

**Sonoma County
Hazard Mitigation Plan**

I NTRODUCTION

APRIL 2017

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

**Sonoma County Fire and Emergency Services Department
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**Adopted by Resolution No. 17-XXXX of the
Sonoma County Board of Supervisors
Month Date, 2017**

INTRODUCTION

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INTRODUCTION

1. PURPOSE OF THE PLAN

Purpose of the Plan

This Hazard Mitigation Plan was prepared in accordance with Federal Emergency Management Agency's (FEMA) Local Hazard Mitigation Plan Guidelines and, once approved by FEMA, will maintain Sonoma County's eligibility for federal assistance for pre-disaster hazard mitigation and post disaster recovery assistance. Actions identified in the mitigation strategy are given priority for funding and technical assistance by State and Federal government. This Hazard Mitigation Plan represents the County's commitment to pre-disaster mitigation, prevention and preparation.

Hazard mitigation is based on the premise that many losses that could result from hazards could be avoided, prevented, or minimized through better planning, construction, design and education beforehand. The purpose of the Hazard Mitigation Plan is to significantly reduce the loss of life, community, economy, and property caused by natural disasters. The Hazard Mitigation Plan 1) assesses and analyzes County relevant hazards; 2) identifies mitigation actions; and 3) seeks to implement these actions during the 2016 – 2021 cycle, subject to the limitations of funding and staff.

A hazard mitigation plan differs from an emergency response plan in that it is intended to be proactive rather than reactive and carried out before disaster events occur. In the past, emergency management has focused primarily on responding to disasters. As a result of the growing volume and severity of preventable, repetitive and costly losses from natural disasters, the Federal government adopted the Disaster Mitigation Act of 2000 (DMA 2000). Local governments are required to prepare and implement a hazard mitigation plan to be eligible for certain types of pre- and post-disaster financial assistance. The general purpose of DMA 2000 is to reduce preventable, repetitive disaster losses by encouraging states and local jurisdictions to plan more wisely and take more proactive actions to reduce vulnerability and risk in order to increase a community's resiliency.

Despite the County's efforts, no amount of planning or mitigation can prevent disasters from occurring or eliminate the risk and impacts of such events all together. Though natural disasters will continue to occur, the County will take actions to reduce the risks and impacts these hazards pose to life, property, and economy. While this Hazard Mitigation Plan seeks to identify opportunities for reasonable mitigation actions, each individual has a responsibility to be aware of the potential hazards where they live and to minimize their own household's vulnerability.

Scope

The term "Hazard" is defined by FEMA as "any event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural losses,

damage to the environment, interruption of business, or other types of harm or loss. Sonoma County is subject to a variety of hazards, be it natural or manmade. The Sonoma County Operational Area Emergency Operations Plan, adopted in December 2014, identifies sixteen hazards that pose a threat to the County. The six natural hazards included in the Emergency Operations Plan are: major earthquake, winter storm, flood, landslide, wildland urban/interface fire, tsunami and drought. The manmade or technological hazards include hazardous material incident, transportation accident, dam failure, explosion, terrorism/bio-terrorism, civil unrest, national security emergency, radiological incident, and pandemic influenza.

Hazard Mitigation is defined as any sustained action taken to reduce or eliminate long term risk to human life and property from natural, human-caused, and technological hazards and their effects. Based on the natural hazards outlined in the Emergency Operations Plan, this Hazard Mitigation Plan analyzes the risk posed to people and property in Sonoma County: earthquake, landslides, flooding, and wildland fire hazards. These hazard are considered to constitute the greatest risk to the county based on past disaster events, future probabilities and scale of vulnerability. In addition, the Hazard Mitigation Plan addresses the impacts that climate change may have on local hazard areas and natural hazards.

For purposes of this Plan, a number of hazards are addressed as secondary related impacts of the four major hazards. For example, the flood hazard is inclusive of severe winter storms and coastal storms and inundation from sea level rise. The landslide hazard includes coastal erosion, expansive soils, and land subsidence. Tsunami is included under the earthquake hazard. Technological hazards, such as hazardous materials incidents, dam or levee failure or pipeline failure, are included in this Hazard Mitigation Plan only as potential secondary hazards that may be triggered by the four natural hazards of focus. Terrorism, civil unrest or other national security events are addressed through other County, state and national planning efforts and are, not addressed by this Hazard Mitigation Plan.

Update 2016

The Hazard Mitigation Plan update process involved a comprehensive review and update of each section and subsection of the 2011 Hazard Mitigation Plan. In addition to the necessary updates, the Hazard Mitigation Plan was reorganized and reformatted. The following Plan summary highlights significant changes made for the Sonoma County Hazard Mitigation Plan 2016:

Executive Summary

- Provides a detailed map of changes made throughout the 2016 Hazard Mitigation Plan
- Summarized progress made on key mitigation actions since 2011

Introduction

- Includes a new Planning Process section, formerly included as an appendix

Community Profile (New Chapter)

- Addresses future growth and vulnerability, as per State recommendations during the 2011 plan review
- Provides a robust summary of critical infrastructure

Hazard Profiles (New Chapter)

- Consolidates previous independent hazard chapters (i.e.: Earthquake, Flood, Wildfire, and Landslide)
- Addresses changes in hazard threats and risks
- Utilizes best available technology including new GIS maps for each hazard and two new HAZUS analyses

Mitigation Strategy

- Retires completed mitigation from the 2011 Hazard Mitigation Plan to the Progress Report
- Features new mitigation actions
- Reclassifies mitigation priorities to improve implementation
- Modifies mitigation priorities in accordance to new risk assessments

Plan Maintenance (previously Plan Implementation Process)

- Includes a tentative work plan for the 2016-2021 update cycle
- Updates the Progress Report to include completed 2011 SCHMP Mitigation Actions

Appendices

- Addresses Climate Change impact to Sonoma County with a new appendix, including drought (new) and sea level rise (updated), to meet California SB 379: Land Use; General Plan Public Safety Element; Climate Adaptation Requirements

Authority

FEMA

Hazard mitigation planning is directed by the Robert T. Stafford Disaster and Relief and Emergency Assistance Act (Stafford Act), as amended by the Disaster Mitigation Act of 2000 (DMA 2000), and by federal regulations implementing the Stafford Act. DMA 2000 amended the Stafford Act to require state, local, and tribal governments to develop and submit to FEMA a mitigation plan that outlines processes for identifying the natural hazards, risks, and vulnerabilities of the jurisdiction. Plan approval by FEMA is a prerequisite to receiving federal hazard mitigation grant funds (see 42 USC Section 5165(a)).

To implement the mitigation planning requirements of the Stafford Act, FEMA promulgated 44 Code of Federal Regulations (CFR) Part 201, the federal regulations governing the planning

process, plan content, and the process for obtaining approval of the plan from FEMA. The planning requirements set forth in the CFR, including plan revision requirements, are identified through the FEMA Regulation Checklist in the Local Mitigation Plan Review Tool. The Sonoma County Local Hazard Mitigation Plan complies with the DMA 2000, Federal Register 44 CFR Parts 201 and 206, Section 322, Mitigation Planning. This law, as of November 1, 2004, requires local governments to develop and submit hazard mitigation plans as a condition of receiving Hazard Mitigation Grant Program (HMGP) and other mitigation project grants.

State of California

The State of California has requirements for Counties to have adopt local hazard mitigation plan and enacted revisions to California Government Code Sections 8685.9 and 65302.6 (commonly known as Assembly Bill [AB] 2140 [Chaptered 2006]) Excerpts of these government code sections are included below.

California Government Code Section 8685.9:

Notwithstanding any other provision of law, including Section 8686, for any eligible project, the state share shall not exceed 75 percent of total state eligible costs unless the local agency is located within a city, county, or city and county that has adopted a local hazard mitigation plan in accordance with the federal Disaster Mitigation Act of 2000 (P.L. 106-390) as part of the safety element of its general plan adopted pursuant to subdivision (g) of Section 65302. In that situation, the legislature may provide for a state share of local costs that exceeds 75 percent of total state eligible costs.

California Government Code Section 65302.6:

(a) A city, county, or a city and county may adopt with its safety element pursuant to subdivision (g) of Section 65302 a local hazard mitigation plan (HMP) specified in the federal Disaster Mitigation Act of 2000 (Public Law 106-390). The hazard mitigation plan shall include all of the following elements called for in the federal act requirements:

- (1) An initial earthquake performance evaluation of public facilities that provide essential services, shelter, and critical governmental functions.
- (2) An inventory of private facilities that are potentially hazardous, including, but not limited to, multiunit, soft story, concrete tilt-up, and concrete frame buildings.
- (3) A plan to reduce the potential risk from private and governmental facilities in the event of a disaster.

(b) Local jurisdictions that have not adopted a local hazard mitigation plan shall be given preference by the Office of Emergency Services in recommending actions to be funded from the Pre-Disaster Mitigation Program, the Hazard Mitigation Grant Program, and the Flood Mitigation Assistance Program to assist the local jurisdiction in developing and adopting a local hazard mitigation plan, subject to available funding from the Federal Emergency Management Agency.

This Local Hazard Mitigation Plan includes the information required by California Government Code Sections 8685.9 and 65302.6.

Climate Change

California, has placed high importance on addressing climate change issues. The adoption of Assembly Bill 32 (AB 32) in 2006 called for communities to reduce greenhouse gas emissions, especially carbon dioxide (CO₂) into the atmosphere. The State has promoted various climate change adaptation efforts including publication of the 2009 Climate Adaptation Strategy and the 2011 Climate Adaptation Planning Guide (Adaptation Guide). The Adaptation Guide provides climate adaptation actions and information communities can integrate with Local Hazard Mitigation Plans, general plan safety elements, Climate Action Plans, Local Coastal Plans, and regional sustainable growth planning. The Adaptation Guide provides guidance regarding mitigation policies to adapt to climate change impacts and create a systematic rationale for reducing risks from natural hazards exacerbated by climate change.

The State's Hazard Mitigation Plan indicates that human-induced global warming from greenhouse gas emissions is creating climate change impacts leading to increased frequencies and magnitudes of natural disasters such as extreme weather events, avalanches, coastal erosion, flooding, sea level rise, extreme heat, drought, landslides, severe weather and storms, and wildland fires. As a result, the 2013 State Hazard Mitigation Plan includes the following two objectives with respect to climate change and hazard mitigation:

- Objective 5: Promote and implement hazard mitigation plans and projects that are consistent with state, regional and local climate action and adaptation goals, policies, and programs.
- Objective 8: Coordinate state and local efforts to reduce greenhouse gas emissions and implement climate adaptation strategies through hazard mitigation plans and actions.

The Local Hazard Mitigation Plan discusses the contributory role that climate change may have on Sonoma County's vulnerability to wildland fires, flooding, sea level rise, and storm events and identifies the other potential hazards that climate change could cause or exacerbate.

It is important to recognize that the potential impacts of climate change are much broader and long term and may result in potentially high community costs. For instance, the changes in weather can also result in changes in growing regions for different plants and agricultural crops as well changes in range of pests and disease which could result in huge economic impacts to the state and county agricultural industries.

For this reason, the County and its nine area cities have prepared a separate document – Climate Action 2020 Community Climate Action Plan, to set forth the measures each jurisdiction will commit to in order to reduce greenhouse gas emissions. For the same reason, this Hazard Mitigation Plan recommends implementation of the adopted Climate Action measures as a long range implementation measure of the Local Hazard Mitigation Plan as well as the General Plan Public Safety Element work program.

Local Authority

Sonoma County shares borders with the following nine incorporated cities and towns in Sonoma County: Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol,

Sonoma and the Town of Windsor. Most local jurisdictions have adopted mutual aid agreements to share critical skilled personnel and equipment and have conducted training for emergency response. Each of these communities is responsible for mitigating their own disaster risk but share mutual mitigation goals with the County and are in the process of updating their respective Local Hazard mitigation Plans, previously affiliated with the Association of Bay Area Government (ABAG) multi-jurisdictional hazard mitigation plan.

Adoption

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

Plan Adoption

Requirement §201.6(c)(5): [The plan shall include...] Documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

Source: FEMA, March 2011.

Information on the 2016 SCHMP was presented to the Board of Supervisors on October 18, 2016 and a final opportunity was provided for public comment. A Board of Supervisors Hearing was held on December 6, 2016 to adopt the (FEMA) "approvable pending adoption" draft of the 2016 SCHMP. Appendix A contains the Board of Supervisors resolution adopting the 2016 Sonoma County Hazard Mitigation Plan.

Planning Process

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

Element A: Planning Process

***Requirement §201.6(b):** An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:*

***§201.6(b)(1) (1):** An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*

***Requirement §201.6(b)(2):** An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and*

***Requirement §201.6(b)(3):** Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.*

***Requirement §201.6(c)(1):** [The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

***Requirement §201.6(c)(4)(i):** [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.*

Source: FEMA, March 2011.

Work Plan

A work plan and schedule for preparing and meeting the regulatory requirements was developed after assessing the existing plan by referencing: 1) FEMA's 2011 Guidelines for preparing Local Multi-Hazard Mitigation Plan, 2) the California, 2013 Hazard Mitigation Plan, 3) FEMA's Hazard Mitigation Plan Review Guide, and 4) the County's 2014 General Plan Public Safety Element.

The success of 2011 SCHMP Implementation Plan was evaluated to measure progress over the last five years. The success of previous mitigation action implementation assisted in identifying future mitigation actions to be carried forward into the next five-year plan. The success of the previous Implementation Plan provided insight and guidance for the method and schedule to be used over the next planning cycle to monitor, evaluate, and update the plan.

Mitigation progress reports provided by the Fire and Emergency Services during the previous 5-year cycle were reviewed. PRMD met with Fire and Emergency Services, the lead agency responsible for monitoring compliance, to discuss the previously approved procedures to monitor, evaluate, and update the Plan to discuss what difficulties and issues (including budget, staff and schedule limitations) were encountered and whether any changes are advisable.

Planning Process

Organize Resources: At the outset of the project, the Oversight Committee identified potential stakeholders, and key personnel from each responsible agency or department. The data sets and mapping from the 2011 HMP effort were reviewed to determine where changes have occurred that need to be reflected in the updated plan. Sources for new hazard information available since 2011 were identified and reviewed.

Public Outreach: the Oversight Committee developed a public outreach strategy in accordance with FEMA guidelines. This strategy includes coordinated messaging through a variety of mediums to ensure the whole community is informed of the Plan and initiatives pertaining to the update of the SCHMP. A presentation was made at the Planning Commissioners workshop on September 29, 2016.

Re-Assess Risks: The County reviewed the list of potential hazards that could pose a threat to people and property along with the County's hazard event history and future probabilities, vulnerabilities included in the 2006 SCHMP risk assessment. After considering possible hazard events, the Oversight Committee determined that the hazard mitigation plan should focus on four key hazards in the County: earthquake, landslide, flood and wildland fire, due to their frequency of occurrence and potential for causing significant physical and economic damage.

A starting point in developing the hazard identification and analysis section of the Local Hazard Mitigation Plan was a thorough review of the existing policies contained in the County Public Safety Element of the 2020 General Plan. This information was supplemented by the most recent studies and data produced by federal, state and local agencies, including: the United States Geological Survey, United States Army Corp of Engineers, United States Forest Service, Federal Emergency Management Agency, California Office of Emergency Services, California Seismic Safety Commission, California Geological Survey, Department of Water Resources, the California Division of Forestry and Fire Protection, and the Association of Bay Area Governments, and U.S. Census Data.

At the beginning of the update process the Technical Team helped PRMD identify applicable laws, regulations, programs and resources at the Federal, State or Local level. The following hazard maps in the Plan were updated or added to reflect new mapping and information available since 2011:

- FIRM 100-yr flood zone
- Tsunami zone
- Sea level rise zone
- Dam inundation zone

- Earthquake ground shaking probability map
- New landslide hazard map
- Fire severity zones map
- Fire district map

The description of each hazard was reviewed including event characteristics, event history, and the potential for future occurrence. Each hazard risk and vulnerability assessments were unpacked to incorporate more comprehensive and accurate analytics; Assessments of hospitals, schools, pipelines, unreinforced masonry buildings, fire stations, dams, and water supply infrastructure and repetitive flood loss properties were significantly expanded. Substantial effort was devoted to working with the California Geological Survey to prepare a revised HAZUS earthquake loss estimates for different earthquake scenarios based on modelling of ground shaking probabilities available since 2009.

County assets were updated to reflect current conditions and insured values. Improved GIS mapping of county assets now provide a better assessment of hazard exposure, vulnerability, impact, and loss estimates.

Re-evaluate Mitigation Strategies: Based on the hazard identification and analysis conducted in the previous step, and an assessment of current County mitigation capabilities (staff, codes and standards, current programs, and development trends), and taking stock of what mitigations have been completed or remain to be completed, the County identified mitigation goals and objectives and a wide range of potential mitigation strategies and actions to mitigate the effects of future earthquake, landslide, flood and wildfire events. Technical Team members recommended mitigations for each of their respective areas of responsibility.

Following an in-depth review by the Oversight Committee, Technical Team, and other interested stakeholders, the list of mitigations was refined based on an assessment of the social, technical, administrative, political, legal, economic, and environmental factors that either contribute to or impede successful implementation. The resulting list of mitigation actions was prioritized, drawing on the expertise of the Oversight Committee and Technical Team, and included in the SCHMP.

Implementation of Plan and Monitoring Process: An Implementation Plan was developed, with input from the Oversight Committee, Technical Team and other interested stakeholders for the highest priority mitigation strategies developed in the previous step. Following adoption of the SCHMP, the County will follow the procedures outlined within the plan to periodically review and update as necessary.

Timeline**Table INT-1: Timeline of Planning Process**

Phase	Milestone	Timeline
Phase 0: Community Outreach	Over 25 Public and Stakeholder Meetings / Initiatives	April 29, 2015 – July 26, 2019
Phase 1: Project Commencement	2011 SCHMP Review Period Start	September 9, 2015
	2011 SCHMP Review Period Close	February 26, 2016
Phase 2: Update of Plan	Update Period Start	Feb 26, 2016
	Update Period Close	August 5, 2016
	Internal Review Period Start	August 10, 2016
	Internal Review Period Close	August 24, 2016
Phase 3: Review Period	Cal OES forwarded notification of FEMA approval of Subaward application in the amount \$100,001.	August 24, 2016
	30-Day Public Review Period Start	August 29, 2016
	30-Day Public Review Period Close	September 29, 2016
	Review and Incorporate Public and Stakeholder Recommendations and Comments	August 10 – October 10, 2016
	Complete 2016 SCHMP Final Draft	October 10, 2016
Phase 4: Review Final Draft and Comments	Submit Plan to Cal OES for review	October 21, 2016
	Board of Supervisors Informational Presentation	October 18, 2016
	Respond to Board of Supervisors requests and revise plan	October 18 - December 6, 2016
Phase 5: Approval	2011 SCHMP Expires	November 16, 2016
	Incorporate State and Federal Recommendations	February - March, 2017
	FEMA issues "Approval Pending Adoption" Letter	February 28, 2017
Phase 6: Adoption	Board of Supervisors Formal Adoption	April 25, 2017
	FEMA issues Official Approval Letter	April 2017
	Implementation Period Start	May, 2017
	Prepare, publish, and distribute approved SCHMP	May, 2017
Phase 7: Implementation	Post FEMA Approved 2016 SCHMP to Website	April 2017
	Incorporate into existing Plans and Procedures	May - September, 2017
	Incorporate into Ongoing Government Day-to-Day Operations	May - September, 2017
	Implementation Period Close	Fall, 2017

Review

The Internal Review Draft of this plan, dated August 10, 2016 was released for a two week review and comment period by agencies, departments, and stakeholders. The Public Review Draft of the 2016 Sonoma County Hazard Mitigation Plan, dated August 29, 2016 was released for a 30 day review and comment period by and the general public. The following steps were taken to ensure all interested parties had an opportunity to review and comment on the draft plan.

- A public notice was sent to the mailing list, including stakeholder agencies announcing the availability of the Public Review Draft of the Plan and announcing a public comment period and hearing where the draft plan would be considered.
- The Public Review Draft was posted on the projects website, where it could be downloaded and comments could be submitted. Discs or hard copies of the Plan were made available upon request. Copies of the plan were available for review at the Permit and Resource Management and Fire and Emergency Services offices in Santa Rosa.
- Public comment on the Public Review Draft was received and integrated where appropriate to the plan.
- Presentations on the draft plan were made to the Sonoma County Operational Area LHMP Task Force (September 1, 2016) and the Sonoma County Operational Area Emergency Coordinators Forum (September 13, 2016).

Planning Team

SCHMP Oversight Committee

The Fire and Emergency Services Department is the lead agency responsible for the Sonoma County Hazard Mitigation Plan. Fire and Emergency Services obtained financial support for the planning effort from FEMA, who has fully approved FES' Subaward Application in the amount of \$100,000 to update the Hazard Mitigation Plan under Hazard Mitigation Grant Program DR-4240.

The Fire and Emergency Services Department coordinated with the Permit and Resource Management Department to prepare a draft of the updated plan. The two departments acted as the Oversight Committee as shown in Table INT-2 to manage the plan preparation.

Table INT-2: SCHMP Oversight Committee

Department	Personnel
Permit and Resource Management Department	Tennis Wick - Director Jennifer Barrett - Deputy Director, Planning Alex Rosas - Engineering / Flood Plain Manager Nathan Quarles – Deputy Director, Building and Engineering Sandi Potter - Comprehensive Planning and Environmental Review Division Manager David Schiltgen - SCHMP Project Manager Cecily Condon - SCHMP Project Manager Shelly Bianchi-Williamson - Geographical Information Technician
Fire and Emergency Services	Chris Helgren - Emergency Manager Kelsey Scanlon - Emergency Coordinator Zachary Hamill - Deputy Emergency Services Coordinator Robert McIntyre - Fire Marshal
Department of Transportation and Public Works	John McCarthy – Deputy Director Road Operations Larry Farmer - Construction Coordinator
Information Systems Department	Philip Gilbert - System Software Analyst
General Services	Toni Holland - Architect
Community Development Commission	Kirsten Larsen Fred Bengs - Construction Services Supervisor
Risk Management	Jamie Bloom
In addition to the Technical Team Members, input and document review was provided by the following County departments and personnel	
Permit and Resource Management Department	Jann Samuels McCall Miller Lisa Posternak
General Services Department	Mark Hummell
CDC	Nina Bellucci
Information Systems Department	Michael Hanson
Transportation and Public Works Department	Keith Fosc Dave Damuller
Sonoma County Water Agency	Kent Gylfe
Sonoma County Transit Authority	Chris Barney
Agricultural Preservation & Open Space District	Maria Cipriani
Sonoma County Office of Education	Denise Calvert Shari Dean

SCHMP Technical Team

In addition to the SCHMP Oversight Committee, the SCHMP Technical Team consisted of representatives from key County departments who provided input and information resources to the consultant team and to review draft documents. The Technical Team, Table INT-2, was a critical resource in developing mitigation priorities, and implementation strategies. The Team met jointly and individually with the Plan.

Table INT-3: SCHMP Technical Team Members

Name	Position	Department	phone	e-mail
Kirsten Larsen	Construction and Housing Finance Manager	Community Development Commission	707- 565-7526	Kirsten.Larsen@sonoma-county.org
BC Capps	Department Program Manager	Energy and Sustainability Division	707-565-3029	BC.Capps@sonoma-county.org
Chris Helgren	Emergency Manager	Fire and Emergency Services Department	707- 565-2052	Christopher.Helgren@sonoma-county.org
Zachary Hamill	Emergency Coordinator	Fire and Emergency Services Department	707-565-3305	Zachary.Hamill@sonoma-county.org
Brentt Blaser	Emergency Coordinator	Fire and Emergency Services Department	707- 565-6160	Brentt.Blaser@sonoma-county.org
Kelsey Scanlon	Emergency Coordinator	Fire and Emergency Services Department	707-565-5711	Kelsey.Scanlon@sonoma-county.org
Keith Lew	Deputy Director	General Services Department	707- 565-3193	Keith.Lew@sonoma-county.org
Toni Holland	Senior Capital Projects Manager	General Services Department	707-565-3425	Toni.Holland@sonoma-county.org
John Hartwig	Director	Information Systems Department	565-6055	John.Hartwig@sonoma-county.org
Marcia Chadbourne	Director	Risk Management Division	565-2473	Marcia.Chadbourne@sonoma-county.org
Jamie Bloom	Risk Management Analyst III	Risk Management Division	707- 565-2789	Jamie.Bloom@sonoma-county.org
Lauren Casey	Program Manager	Regional Climate Protection Authority	707-565-5379	Lauren.Casey@rcpa.ca.gov
Carolyn Glanton	Specialist	Regional Climate Protection Authority	565-5361	carolyn.glanton@rcpa.ca.gov
Dennis Smiley	Sergeant	Sheriff's Office	707-565-2411	Dennis.Smiley@sonoma-county.org
Susan Klassen	Director	Transportation and Public Works Department	707- 565-2440	Susan.Klassen@sonoma-county.org
John McCarthy	Deputy Director	Transportation and Public Works Department	707- 565-2901	John.mccarthy@sonoma-county.org

Public Engagement

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

Requirements:

Element A: Planning Process

***Requirement §201.6(b):** An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:*

***Requirement §201.6(b)(1):** An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;*

***Requirement §201.6(b)(2):** An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process;*

Source: FEMA, March 2011.

Sonoma County is strongly committed to public participation in the Hazard Mitigation Plan planning process; the County participated in over 30 stakeholder and public outreach initiatives. The County established several goals to guide its public outreach and participation efforts, as follows:

- Provide several mediums of communication to inform the general public of pertinent hazard mitigation information, including how to contribute to the plan preparation.
- Provide multiple methods and multiple opportunities for public input and review.
- Conduct specific outreach to, and elicit input from key stakeholders.
- Provide ongoing outreach to increase public awareness of hazards and educate the public regarding measures they should take to minimize or avoid disaster damages.

Stakeholder Outreach

Sonoma County follows a fully open, publicly accessible planning process. All stakeholders in the County's planning process are provided with early notification, and are kept fully informed and educated as to the issues involved in the planning process. As a result the county is able to identify and resolve issues early in the planning effort. Development of the Sonoma County Hazard Mitigation Plan followed the same public participation philosophy and process.

- Stakeholder outreach included direct contact with key interest groups that have been involved in past disaster response and recovery planning efforts through scheduled meetings, phone, and email communications. The County identified the Sonoma County Operational Area Emergency Council and the Sonoma County Operational Area

Emergency Coordinators Forum public meetings as the most effective mechanism for SCHMP input and review from Sonoma County cities and adjacent counties, private-non-profit organizations, academic institutions, utility providers and the private sector. Notice of the County's preparation of the Local Hazard Mitigation Plan Update and the opportunity to comment was included in the June 9, 2015, September 8, 2015, November 19, 2015, December 18, 2015, March 8, 2016, May 18, 2016, June 14, 2016 and September 13, 2016 meeting of the above bodies and provided notice to those entities indicated in Table INT-3 below as well as members of the public who attended or follow the meeting minutes.

SoCo Operational Area LHMP Task Force

Sonoma County Fire and Emergency Services Operational Area Emergency Council created the SoCo Operational Area LHMP Task Force, which is open to Countywide localities and regional agencies involved in hazard mitigation activities and planning, and agencies that have the authority to regulate development, as well as businesses, academia, other private and non-profit interests and jurisdictional stakeholders. The purpose of the Task Force is to encourage and enhance whole community engagement and the opportunity to discuss all current mitigation plans and activities within the County to ensure consistent information sharing, best practice identification, adoption, and implementation of the Sonoma County Hazard Mitigation Plan and other hazard mitigation plans throughout the jurisdiction. The Task Force worked to integrate updated information from the plan, specifically risk assessment or mitigation strategies, with other planning efforts throughout the county, to include multiple local hazard mitigation plan updates and other related projects.

Sonoma County Operational Area Emergency Council

The purpose of the Emergency Council is to study, revise and recommend to the Board of Supervisors for adoption the Sonoma County Emergency Plan, and to review and recommend action upon all proposed mutual aid agreements with the United States, State of California, other political subdivisions, corporations, and groups or individuals; to review and recommend the adoption of such ordinances, resolutions, rules and regulations as may be necessary to implement the County Emergency Plan or other mutual aid agreement entered into pursuant to such plan.

Sonoma County Operational Area Emergency Coordinators Forum

The Sonoma County/Operational Area's Emergency Coordinators Forum is a working group hosted by Sonoma County Fire & Emergency Services and composed of representatives from each of the cities, various county departments, state agencies, special districts, utilities, and disaster response and recovery related agencies. These members are tasked with emergency management responsibilities in the Sonoma County Operational Area. The Sonoma Operational Area is a joint powers agreement consisting of all of the political subdivisions within the County's geographical borders. The group meets quarterly to discuss and coordinate emergency management, preparedness, training, and disaster recovery-related issues.

Table INT-4: SoCo Operational Area LHMP Task Force

City of Healdsburg LHMP Planning Team
City of Petaluma LHMP Planning Team
City of Rohnert Park LHMP Planning Team
City of Santa Rosa LHMP Planning Team
City of Sebastopol LHMP Planning Team
City of Sonoma LHMP Planning Team
Kashia Band of Pomo Indians
Redwood Empire Schools Insurance Group
Regional Climate Protection Authority
Sonoma County HMP Planning Team
Sonoma County Water Agency Planning Team
Town of Windsor LHMP Planning Team

Table INT-5: Emergency Coordinators Forum Participants

American Red Cross	Santa Rosa Fire Department Emergency Management
Cal OES	Santa Rosa Police Department
CalFire/Forestry & Fire Protection	Sebastopol Fire Department
CHP -- California Highway Patrol	Sonoma Valley Fire Rescue
Cloverdale Fire Protection District	Sonoma County Fire and Emergency Services -Auxiliary Communications Service
Cloverdale Police Department	Sonoma County Fire and Emergency Services – Emergency Management
Coastal Valleys EMS	Sonoma County Fire and Emergency Services – Fire
Cotati City Manager	Sonoma County Fire and Emergency Services – UASI
Cotati Police Department	Sonoma County Health Services Public Health
Community Member-at-Large	Sonoma County Office of Education
Healdsburg Fire Department	Sonoma County Sheriff Communications Bureau
National Guard 95 th Civil Support Team	Sonoma County Water Agency
Petaluma Fire Department	Sonoma County Jr. College – Facilities Planning and Operations
PG&E Government Relations Department	Sonoma County Jr. College – Police Department
Redwood Empire Schools Insurance Group	Sonoma State University
Rohnert Park Public Safety	The Sea Ranch Emergency Management Safety and Security
Salvation Army	U.S. Coast guard – Two Rock
Santa Rosa Fire Department	Windsor Police Department

Table INT-6: Emergency Council Participants

American Red Cross Disaster Services	County Sheriff
AT&T Service Management	Emergency Services Director
CalOES	Fire and Emergency Services Dept Director
CalFire/Forestry & Fire Protection	General Services Dept Director
CHP -- California Highway Patrol	Health Services Dept Director
Cloverdale Fire Protection District	Human Resources Dept Director
Cotati Police Department	Human Services Dept
Healdsburg Fire Department	Information Services Dept Director
Community Member-at-Large	Permits and Resource Mgmt Dept Director
Sonoma County Fire & Emergency Services	Public Schools
US Coast Guard Emergency Operations	Public Utilities
Rohnert Park Public Safety	Santa Rosa Junior College
Redwood Empire Schools Insurance Group	Sonoma County Water Agency
Santa Rosa Police Department	Sonoma State University
Santa Rosa Fire Department	Town of Windsor
Sebastopol Fire Department	Sonoma County Deputy Director of Road Operations
PG&E Governmental Relations	US Coast Guard Two Rock

Table INT-7: Additional SCHMP Stakeholders

The following agencies and entities were also directly contacted during preparation of the Hazard Mitigation Plan to provide information and/ or comments.	
Governor's Office of Emergency Services	Victoria LaMar-Haas, Senior ESC Linda McClanahan – CALOES Lori Newquist
FEMA	Helen Dubois-Region 9 JoAnn Scardino- Region 9 Michael Hornick- Region 9 Risk Analysis
Army Corps of Engineers	Arijs Rakstins - Deputy District Engineer for Civil Works Michael Dillabough, COE - Chief of Operations
Association of Bay Area Governments (ABAG)	Danielle Hutchings - Earthquake and Hazards Program Coordinator
AT&T	Carol Shaw Robyn Flemming Anita Gabrielson
California Coastal Commission	Grace Ma Ruby Papp
California Division of Forestry and Fire Protection	Staff
California Geological Survey	Rui Chen - Seismic Hazard Assessment Program David Branum - Seismic hazard assessment program
Caltrans	Rey Centano - Caltrans Regional Project Manager Matthew E. Bailey - HQ Division of Project Management Reza Fereshtehnejad / HQ Caltrans / CAGov
Department of Water Resources	Youchen (Tim) Chao, P.E. - Div. of Flood Management
EPS consultants	Darin Smith - Housing Statistics
Legislative Analyst's Office	Lia Moore – Legislative Analyst
National Flood Insurance Program (NFIP)	Ricardo Pineda - NFIP State Coordinator Tam Sing
Office of Statewide Health Planning & Development	Kelie Zimmer - Facilities Development Division Patrick Rodgers - Facilities Development Division David Byrnes - Information Officer
Pacific Gas and Electric (PGE)	Karlene Silva - Maintenance and Construction Supervisor Kelli Nevin - Government Relations Joel Morgan - Gas and Electric Supervisors
Redwood Empire Schools Insurance Group	Erin Tarkhanian - Loss Prevention Coordinator
San Francisco Bay Conservation and Development Commission (BCDC)	Staff
State Department of General Services	John Vester - AGPA
United States Geological Survey (USGS)	Charles Berenchok
Governor's Office of Emergency Services	Linda McClanahan - CALOES

Public Outreach

The County released a public notice of the Hazard Mitigation Plan Update commencement inviting input and comment and providing contact information on the PRMD website. Direct E-mail and phone notification was also provided to a number of other agencies and community organization. The planning process for the SCHMP used a number of techniques to attract public involvement in the program. These include:

- **Board of Supervisors Informational Presentation:** PRMD presented the updated SCHMP to the Board of Supervisors on October 18, 2016.
- **Community Workshop:** As part of the public engagement and outreach process, PRMD hosted a community workshop on August 29, 2016 to give members of the general public an opportunity to learn about and contribute to the plan. As part of this process, the County created a survey for community members, which was used to gauge interest and understanding of concerns regarding hazards in the County. The survey asked about potential hazards facing the County and what steps community members have taken or are interested in taking to reduce the threat from these hazards.
- **Direct Mailing of Notices:** Direct mailing of notices to entities on the Hazard Mitigation Plan mailing list including: neighboring counties and cities, Firefighting entities, Sheriff/Police, Army Reserve and National Guard entities, Emergency Services/Sonoma County Operational Area Coordinators, utilities, local civil Associations and nonprofit organizations, Chambers of Commerce, Regional Economic Development Agencies, Water Management Districts and River Basin Commissions, Schools/School Boards, State/Local Governmental Entities, Major Businesses or Industries/Professional Organizations, Regional Planning Agencies, Departments, Districts, Councils, and Commissions, Federal Agencies, Insurance Companies, Area Academic Institutions, Community Services Districts, FEMA, CALOES, Hospitals/Clinics, Red Cross/ Charities, Historic Preservation Organizations and Newspapers
- **General Plan - Public Safety Element Public Comment Period:** In 2014 the County updated its General Plan Public Safety Element to incorporate the Hazard Mitigation Plan Hazard maps and implementation tasks. Public comments received during that process were timely and relevant to development of the scope of work for the 2016 Sonoma County Hazard Mitigation Plan update. The General Plan Public Safety Element was revised by Resolution No. 14-0355 of the Sonoma County Board of Supervisors September 9, 2014.
- **Informational Presentation:** A public informational presentation was made before the Planning Agency on September 29, 2016.
- **Newspaper:** Newspaper notices of public hearings and comment periods were posted in the Press Democrat, local Sonoma County paper.

- **Preparedness Month Display:** The SCHMP was promoted on the Sonoma County Fire and Emergency Services Preparedness Month display located in front of the Board of Supervisors hearing room (575 Administration Drive, Santa Rosa, CA 95403).
- **Radio:** The update of the SCHMP and request for public commentary was announced on the radio show KOWS 107.3 FM: The Joy of Preparedness on Sunday, September 4th.
- **Survey:** A survey was made available for participants at the Community Workshop on August 29, 2016.
- **Webpage:** Creation of a comprehensive webpage on the County website to provide the public access to the SCHMP documents and give the public the ability to submit and interact with planners during the process. The Permit and Resource Management Department website receives close to 500,000 visits per year, approximately 1,370 visits per day. The Fire and Emergency Services Department website provides a link to the PRMD website

Table INT-8: Public and Stakeholder Outreach Initiatives Calendar

Phase	Initiative	Date
Pre-update Outreach	Hazard Mitigation Plan Meeting	April 29, 2015
	LHMP Scoping Meeting	June 05, 2015
	SoCo Emergency Coordinators Forum	September 8, 2015
	2016 SCHMP Update Kick Off Meeting	September 09, 2015
	Mitigation and Adaptation Workshop	September 24, 2015
	Project Manager Meeting	September 28, 2015
	Flood Plain Management and Repetitive Loss Properties Meeting	November 02, 2015
	SoCo Operational Area Emergency Council Created the SoCo Operational Area LHMP Task Force	November 19, 2015
	SoCo Emergency Coordinators Forum	December 18, 2015
Update Period Outreach	SCHMP '16 Webpage Created	Feb 26, 2016
	Emergency Coordinators Forum Meeting	March 08, 2016
	SCHMP Technical Team Meeting	March 11, 2016
	Flood Plain Management, Repetitive loss, and NFIP CRS Meeting	March 15, 2016
	SoCo Operational Area LHMP Task Force Meeting #1	April 07, 2016
	SCHMP County Facility Vulnerability Meeting	April 20, 2016
	SoCo Operational Area LHMP Task Force Meeting #2	May 05, 2015
	CalOES/FEMA LHMP Workshop in Sonoma County	May 05, 2016
	Flood Plain Management Meeting	May 11, 2016
	SoCo Operational Area Emergency Council	May 18, 2016
	Green Infrastructure and Coastal Protection Workshop	May 19, 2016
	PG&E Public Safety Liaison Meeting	June 13, 2016
	SoCo Emergency Coordinators Forum	June 14, 2016
	SoCo Operational Area LHMP Task Force Meeting #3	July 07, 2016
	Large Event Wildland Fire Response Planning Meeting	July 15, 2016
Review, Approval, and Adoption Period Outreach	SCHMP '16 Update Public Workshop	August 29, 2016
	Preparedness Month Display in County Administration Building	September 2016
	SoCo Operational Area LHMP Task Force Meeting #4	September 01, 2016
	KOWS 107.3 FM: The Joy of Preparedness Radio Show	September 04, 2016
	SoCo Emergency Coordinators Forum	September 13, 2016
	Planning Agency Workshop	September 29, 2016
	Board of Supervisors Informational Presentation	October 18, 2016
	SoCo Operational Area LHMP Task Force Meeting #5	November 03, 2016
	SoCo Operational Area Emergency Council	November 09, 2016
Board of Supervisors Public Hearing	December 06, 2016	
Implementation Period Outreach	Distribution of notices of approval to stakeholders	December 13, 2016
	SoCo Emergency Coordinators Forum	December 13, 2016
	SoCo Operational Area LHMP Task Force Meeting #6	January 05, 2017
	SoCo Operational Area LHMP Task Force Meeting #7	March 02, 2017