

EXECUTIVE SUMMARY

HAZARD MITIGATION PLANNING BACKGROUND

Hazard mitigation is the use of long-term and short-term policies, programs, projects, and other activities to alleviate the death, injury, and property damage that can result from a disaster. Santa Clara County and a partnership of local governments within the county have developed a hazard mitigation plan to reduce risks from natural disasters in the Santa Clara County Operational Area—defined as the unincorporated county and incorporated jurisdictions within the geographical boundaries of the county. The plan complies with federal and state hazard mitigation planning requirements to establish eligibility for funding under Federal Emergency Management Agency (FEMA) grant programs.

Initial Regional Planning Efforts for Hazard Mitigation

The Association of Bay Area Governments (ABAG) provides communities in the San Francisco Bay area with planning and research resources related to land use, housing, environmental and water resource protection, disaster resilience, energy efficiency, hazardous waste mitigation, risk management and financial services. In 2004, ABAG led a regional effort to address hazard mitigation planning for Bay Area jurisdictions. ABAG's regional template was used by numerous counties and cities to meet federal hazard mitigation planning requirements. The ABAG process enabled individual planning processes to meet local government needs, while pooling resources and eliminating redundant planning efforts.

In 2010, ABAG conducted its second regional planning effort. Municipalities that used the 2010 updated ABAG tools to meet federal hazard mitigation planning requirements included the County of Santa Clara and the cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San José, Santa Clara, Saratoga and Sunnyvale. ABAG discontinued its full support of the regional planning concept in 2015, so jurisdictions that were covered under the regional plan must initiate individual or reformed multijurisdictional planning efforts to continue to comply with federal mitigation planning requirements.

The 2016 Santa Clara County Operational Area Planning Effort

In 2016, Santa Clara County, the Santa Clara County Fire Department, and all incorporated cities in Santa Clara County teamed together to prepare an updated multi-jurisdiction hazard mitigation plan tailored to the local needs and capabilities of the Santa Clara County Operational Area. The planning partnership developed a new plan from scratch, using lessons learned from the earlier ABAG planning efforts. The 2016 plan differs from previous plans in the following ways:

- The plan is not a subset of a larger regional effort. It focuses on the geographic region of the Santa Clara County Operational Area and on hazards of concern specific to that area.
- The plan follows the planning guidance of FEMA's Community Rating System so that it maximizes the planning benefit for the nine communities in the Operational Area participating in that program.
- Newly available data and tools provide for a more detailed and accurate risk assessment.

- The risk assessment has been formatted to provide information on risk and vulnerability that will allow a measurement of cost-effectiveness, as required under FEMA mitigation grant programs.
- The update gave the planning partners an opportunity to engage local citizens and gauge their perception of risk and support for risk reduction through mitigation.

PLAN DEVELOPMENT APPROACH

Phase 1—Organization

A core planning group consisting of a contract consultant and Santa Clara County Office of Emergency Services staff was assembled to facilitate the update of this plan. A planning partnership was formed by engaging the eligible local governments within the Operational Area and making sure they understood their expectations for compliance under the updated plan. A 19-member working group was assembled to oversee the plan update, consisting of both governmental and not-governmental stakeholders within the Operational Area. Coordination with other county, state, and federal agencies involved in hazard mitigation occurred throughout the plan update process. This phase included a review of the existing ABAG hazard mitigation plan, the California statewide hazard mitigation plan, and existing programs that may support hazard mitigation actions.

Phase 2—Risk Assessment

Risk assessment is the process of measuring the potential loss of life resulting from natural hazards, as well as personal injury, economic injury and property damage, in order to determine the vulnerability of people, buildings, and infrastructure to natural hazards. For this update, risk assessment models were enhanced with new data and technologies that have become available since 2010. The Working Group used the risk assessment to rank risk and to gauge the potential impacts of each hazard of concern in the Operational Area. The risk assessment included the following:

- Hazard identification and profiling
- Assessment of the impact of hazards on physical, social, and economic assets
- Identification of particular areas of vulnerability
- Estimates of the cost of potential damage.

Based on the risk assessment, hazards were ranked for the risk they pose to the overall Operational Area, as shown in Table ES-1.

| Table ES-1. Hazard Risk Ranking | | |
|---------------------------------|-----------------------|----------|
| Hazard Ranking | Hazard Event | Category |
| 1 | Earthquake | High |
| 2 | Flood | High |
| 3 | Severe Weather | High |
| 4 | Dam and Levee Failure | Medium |
| 5 | Landslide | Medium |
| 6 | Wildfire | Medium |
| 7 | Drought | Medium |

Each planning partner also ranked hazards for its own area. Table ES-2 summarizes the categories of high, medium and low (relative to other rankings) based on the numerical ratings that each jurisdiction assigned each hazard.

Table ES-2. Summary of Hazard Ranking Results

| | Number of Jurisdictions Assigning Ranking to Hazard | | | |
|-----------------------|---|--------|-----|------------|
| | High | Medium | Low | Not Ranked |
| Dam Failure | 0 | 4 | 10 | 3 |
| Drought | 0 | 1 | 15 | 1 |
| Earthquake | 17 | 0 | 0 | 0 |
| Flood | 0 | 17 | 0 | 0 |
| Landslide | 1 | 10 | 3 | 3 |
| Severe weather | 2 | 15 | 0 | 0 |
| Wildfire | 5 | 5 | 3 | 4 |

The results indicate the following general patterns:

- The earthquake hazard was most commonly ranked as high.
- The flood, landslide and severe weather hazards were most commonly ranked as medium.
- The dam failure and drought hazards were most commonly ranked as low.

Phase 3—Public Outreach

The Core Planning Group implemented a multi-media public involvement strategy utilizing the outreach capabilities of the planning partnership that was approved by the Working Group. The strategy included public meetings to introduce the planning process and present the risk assessment, a hazard mitigation survey, a project website, the utilization of social media (Facebook, Twitter and Nextdoor) and multiple media releases.

Phase 4—Goals, Objectives and Actions

The Working Group reviewed and updated the goals from the 2010 ABAG plan and developed a set of objectives. The planning partnership selected a range of appropriate mitigation actions to work toward achieving the goals set forth in this plan update. Additionally, the Working Group selected a set of county-wide mitigation actions.

Phase 5—Implementation and Maintenance Strategy

The Working Group developed a plan implementation and maintenance strategy that includes annual progress reporting, a strategy for continued public involvement, a commitment to plan integration with other relevant plans and programs, and a recommitment from the planning partnership to actively maintain the plan over the five-year performance period.

Phase 6—Plan Document Development

The Core Planning Group and Working Group assembled a document to meet federal hazard mitigation planning requirements for all partners. The updated plan contains two volumes. Volume 1 contains components that apply to all partners and the broader Operational Area. Volume 2 contains all components that are jurisdiction-specific. Each planning partner has a dedicated annex in Volume 2.

Phase 7—Adoption

Once pre-adoption approval has been granted by the California Office of Emergency Services and FEMA Region IX, the final adoption phase will begin. Each planning partner will individually adopt the updated plan.

Phase 8—Plan Implementation

Plan implementation will occur over the next five years as the planning partnership begins to implement the countywide and jurisdiction-specific actions identified in this plan.

MITIGATION GOALS AND OBJECTIVES

The following guiding principle guided the Working Group and the planning partnership in selecting the actions contained in this plan update:

Carefully plan for the maintenance and enhancement of a disaster-resistant Operational Area by reducing the current and future potential loss of life, property damage, and environmental degradation from various hazards, while accelerating economic recovery from those hazards.

Goals

The Working Group and the planning partnership established the following goals for the plan update:

1. Actively develop community awareness, understanding, and interest in hazard mitigation and empower the Operational Area to engage in the shaping of associated mitigation policies and programs.
2. Minimize potential for loss of life, injury, social impacts, and dislocation due to hazards.
3. Minimize potential for damage to property, economic impacts, and unusual public expense due to hazards.
4. Provide essential information to the whole community that promotes personal preparedness and includes advice to reduce personal vulnerability to hazards.
5. Encourage programs and projects that promote community resiliency by maintaining the functionality of critical Operational Area resources, facilities, and infrastructure.
6. Promote an adaptive and resilient Operational Area that proactively anticipates the impacts of climate change.

The effectiveness of a mitigation strategy is assessed by determining how well these goals are achieved.

Objectives

The following objectives were identified to help establish priorities for recommended mitigation actions. Each selected objective meets multiple goals, serving as a stand-alone measurement of the effectiveness of a mitigation action, rather than as a subset of a goal. The objectives are as follows:

1. Develop and provide updated information about threats, hazards, vulnerabilities, and mitigation strategies to state, regional, and local agencies, as well as private sector groups.
2. Improve understanding of the locations, potential impacts, and linkages among threats, hazards, vulnerability, and measures needed to protect life.
3. Encourage the incorporation of mitigation best management measures into plans, codes, and other regulatory standards for public, private, and non-governmental entities within the Operational Area.
4. Inform the public on the exposure to natural hazard risk and ways to increase the public's capability to prevent, prepare, respond, recover, and mitigate impacts of natural hazard events.
5. Establish and maintain partnerships in the identification and implementation of mitigation measures in the Operational Area.
6. Advance community and natural environment sustainability and resilience to future impacts through preparation and implementation of state, regional, and local projects.
7. Reduce repetitive property losses from all hazards.

8. Where feasible and cost-effective, encourage property protection measures for vulnerable structures located in hazard areas.
9. Improve systems that provide warning and emergency communications.

MITIGATION ACTION PLAN

Mitigation actions presented in this update are activities designed to reduce or eliminate losses resulting from natural hazards. The update process resulted in the identification of more than 344 mitigation actions for implementation by individual planning partners, as presented in Volume 2 of this plan. In addition, the Working Group and planning partnership identified countywide actions benefiting the whole partnership, as listed in Table ES-3.

Table ES-3. Hazard Mitigation Action Plan Matrix

| Action Number and Description | Priority |
|--|----------|
| Action SCOA-1 —Continue to maintain a website that will house the Operational Area hazard mitigation plan, its progress reports, and all components of the plan’s maintenance strategy to provide the planning partners and public ongoing access to the plan and its implementation. | High |
| Action SCOA-2 —Continue to leverage, support and enhance ongoing, regional public education and awareness programs as a method to educate the public on risk, risk reduction and community resilience. | High |
| Action SCOA-3 —Continue ongoing communication and coordination in the implementation of the Santa Clara County Operational Area Hazard Mitigation Plan. | High |
| Action SCOA-4 —Continue to support the use, development and enhancement of a regional crisis communications system. | High |
| Action SCOA-5 —Strive to capture time-sensitive, perishable data—such as high water marks, extent and location of hazard, and loss information—following hazard events to support future updates to the risk assessment. | High |
| Action SCOA-6 —Identify new and comprehensive hazard datasets to improve and augment future updates to the risk assessment | High |

IMPLEMENTATION

Full implementation of the recommendations of this plan will require time and resources. The measure of the plan’s success will be its ability to adapt to changing conditions. The County of Santa Clara and its planning partners will assume responsibility for adopting the recommendations of this plan and committing resources toward implementation. The framework established by this plan commits all planning partners to pursue actions when the benefits of a project exceed its costs. The planning partnership developed this plan with extensive public input, and public support of the actions identified in this plan will help ensure the plan’s success.