

EXECUTIVE SUMMARY

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. Sonoma County developed an updated hazard mitigation plan in partnership with the following local governments within the county:

- **Town of Windsor**
- **City of Sonoma**
- **City of Cotati**
- **City of Santa Rosa**
- **Gold Ridge Resource Conservation District**
- **Sonoma Resource Conservation District**
- **Sonoma County Agricultural Preservation & Open Space District**
- **County of Sonoma**
- **Northern Sonoma County Fire Protection District**
- **Rancho Adobe Fire**
- **North Sonoma Coast Fire Protection District**
- **Timber Cove Fire Protection District**
- **Cloverdale Fire Protection District**
- **Sonoma County Fire Protection District**

The hazard mitigation plan defines measures to reduce risks from natural disasters in the Sonoma County Operational Area, which consists of the entire county, including unincorporated areas, incorporated cities, and special purpose districts. The plan complies with federal and state hazard mitigation planning requirements to establish eligibility for funding under Federal Emergency Management Agency (FEMA) grant programs for all planning partners. It updates the County's previous plan, the *2016 Sonoma County Operational Area Hazard Mitigation Plan*.

PLAN DEVELOPMENT APPROACH

Organization

A core planning team consisting of a contract consultant and Sonoma County staff was assembled to facilitate this plan update. A planning partnership was formed by engaging eligible local governments and making sure they understood their expectations for compliance under the updated plan. A steering committee was assembled to oversee the plan update, consisting of both governmental and non-governmental stakeholders within the planning area. Coordination with other local, state, and federal agencies involved in hazard mitigation occurred throughout the plan update process. Organization efforts included a review of the County's 2016 hazard mitigation plan, the California statewide hazard mitigation plan, and existing programs that may support hazard mitigation actions.

Public Outreach

The planning team implemented a multi-media public involvement strategy utilizing the outreach capabilities of the planning partnership that was approved by the Steering Committee. The strategy included public meetings, a hazard mitigation survey, a project website, the use of social media, and multiple media releases.

Plan Document Development

The planning team and Steering Committee 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 planning area. Volume 2 contains all components that are jurisdiction-specific. Each planning partner has a dedicated annex in Volume 2.

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.

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. For this update, risk assessment models were enhanced with new data and technologies. The Steering Committee used the risk assessment to rate risk and to gauge the potential impacts of each hazard of concern in the planning 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 rated for the risk they pose to the overall planning area. Figure ES-1 shows the resulting scores and ratings for the entire Sonoma County planning area. Each planning partner also rated hazards for its own area. Figure ES-2 summarizes how the 14 participating planning partners rated each hazard. The results indicate the following general patterns:

- Almost all planning partners rated earthquake and wildfire in the highest risk category.
- Flooding, severe weather, and landslide/mass movement are the hazards most commonly rated in the medium risk category by individual planning partners, though landslide/mass movement was rated in the highest risk category countywide.
- Sea-level rise and tsunami are the hazards most commonly rated as lowest risk by individual planning partners, though sea-level rise was rated as a medium risk countywide.

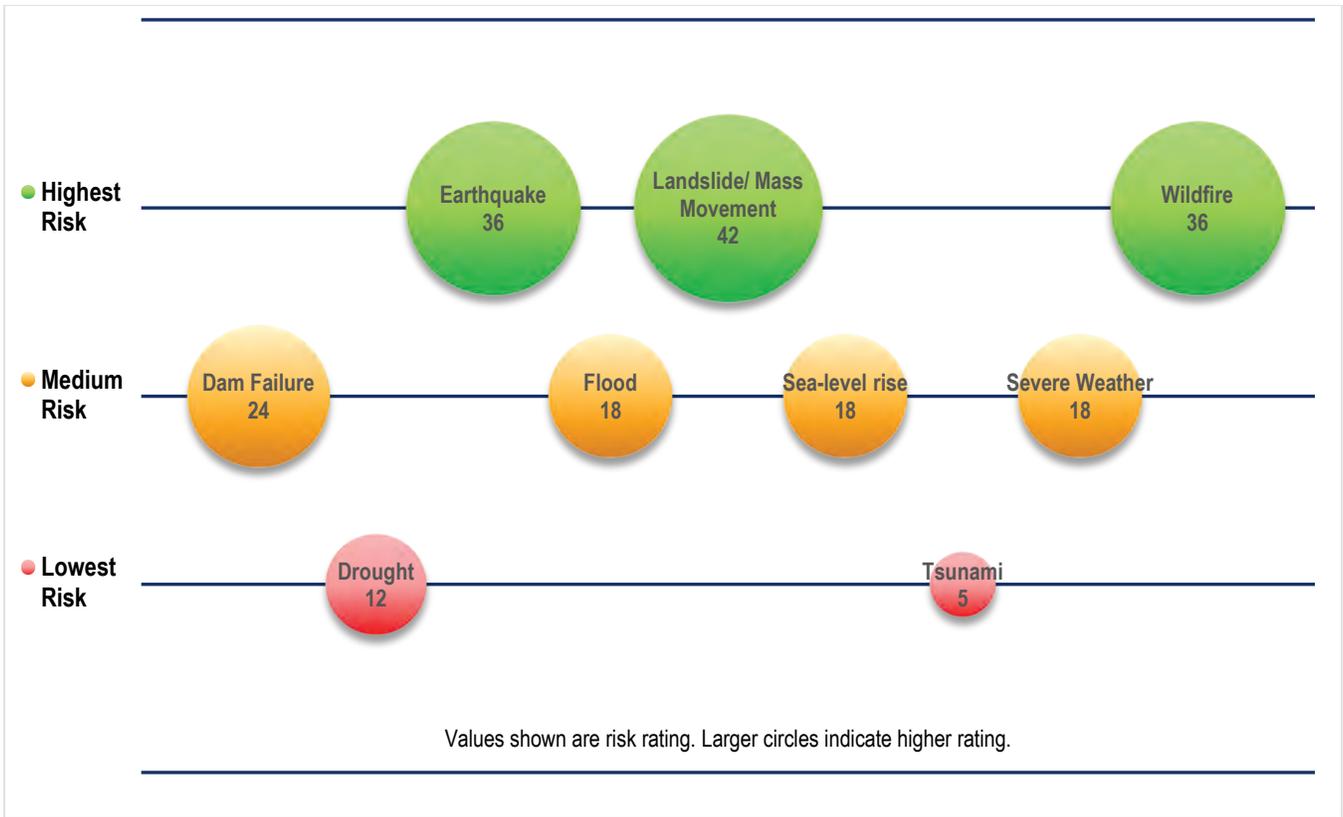


Figure ES-1. Countywide Hazard Risk Rating

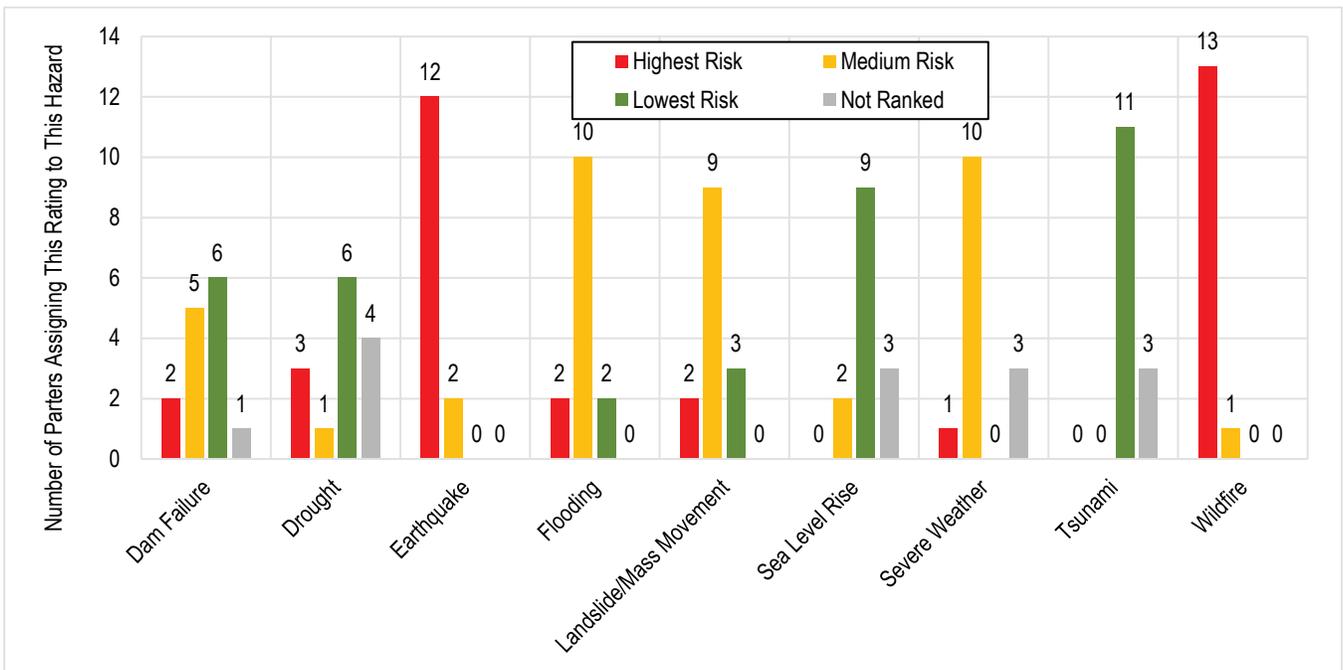


Figure ES-2. Summary of Risk Rating for Individual Planning Partners

MITIGATION GOALS AND OBJECTIVES

The Steering Committee reviewed and made minor updates to the guiding principle, goals, and objectives from the *2016 Sonoma County Operational Area Hazard Mitigation Plan*. The following guiding principle guided the Steering Committee and planning partners in selecting actions contained in this plan update:

Create a resilient Sonoma County for the whole community.

Goals

The Steering Committee and planning partners established the following goals for the plan update:

1. Protect people and minimize loss of life, injury, and social impacts
2. Minimize potential for loss of property, economic and social impacts, and displacement due to hazards.
3. Minimize potential for environmental impacts and consider a broad-range of mitigation solutions, including nature-based solutions where feasible.
4. Communicate natural hazard risk to the whole community within Sonoma County.
5. Support and inform the development of relevant mitigation policies and programs.
6. Promote an adaptive and resilient Sonoma County that proactively anticipates the future impacts from hazards within the county.
7. Pursue the development and implementation of long-term, cost-effective, and environmentally sound mitigation projects.
8. Enhance the capability/capacity of the Sonoma County planning area to prepare, respond and recover from the impact of natural hazards.

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

Objectives

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 also are used to help establish priorities. The objectives are as follows:

1. Incorporate mitigation best management measures into plans, codes, and other regulatory standards for the private sector, nonprofit agencies, and community-based organizations within the planning area.
2. Maintain established partnerships in the identification and implementation of mitigation measures in the Sonoma County Planning area.
3. Retrofit, purchase, mitigate or relocate structures in high hazard areas, with an emphasis on those subject to repetitive damages.
4. Promote and implement hazard mitigation plans and projects that are consistent with state, regional, and local climate action and adaptation goals, policies, and programs.
5. Improve and expand systems that provide warning and emergency communications to the whole community.
6. Increase resilience and capabilities of community lifelines.

7. Prevent (or discourage) new development in hazardous areas or ensure that if building occurs in high-risk areas that it is done in such a way as to minimize risk
8. At the local government level, continually improve understanding of the location and potential impacts of natural hazards, utilizing the best available data and science
9. Consider the impacts of natural hazards in all planning mechanisms that address current and future land uses within the planning area
10. Minimize adverse impacts from flood risk on vulnerable communities.
11. Through the enforcement of relevant federal, State and local regulations, sustain life and property protection measures for all communities and structures located in the Sonoma County Planning area.
12. All cities, the County, special districts, and tribal organizations will develop, adopt, and implement local hazard mitigation principles that may be integrated with local comprehensive plan safety elements, Community Wildfire Protection Plans, floodplain management plans, facilities master plans, and other local planning initiatives.

MITIGATION ACTION PLAN

The planning partners selected mitigation actions to work toward achieving the goals set forth in this plan update. 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 309 mitigation actions for implementation by individual planning partners, as presented in Volume 2 of this plan. In addition, the Steering Committee and planning partners identified countywide actions benefiting the whole partnership, as listed in Table ES-4.

IMPLEMENTATION

The Steering Committee developed a plan implementation and maintenance strategy that includes grant monitoring and coordination, 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 monitoring and evaluating the plan over the five-year performance period.

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. Sonoma County 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.

Table ES-1. Area-Wide Hazard Mitigation Actions

Action Number and Description	Priority for Implementation	Priority for Pursuing Grants
CW-1—The County will pursue an “Information Sharing Access Agreement” with FEMA allowing the County to readily access FEMA repetitive loss data for the entire county as needed at a level of detail to study and analyze repetitive flood loss problems in the county	High	N/A
CW-2—Continue to maintain a county-wide hazard mitigation website and the associated Story-Map that will store the hazard mitigation plan and provide the public an opportunity to monitor plan implementation progress. Each planning partner can support this initiative by including an initiative in its action plan of creating a link to the County hazard mitigation website.	High	N/A
CW-3—Leverage public outreach partnering capabilities in the planning area (such as CERT) to promote a uniform and consistent message on the importance of proactive hazard mitigation.	High	N/A
CW-4—Continue to update hazard mapping with best available data and science as it evolves, within the capabilities of the planning partnership. Support FEMA’s RiskMAP initiative.	High	Medium
CW-5—Retain a steering committee as a working body over time to monitor progress of the hazard mitigation plan, provide technical assistance to planning partners, manage data, and oversee the update of the plan according to schedule. This body will continue to operate under the ground rules established at its inception.	High	N/A
CW-6—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 as well as other plans and programs that utilize hazard extent and location data	High	N/A
CW-7—Utilize viable and relevant information, data and tools (Hazus models) developed as part of the update to the risk assessment of this plan update to support training and exercise of the County’s preparedness, response and recovery programs	High	N/A