program dollars be allocated to ensure inclusive and accessible service delivery? Does the cost structure of the program result in disparate use? /Does the fee structure of the service result in increased burdens for low-income communities?	Does this program/service create unintended consequences for communities that are underserved and underrepresented? How will they be mitigated? Is there an opportunity to extend additional benefits through this program/service that can help support the healing of past harms to communities? Does the program empower and build capacity of a community?
Capital Investments	What are the criteria for prioritizing projects and investments? Does the data and information used consider the demographic, geographic and real-world experience of residents and businesses in the area? If data gaps exist, what are you using to guide decisions? What process will be used to get input from the community? How will you reach underserved populations?	Will the investment provide improved safety, health, access, or opportunity for the communities who need it most? How will the underserved people who currently live and work in the area benefit from the investment?	What measures will be taken to mitigate the potential impacts of involuntary displacement in the project? How will business or employment opportunity created through the project be extended to communities of color, people with disabilities, and low-income people? How will community benefits be negotiated?
Regulation	Has analysis been done on the impacts to communities of color, people with disabilities, low-income populations, seniors, children, renters, and other historically underserved or excluded groups? How will impacted communities be able to learn about and understand changes with the regulation? How will the regulation be enforced?	Will the regulation provide improved safety, health, access, or opportunity for the communities who need it most? How will the regulation alleviate any cost-burden for those who are already in a position where it is difficult to pay?	Does the regulation create or inhibit opportunity for communities of color, people with disabilities, and low-income populations? Will enforcement disproportionately negatively affect low-income communities or communities of color? How will this be mitigated?
Planning	How will impacted communities be involved in the planning process? What measures will be taken to ensure the process is fair and inclusive?	How does the plan prioritize and address the needs of the most impacted or vulnerable in the community? Does the plan improve safety, health, access, or opportunity for the communities who need it most? How will resources shift to ensure equitable implementation of the plan?	What measures will be taken to mitigate the potential impacts of involuntary displacement? How will policies support community development? What support is needed to build the community's ownership and self-determination with the plan?

- Procedural equity—ensuring that processes are fair and inclusive in the development and implementation of any program or policy
- Distributive equity—ensuring that resources or benefits and burdens of a policy or program are distributed fairly, prioritizing those with highest need first.
- Structural equity—a commitment and action to correct past harms and prevent future negative consequences by institutionalizing accountability and decision-making structures that aim to sustain positive outcomes

Table 2.0. Equity Screening Question Matrix

Evaluation Question	Response
1. What issue/problem/risk is the action designed to address? And what are the expected benefits?	Issue: Benefits:
2. Who is the target audience/beneficiary for this action? Who is affected if no action is taken?	
3. How would you classify the mitigation action? (Programs/Service; Capital Investment; Regulation; Planning). <i>Refer to questions in table above based on your answer to this question.</i>	
4. Will any community groups be involved in the design/implementation of this action? (i.e. potential partners)	
5. Will this action reduce risk from natural hazards for the following groups? How?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
6. How could this action benefit the following groups? Or How could this action be modified so that there are benefits?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
7. How could this action burden/negatively impact/leave out the following groups, for example through communication, transportation, physical or programmatic barriers?	
Communities of color	
Persons with disabilities and/or access and functional needs	
Households with limited English Proficiency	
Renters	
Economically disadvantaged families	
Seniors (age 65 or older)	
Children (under 15 years of age)	
8. If you have identified burdens, barriers, or negative impacts, or opportunities for benefits please <u>revisit the action</u> to identify strategies to reduce or eliminate burdens or negative impacts; remove communication, transportation, physical or programmatic barriers; or enhance potential benefits.	
9. Have you identified a performance metric for evaluating progress on this action? How will you know when this action is complete? (please provide) Have you considered outcomes for communities of color, people with disabilities, low-income families, people with limited English proficiency, renters, seniors, and children?	

**ANNEX TEMPLATE FOR
SPECIAL-PURPOSE DISTRICTS**

1. DISTRICT NAME

1.1 LOCAL HAZARD MITIGATION PLANNING TEAM

Primary Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

Alternate Point of Contact

Name, Title

Street Address

City, State ZIP

Telephone: xxx-xxx-xxxx

e-mail Address: xxx@xxx.xxx

This annex was developed by the local hazard mitigation planning team, whose members are listed in Table 1-1.

Table 1-1. Local Hazard Mitigation Planning Team Members

Name		Title	

1.2 JURISDICTION PROFILE

1.2.1 Overview

Insert Narrative Profile Information, per Instructions.

The [name of adopting body] assumes responsibility for the adoption of this plan; [name of oversight agency] will oversee its implementation.

All fire districts should include the following sentence (non-fire special purpose districts should delete the sentence):

The District participates/does not participate in the Public Protection Class Rating System and currently has a rating of #.

1.2.2 Service Area

The District service area covers [area in square miles], serving a population of [population].

1.2.3 Assets

Table 1-2 summarizes the assets of the District and their value.

Table 1-2. Special Purpose District Assets

Asset	Value
Property	
[number] acres of land	\$ [value]
Equipment	
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
[description]	\$ [value]
Total:	\$ [value]
Critical Facilities	
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
[description – Include Address]	\$ [value]
Total:	\$ [value]

1.3 CURRENT TRENDS

Insert summary description of service trends.

1.4 CAPABILITY ASSESSMENT

This section describes an assessment of existing capabilities for implementing hazard mitigation strategies. The introduction at the beginning of this volume of the hazard mitigation plan describes the components included in the capability assessment and their significance for hazard mitigation planning.

Findings of the capability assessment were reviewed to identify opportunities to expand, initiate or integrate capabilities to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The “Analysis of Mitigation Actions” table in this annex identifies these as community capacity building mitigation actions. The findings of the assessment are presented as follows:

- An assessment of planning and regulatory capabilities is presented in Table 1-3.
- An assessment of fiscal capabilities is presented in Table 1-4.
- An assessment of administrative and technical capabilities is presented in Table 1-5.
- An assessment of education and outreach capabilities is presented in Table 1-6.

- Classifications under various community mitigation programs are presented in Table 1-7.
- The community's adaptive capacity for the impacts of climate change is presented in Table 1-8.

Table 1-3. Planning and Regulatory Capability

Plan, Study or Program	Date of Most Recent Update	Comment
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		
Name of code, ordinance, policy, program or plan		

Table 1-4. Fiscal Capability

Financial Resource	Accessible or Eligible to Use?
Community Development Block Grants	Yes/No
Capital Improvements Project Funding	Yes/No
Authority to Levy Taxes for Specific Purposes	Yes/No
User Fees for Water, Sewer, Gas or Electric Service	Yes/No
<i>If yes, specify:</i> Enter Response	
Incur Debt through General Obligation Bonds	Yes/No
Incur Debt through Special Tax Bonds	Yes/No
Incur Debt through Private Activity Bonds	Yes/No
Withhold Public Expenditures in Hazard-Prone Areas	Yes/No
State-Sponsored Grant Programs	Yes/No
Development Impact Fees for Homebuyers or Developers	Yes/No
Other	Yes/No
<i>If yes, specify:</i> Enter Response	

Table 1-5. Administrative and Technical Capability

Staff/Personnel Resource	Available?
Planners or engineers with knowledge of land development and land management practices <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Engineers or professionals trained in building or infrastructure construction practices <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Planners or engineers with an understanding of natural hazards <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Staff with training in benefit/cost analysis <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Surveyors <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Personnel skilled or trained in GIS applications <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Scientist familiar with natural hazards in local area <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Emergency manager <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Grant writers <i>If Yes, Department /Position:</i> Enter Response	Yes/No
Other <i>If Yes, Department /Position:</i> Enter Response	Yes/No

Table 1-6. Education and Outreach Capability

Criterion	Response
Do you have a public information officer or communications office?	Yes/No
Do you have personnel skilled or trained in website development?	Yes/No
Do you have hazard mitigation information available on your website? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you use social media for hazard mitigation education and outreach? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any citizen boards or commissions that address issues related to hazard mitigation? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any other programs in place that could be used to communicate hazard-related information? <i>If yes, briefly describe:</i> Enter Response	Yes/No
Do you have any established warning systems for hazard events? <i>If yes, briefly describe:</i> Enter Response	Yes/No

Table 1-7. Community Classifications

	Participating?	Classification	Date Classified
FIPS Code	Yes/No		Date
DUNS#	Yes/No		Date
Community Rating System	Yes/No		Date
Building Code Effectiveness Grading Schedule	Yes/No		Date
Public Protection	Yes/No		Date
Storm Ready	Yes/No		Date
Firewise	Yes/No		Date
Tsunami Ready	Yes/No		Date

Table 1-8. Adaptive Capacity for Climate Change

Criterion	Jurisdiction Rating ^a
Technical Capacity	
Jurisdiction-level understanding of potential climate change impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Jurisdiction-level monitoring of climate change impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Technical resources to assess proposed strategies for feasibility and externalities <i>Comment:</i> Enter Comment	High/Medium/Low
Jurisdiction-level capacity for development of greenhouse gas emissions inventory <i>Comment:</i> Enter Comment	High/Medium/Low
Capital planning and land use decisions informed by potential climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Participation in regional groups addressing climate risks <i>Comment:</i> Enter Comment	High/Medium/Low
Implementation Capacity	
Clear authority/mandate to consider climate change impacts during public decision-making processes <i>Comment:</i> Enter Comment	High/Medium/Low
Identified strategies for greenhouse gas mitigation efforts <i>Comment:</i> Enter Comment	High/Medium/Low
Identified strategies for adaptation to impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Champions for climate action in local government departments <i>Comment:</i> Enter Comment	High/Medium/Low
Political support for implementing climate change adaptation strategies <i>Comment:</i> Enter Comment	High/Medium/Low
Financial resources devoted to climate change adaptation <i>Comment:</i> Enter Comment	High/Medium/Low
Local authority over sectors likely to be negative impacted <i>Comment:</i> Enter Comment	High/Medium/Low

Criterion	Jurisdiction Rating ^a
Public Capacity	
Local residents knowledge of and understanding of climate risk <i>Comment:</i> Enter Comment	High/Medium/Low
Local residents support of adaptation efforts <i>Comment:</i> Enter Comment	High/Medium/Low
Local residents' capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Local economy current capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low
Local ecosystems capacity to adapt to climate impacts <i>Comment:</i> Enter Comment	High/Medium/Low

- a. High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

1.5 INTEGRATION REVIEW

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed at the end of this annex were used to provide information on integration. The progress reporting process described in Volume 1 of the hazard mitigation plan will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

1.5.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

1.5.2 Opportunities for Future Integration

The capability assessment presented in this annex indicates opportunities to integrate this mitigation plan with other jurisdictional planning/regulatory capabilities. Capabilities were identified as integration opportunities if they can support or enhance the actions identified in this plan or be supported or enhanced by components of this plan. The capability assessment identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description
- Plan or Program Name—Description

Taking action to integrate each of these programs with the hazard mitigation plan was considered as a mitigation action to include in the action plan presented in this annex.

1.6 RISK ASSESSMENT

1.6.1 Jurisdiction-Specific Natural Hazard Event History

Table 1-8 lists past occurrences of natural hazards for which specific damage was recorded in this jurisdiction Other hazard events that broadly affected the entire planning area, including this jurisdiction, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 1-8. Past Natural Hazard Events				
Type of Event	FEMA Disaster #	Date		Damage Assessment
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$
Insert event type			Date	\$

1.6.2 Hazard Risk Ranking

Table 1-9 presents a local ranking of all hazards of concern for which this hazard mitigation plan provides complete risk assessments. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and district operations. Mitigation actions target hazards with high and medium rankings.

Table 1-9. Hazard Risk Ranking

Rank	Hazard	Risk Ranking Score	Risk Category
1			High/Medium/Low
2			High/Medium/Low
3			High/Medium/Low
4			High/Medium/Low
5			High/Medium/Low
6			High/Medium/Low
7			High/Medium/Low
8			High/Medium/Low
9			High/Medium/Low

1.6.3 Jurisdiction-Specific Vulnerabilities

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- Insert as appropriate.
- Insert as appropriate.
- Insert as appropriate.

Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in this annex.

1.7 STATUS OF PREVIOUS PLAN ACTIONS

If your jurisdiction has no previous hazard mitigation plan, please enter an “X” in the box at right and do not complete this section.

Table 1-10 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 1-10. Status of Previous Plan Actions

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				
Insert Action Number & Text Comment: Enter Comment				

Action Item from Previous Plan	Completed	Removed; No Longer Feasible	Carried Over to Plan Update	
			Check if Yes	Action # in Update
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				
Insert Action Number & Text				
Comment: Enter Comment				

1.8 HAZARD MITIGATION ACTION PLAN

Table 1-11 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 1-12 identifies the priority for each action. Table 1-13 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 1-11. Hazard Mitigation Action Plan Matrix

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-1 —Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas.						
<i>Hazards Mitigated:</i> Enter Response						
Existing	Enter Response	Enter Response	Enter Response	High	HMGP, PDM, FMA	Short-term

Benefits New or Existing Assets	Objectives Met	Lead Agency	Support Agency	Estimated Cost	Sources of Funding	Timeline ^a
Action xxx-2 —Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan.						
<u>Hazards Mitigated:</u> All hazards						
New & Existing	Enter Response	Enter Response	Enter Response	Low	Staff Time, General Funds	Short-term
Action xxx-3 —Purchase generators for critical facilities and infrastructure that lack adequate backup power, including [redacted].						
<u>Hazards Mitigated:</u> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire						
Existing	Enter Response	Enter Response	Enter Response			
Action xxx-4 —Description						
<u>Hazards Mitigated:</u> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-5 —Description						
<u>Hazards Mitigated:</u> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-6 —Description						
<u>Hazards Mitigated:</u> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-7 —Description						
<u>Hazards Mitigated:</u> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response
Action xxx-8 —Description						
<u>Hazards Mitigated:</u> Enter Response						
Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response	Enter Response

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

Acronyms used here are defined at the beginning of this volume.

Table 1-12. Mitigation Action Priority

Action #	# of Objectives Met	Benefits	Costs	Do Benefits Equal or Exceed Cost?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Implementation Priority ^a	Grant Pursuit Priority ^a
1	3	High	High	Yes	Yes	No	Medium	High
2	3	Low	Low	Yes	No	Yes	High	Low
3	3	High	Medium	Yes	Yes	No	Medium	High
4								
5								
6								
7								
8								
9								

a. See the introduction to this volume for explanation of priorities.

Table 1-13. Analysis of Mitigation Actions

Hazard Type	Action Addressing Hazard, by Mitigation Type ^a							
	Prevention	Property Protection	Public Education & Awareness	Natural Resource Protection	Emergency Services	Structural Projects	Climate Resilient	Community Capacity Building
High-Risk Hazards								
Medium-Risk Hazards								
Low-Risk Hazards								

a. See the introduction to this volume for explanation of mitigation types.

1.9 PUBLIC OUTREACH

Table 1-14 lists public outreach activities for this jurisdiction.

Table 1-14. Local Public Outreach

Local Outreach Activity	Date	Number of People Involved

1.10 INFORMATION SOURCES USED FOR THIS ANNEX

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>
- <INSERT PLAN/PROGRAM AND DESCRIPTION OF HOW IT WAS USED>

The following outside resources and references were reviewed:

- **Hazard Mitigation Plan Annex Development Toolkit**—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- <INSERT DOCUMENT AND DESCRIPTION OF HOW IT WAS USED>

1.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Insert text, if any; otherwise, delete section

1.12 ADDITIONAL COMMENTS

Insert text, if any; otherwise, delete section