

**Sonoma County  
Hazard Mitigation Plan**

**HAZARDS ASSESSMENT**

**APRIL 2017**

**Sonoma County Permit and Resource Management Department  
2550 Ventura Avenue  
Santa Rosa, CA 95403**

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**Adopted by Resolution No. 17-XXXX of  
the Sonoma County Board of Supervisors  
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# INTRODUCTION

## DMA 2000, Stafford Act, and Title 44 Code of Federal Regulations (CFR) §201.6. Requirements:

### Element B: Hazard Identification And Risk Assessment

#### *Requirement*

**§201.6(c)(2)(i):** *[The risk assessment shall include a] description of the type, location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.*

**§201.6(c)(2)(ii):** *[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:*

**Requirement §201.6(c)(2)(ii)(A):** *The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;*

**Requirement §201.6(c)(2)(ii)(B):** *An estimate of the potential dollar losses to vulnerable structures identified in this section and a description of the methodology used to prepare the estimate.*

**Requirement §201.6(c)(2)(ii)(C):** *Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.*

Source: FEMA, March 2011.

The 2016 Sonoma County Hazard Mitigation Plan assess the natural hazard risks associated with earthquakes, floods, wildland fires, and landslides. While climate change risks are mentioned in the individual hazard profiles, for the purposes and scope of this plan, in depth climate change impacts and considerations can be found in Appendix D.

The risk assessment process measures the potential loss to a community, including loss of life, personal injury, property damage, and economic injury resulting from a hazard event. The risk assessment process allows a community to better understand their potential risk and associated vulnerability to natural hazards. This information provides the framework for a community to develop and prioritize mitigation strategies and plans to help reduce both the risk and vulnerability from future hazard events. Natural hazard risks are evaluated by analyzing:

- Probability –The probability of an event occurring;

and

- Impact –the size of and severity of impact varies in terms of cost and impact on health, human life, and other critical factors.

The hazard and risk assessment for this Multi-Hazard Mitigation Plan follows the methodology recommended by FEMA: 1) physical characteristics of the hazard; 2) past occurrences of the hazard in the County; 3) likelihood of future occurrence; 4) inventory of assets; 5) vulnerability of the people and structures in the County, especially critical facilities; 6) estimated impacts and losses of future events on the County's people, built environment; 7) and Hazard-specific plans, programs, laws and financial resources and key entities.

## **Methods and Sources**

The Sonoma County Permit and Resource Management Department (PRMD), Department of Information System GIS division, was involved in the initial and final analysis of the earthquakes, floods, wildland fires, and landslides hazards. PRMD GIS was solely responsible for data research and acquisition, and subsequent, review per quality assurance/quality control, data modelling and unilateral decisions regarding minor content/format changes to remain consistent with the presentation of specific hazards such as flooding. Where available, PRMD GIS used mandatory official source maps prepared by Federal Emergency Management Administration, (FEMA), the California Department Forestry and Fire Protection (CALFire), and the California Geological Survey (CGS) to prepare Sonoma County hazard maps.