

CHAPTER 1 - THE PLANNING PROCESS

CHAPTER CONTENT

- 1.1 Purpose of the Plan**
 - 1.1.1 California – What’s at Stake
 - 1.1.2 What Is Hazard Mitigation?
 - 1.1.3 The SHMP – An Enhanced State Mitigation Plan
- 1.2 Plan Overview**
 - 1.2.1 What’s New in the 2013 SHMP?
 - 1.2.2 2013 SHMP Chapter Outline
- 1.3 Preparing the 2013 SHMP**
 - 1.3.1 Plan Update Procedure
 - 1.3.2 Coordination Among Agencies and Departments
 - 1.3.3 Public Involvement
- 1.4 Implementing the 2013 SHMP**
 - 1.4.1 Cal OES Coordination Role
 - 1.4.2 Cal OES Implementation Role
- 1.5 Integration with Other Planning Efforts**
 - 1.5.1 State Emergency Plan
 - 1.5.2 Hazard-Specific Mitigation Plans
 - 1.5.3 Related Planning Efforts
 - 1.5.4 Cal OES Local Hazard Mitigation Planning Program
- 1.6 Adoption by the State**
- 1.7 Updating the Plan**

1.1 PURPOSE OF THE PLAN

The State of California Multi-Hazard Mitigation Plan, also known as the State Hazard Mitigation Plan (SHMP), represents the state’s primary hazard mitigation guidance document, and provides an updated and comprehensive description of California’s historical and current hazard analysis, mitigation strategies, goals and objectives. More importantly, the SHMP reflects the state’s commitment to reduce or eliminate potential risks and impacts of natural and human-caused disasters in keeping our families, homes and communities better prepared and more disaster resilient.

The State of California is required to review and revise its SHMP and resubmit for Federal Emergency Management Agency (FEMA) approval at least once every 3 years to ensure continued funding eligibility for certain Stafford Act grant programs. This includes FEMA’s hazard mitigation assistance programs: Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Assistance (PDM), Repetitive Flood Claim Program, as well as the Fire Management Assistance Grant Program and Public Assistance grants (Categories C-G).

In addition, the approval of the SHMP allows the state to be eligible for the reduced cost share (90/10) for grants awarded under the Flood Mitigation Assistance/Severe Repetitive Loss grant program. FEMA approval of the 2010 SHMP has enabled California to receive approximately \$135.2 million in Public Assistance grant funding and \$33.8 million in Hazard Mitigation Grant Program funding between January 2010 and December 2012. Without a FEMA-approved SHMP, California would not have received these funds.

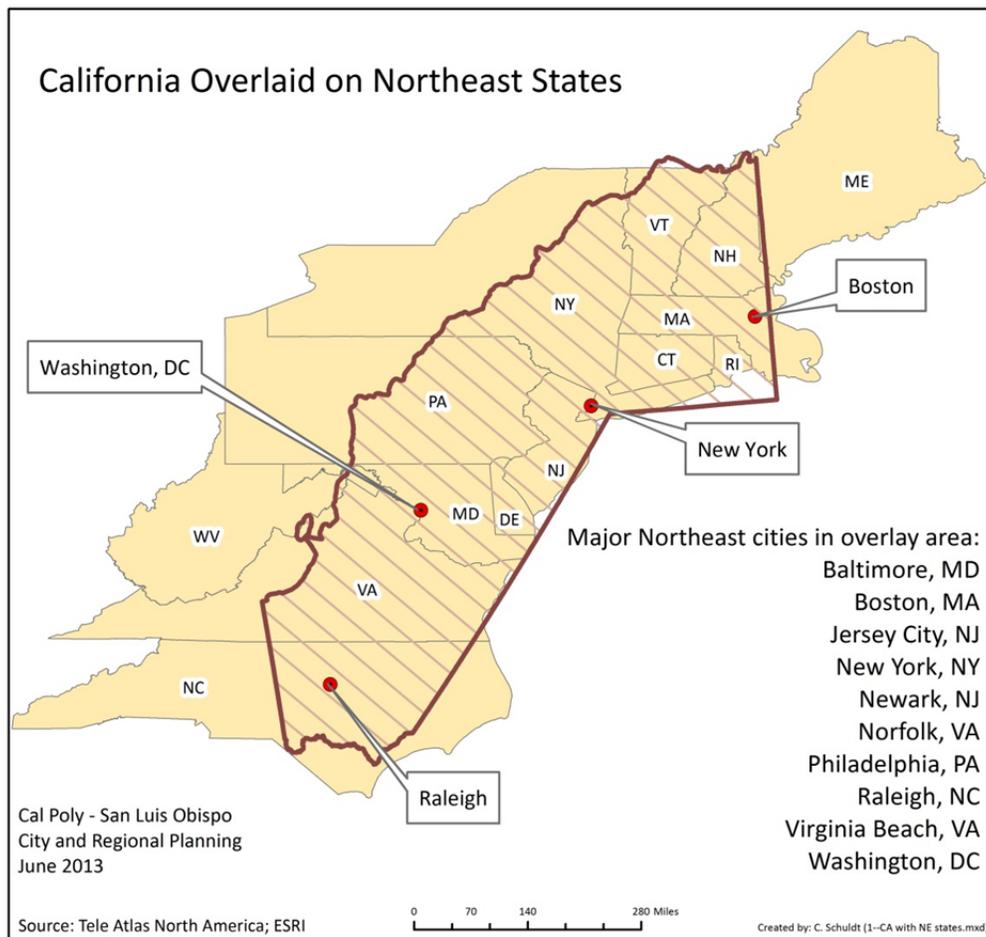
During this period, the plan has been strengthened through formal reorganization of Cal EMA as part of the California Governor’s office. Cal EMA has been renamed the California Governor’s Office of Emergency Services or Cal OES (effective July 1, 2013). The benefit of this reorganization is that it creates a stronger

relationship between Cal OES and the executive power of the Governor, giving Cal OES clearer authority to act on the Governor’s behalf during emergencies and lends the strength of Governor’s office to implementation of mitigation initiatives by Cal OES.

1.1.1 CALIFORNIA – WHAT’S AT STAKE

With approximately 38 million people, California is the most populous state in the nation. If it were a separate country, it would have the world’s ninth largest economy. It has the nation’s largest industrial belt, stretching much of the way from Sacramento to San Diego and including global headquarters for computer, movie-television, and digital-entertainment industries. California is also the nation’s largest agricultural producer.

MAP 1.A: California Overlaid on Northeast States



Map 1.A illustrates California's size by superimposing its boundaries on 12 eastern states with examples of major cities within the overlay area.

California is vulnerable to a catastrophic disaster within the lifetimes of most residents. No community is fully immune. Though wildfires and floods are the most common disasters, earthquakes hold the greatest potential for large-scale destruction. A major disaster would pose significant challenges for restoring people’s lives, restarting economic engines, repairing infrastructure, and creating sustainable redevelopment.

MAP 1.B: The State of California

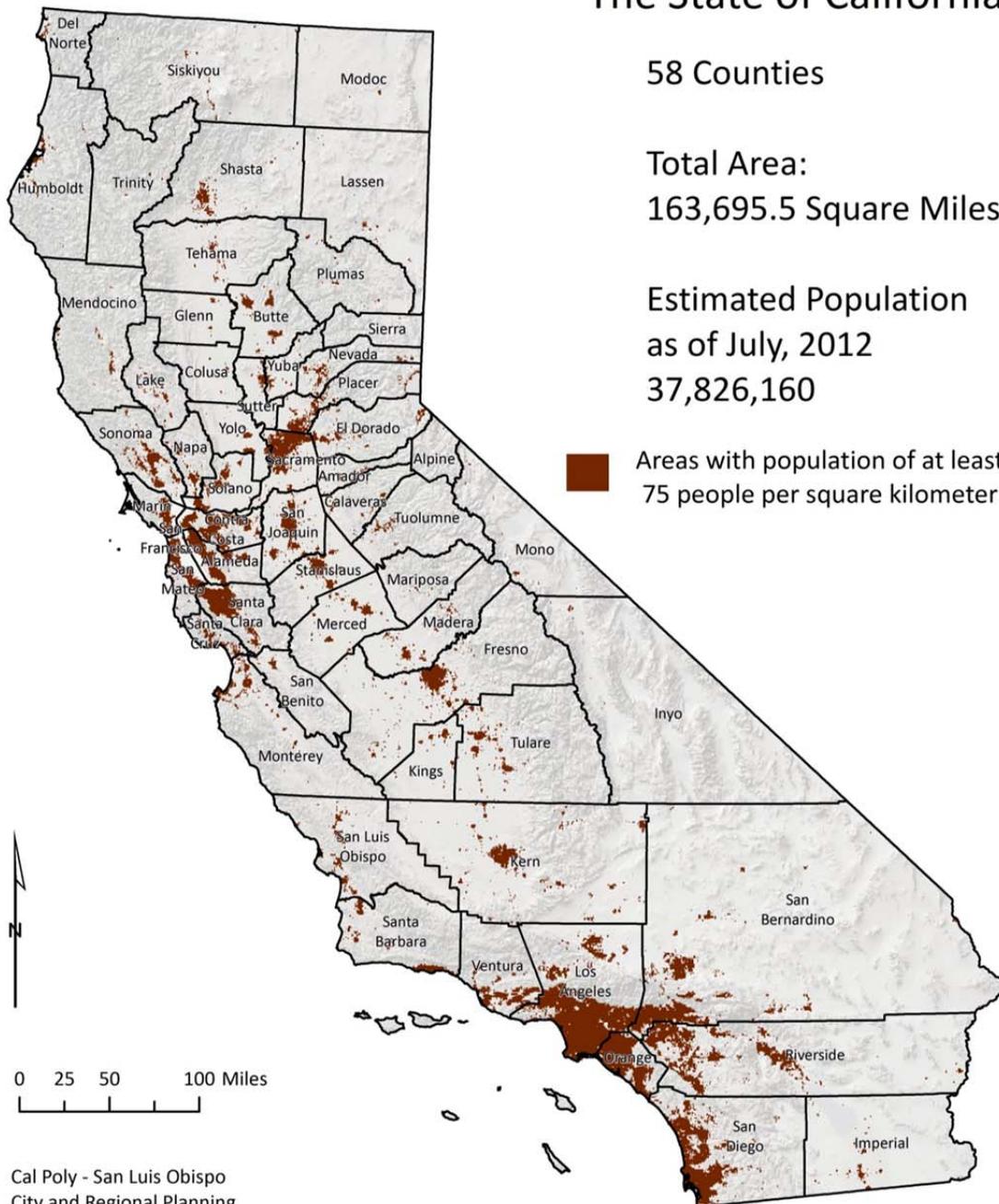
The State of California

58 Counties

Total Area:
163,695.5 Square Miles

Estimated Population
as of July, 2012
37,826,160

 Areas with population of at least
75 people per square kilometer



Cal Poly - San Luis Obispo
City and Regional Planning
June 2013

Source: CA Dept. of Finance, E-2. *California County Population Estimates and Components of Change by Year — July 1, 2010–2012*; ORNL LandScan 2007™ /UT-Battelle, LLC 2005-2007 American Community Survey (ACS) 3-year estimates; and 2000 U.S. Census County Division (CCD)

Created by: C. Schuldt (1.1--State of California.mxd)

Map 1.B identifies key features of the state of California, particularly in the areas with at least 75 people per square kilometer, urban, suburban, and rural settlements. *(Online or download viewers can zoom in for a closer view of the information on this map.)*

It should be noted that although, updated hazard layer datasets have been obtained and new maps created for the 2013 SHMP, population data (from the 2000 census) are the same as those used for the 2010 SHMP maps because population changes reflected in the 2010 census data would be too small to be discernible at a statewide scale.

Since 1950, California has experienced over 400 state-proclaimed emergencies and/or federally declared disasters. For a description of California’s disaster history, including statistics and maps, see Chapter 4, Risk Assessment Overview. Among other things, it provides a profile of California’s assets at risk and outlines issues of climate change affecting natural hazards.

1.1.2 WHAT IS HAZARD MITIGATION?

Hazard mitigation is defined by FEMA as “any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards.” For the purposes of the SHMP, hazards include natural, technological/accidental, and adversarial/human-caused. A “hazard” is defined by FEMA as “any event or condition with the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, environmental damage, business interruption, or other loss.”¹

Hazard mitigation is distinguished from other disaster management functions by measures that make development and the natural environment safer and more disaster-resilient. Effective mitigation begins with identifying the threats and hazards a community faces and determining the associated vulnerabilities and consequences. Understanding risks makes it possible to develop strategies and plans to manage them. The purpose of mitigation planning is to identify policies and actions that can be implemented over the long term to reduce risk and future losses. Mitigation Plans form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage.

Hazard mitigation differs from emergency preparedness, which focuses on activities designed to make a person, place, organization, or community more ready to take appropriate action in a disaster with emergency response, equipment, food, shelter, and medicine. However, hazard mitigation and emergency preparedness go hand-in-hand because where time or financial resources may preclude certain desirable mitigation actions, emergency preparedness can make it possible to respond and recover appropriately despite losses that may be unavoidable.

1.1.3 THE SHMP – AN ENHANCED STATE MITIGATION PLAN

This document is a comprehensive update of the 2010 SHMP. It performs the following functions:

- Documents statewide hazard mitigation systems implemented in California
- Describes strategies and priorities for future mitigation activities
- Highlights new hazard mitigation initiatives since the 2010 SHMP
- Describes and illustrates mitigation progress and success stories
- Facilitates integration of local, state, tribal, and private sector hazard mitigation activities into a comprehensive statewide effort
- Meets state and federal statutory and regulatory requirements for an “Enhanced State Mitigation Plan” (see below)

The 2010 SHMP was adopted by the state in September 2010. It was also approved by FEMA as a Standard State Mitigation Plan as well as designated by FEMA as an Enhanced State Mitigation Plan in October 2010. The 2013 SHMP has also been designed to meet the requirements for an Enhanced State Mitigation Plan under Rule 44 Code of Federal Regulations (CFR) Part 201.4 published by FEMA.

¹ 44 CFR Section 206.401

State adoption of the SHMP and FEMA approval of the SHMP as a Standard Plan qualify California to obtain federal assistance for hazard mitigation and for the repair and replacement of infrastructure damaged in natural disasters. FEMA designation of the SHMP as an Enhanced State Mitigation Plan provides additional post-disaster funding to the state.

Under the Stafford Act, as amended, an Enhanced State Mitigation Plan designation would continue California's present qualification to receive Hazard Mitigation Grant Program (HMGP) funding after federally declared disasters of up to 20 percent of the federal funding authorized for Public Assistance and Individual Assistance programs with a Presidential declaration.

Without the Enhanced State Mitigation Plan designation, California would only qualify for receipt of hazard mitigation funds according to the following formula:

- 15 percent for amounts not more than \$2 billion
- 10 percent for amounts more than \$2 billion and not more than \$10 billion
- 7½ percent for amounts more than \$10 billion and not more than \$35 billion

As noted previously, FEMA approval of the 2010 SHMP has enabled California to receive approximately \$135.2 million in Public Assistance grant funding and \$33.8 million in Hazard Mitigation Grant Program funding between January 2010 and December 2012. Without a FEMA-approved SHMP, California would not have received these funds.

According to the FEMA guidance criteria:

An Enhanced State Mitigation Plan documents the State's demonstrable and sustained commitment to the objectives of hazard mitigation. This designation recognizes the State as a proactive leader in implementing a comprehensive statewide program. The enhanced status acknowledges the extra effort a State has made to reduce losses, protect its resources, and create safer communities.²

As with the 2010 SHMP, the stakes are high for achieving Enhanced State Mitigation Plan status in 2013. Although most disasters cost well under the \$2 billion threshold, a few in California since 1950 have exceeded that amount. In short, the principal value of having a FEMA-approved Enhanced State Mitigation Plan lies with California's potential for catastrophic events. In light of increasingly high probabilities estimated for catastrophic earthquakes to occur on the San Andreas and Hayward Faults, approval of an Enhanced State Mitigation Plan is in everyone's best interest in California.

To be approved by FEMA as an Enhanced State Mitigation Plan, the 2013 SHMP must describe the state's system and strategy for tracking mitigation projects, demonstrate that the state is capably managing these in relation to SHMP goals, and show that California is a "proactive leader in implementing a comprehensive statewide program."³

1.2 PLAN OVERVIEW

The SHMP is designed to be a reference for a variety of users having specific interests in some aspect of its detailed contents. For those interested in understanding the document as a whole but not the detailed subject matter covered, the following discussion provides an overview.

² 44 CFR Section 206.401

³ 44 CFR Section 206.401

1.2.1 WHAT'S NEW IN THE 2013 SHMP?

The 2013 SHMP provides a variety of new features:

- The SHMP generally continues the chapter organization and content of the 2010 Plan
- Substantial new material has been added on climate change mitigation and adaptation
- Addition of a new annex on the topic of lifelines and renumbering of some annexes
- Additions and deletions to material included in the appendices and renumbering of some appendices
- The SHMP continues to “live” primarily on the Cal OES “Hazard Mitigation” web portal (<http://hazardmitigation.calema.ca.gov/>), which provides updated links to external information resources
- Readers can download the plan and/or its annexes for separate use
- Users can zoom in on many of the online or downloaded maps for a closer view
- A summary of what's new by chapter is included at the end of chapter 1.

Progress Summaries

Progress as of 2013: The 2010 SHMP introduced summaries of mitigation progress during the preceding three-year period. This feature is continued in the 2013 SHMP to capture substantial hazard mitigation activities in the past three years; such as retrofitting of seismically vulnerable structures through California Earthquake Authority loans, major flood mitigation activities undertaken by the Department of Water Resources and extension of new wildfire mitigation requirements in CALFIRE's Very High Fire Hazard Severity Zones. Mitigation progress summaries are provided in light blue-highlighted text boxes throughout Chapters 1 through 7.

Best Practices Highlights

Mitigation Examples: The 2013 SHMP introduces highlights of mitigation initiatives taken at the local, regional and state levels that represent significant new best practices, e.g., recent retrofitting of over 100 unreinforced masonry (brick) buildings to better withstand earthquakes in downtown San Luis Obispo, and adoption of a new “soft-story” ordinance designed to assure strengthening of 3,000 seismically vulnerable multi-story buildings in San Francisco. This new feature is intended to provide fresh ideas for public and private sector organizations moving forward on hazard mitigation projects throughout the state. Mitigation best practices highlights are provided in light yellow text boxes in Chapters 5 and 6.

1.2.2 2013 SHMP CHAPTER OUTLINE

The chapter structure of the 2013 SHMP includes a significant amount of new material reflecting modifications, updates, and progress made since 2010. Highlights include the following:

Chapter 1, The Planning Process, provides an overview of the 2013 SHMP, identifies the plan update approach, and generally explains how state agencies, private organizations, and the public were involved in the update.

Chapter 2, State Goals and Objectives, presents state mitigation goals and objectives for decreasing life loss and injuries, minimizing damage and disruption, and protecting the environment. It also identifies federal hazard mitigation funding priorities as well as issues pertaining to Local Hazard Mitigation Plans.

Chapter 3, State Mitigation Strategies and Actions, summarizes the institutional context for the SHMP and describes progress since 2010 for eight basic mitigation strategic action components.

Chapter 4, Risk Assessment Overview, provides a profile of California's size, population, and other assets requiring protection from disaster losses, establishes common terminology used in the SHMP, describes California's disaster history, and provides an update on issues of climate change affecting natural hazards.

Chapter 5, Earthquakes, Floods and Wildfires: Risks and Mitigation, provides an assessment of hazards, risks, and population vulnerability in California’s 58 counties; describes in greater detail the three primary hazards (earthquakes, floods, and wildfire); profiles and assesses potential losses to buildings and critical infrastructure; and describes mitigation progress since 2010.

Chapter 6, Other Hazards: Risks and Mitigation, provides an assessment of hazards, and profiles and assesses potential losses to buildings and critical infrastructures from levee failure, landslide, tsunami, climate-related, human-caused, and various other hazards, and describes mitigation progress since 2010.

Chapter 7, SHMP as an Enhanced State Mitigation Plan, includes integration of the SHMP with other planning initiatives, program management and project implementation, effectiveness of mitigation actions, and use of available mitigation funding. It links these criteria to California’s comprehensive mitigation program and describes the ongoing strategy for monitoring, evaluating, and updating the SHMP.

A more detailed summary of chapter updates is included in a feature box at the end of Chapter 1. The SHMP also includes a series of annexes on specialized topics: Annex 1, Guide to Community Planning and Hazard Mitigation; Annex 2, Guide to California Hazard Mitigation Laws, Policies and Institutions; Annex 3, Lifelines Infrastructure and Hazard Mitigation Planning; Annex 4, Public Sector Funding Sources; Annex 5, California Local Hazard Mitigation Plan Status Report; and Annex 6, 2010 SHMP Stakeholder Survey Report. Also included are appendices providing details supplementing chapter text.

1.3 PREPARING THE 2013 SHMP

This section generally describes how the updated SHMP was prepared, who was involved in the planning process, how the state planning team reviewed and analyzed the SHMP, and how each chapter was revised.

Most important is the description of how the SHMP has been implemented and revised using a multi-stakeholder approach in an effort to maximize the value added from the plan revision process. Hazard mitigation planning is a dynamic process built on realistic assessments of hazards and effective strategies for investing in priority mitigation projects and actions. It involves multiple stakeholders and blends public and private sector goals, objectives, and actions.

A series of working groups organized in conjunction with the preparation of the 2010 SHMP continued to meet throughout 2011 with one meeting again in 2013. Decisions about continuation of working groups and establishment of new working groups are pending. Additionally, the full State Hazard Mitigation Team met multiple times during 2013 to initiate and review drafts of the 2013 SHMP. These include an administrative draft, a public review draft, a FEMA-approval draft, and a final manuscript for adoption by the Cal OES Director. Public outreach included various work group meetings and subsequent online public review and commenting.

1.3.1 PLAN UPDATE PROCEDURE

An overall goal of the 2013 SHMP update process has been to facilitate mitigation action across the boundaries of federal and state agencies, local governments, tribal organizations, business and industry, and nonprofit private sector organizations. While Cal OES has lead responsibility for the development and maintenance of the SHMP, this document has been produced in collaboration and through engaged partnerships with multiple state agencies and other groups. A State Hazard Mitigation Team (SHMT) representing over 80 agencies and organizations, including four working groups, met regularly starting in 2010 to prepare the 2010 SHMP and in 2011 to address various implementation issues. The SHMT resumed meeting in early 2013 to continue its work to implement the 2010 SHMP and begin the 2013 SHMP update. The SHMT is the primary resource for information contained in the SHMP and Cal OES the steward of the plan on behalf of the people of California.

Draft Updates

The 2013 SHMP was prepared on the basis of a master outline designating content and approximate length of each chapter. Updates for each chapter were solicited by Cal OES from members following a SHMT kickoff meeting in January 2013. SHMT members submitted chapter and section updates for editorial integration by Cal OES and a faculty-student team at California Polytechnic State University San Luis Obispo. An administrative draft 2013 SHMP was prepared by this team during the first half of 2013, followed by SHMT review and evaluation in the spring. A review of changes to each chapter was undertaken by the SHMT in June 2013. Revisions were included in a public review draft placed on the web in July 2013. See Sections 3.6.4 and 7.7 for more information.

SHMP Integration with Emergency Management

The update process recognized that the SHMP plays a fundamental role in comprehensive, integrated emergency management in California. Among other things, it identifies and analyzes the consequences of the risks associated with human-caused and natural hazards, together with vulnerabilities of people and property associated with such risks and mitigation programs devised to lessen their impact. Timely and effective hazard mitigation has multiple benefits that include:

- Minimizing deaths, injuries, and other negative disaster impacts on the public
- Reducing disaster losses to property, facilities, and infrastructure
- Minimizing negative impacts on the environment and economic condition of the state
- Lessening the work of emergency responders
- Assuring greater continuity of government operations, including continued delivery of services
- Creating conditions by which recovery can happen more quickly and be less costly
- Heightening public confidence in the jurisdiction's governance

The 2013 SHMP identifies these benefits as an integral part of its various chapters, providing detailed evidence of the value of reducing specific hazards, risks, and vulnerabilities to achieve such benefits. Such benefits are reflected in the SHMP goals in Chapter 2, strategies and actions in Chapter 3, risk assessment overview in Chapter 4, evaluation of primary and other hazards and their mitigation in Chapters 5 and 6, and the description of California's comprehensive mitigation program management in Chapter 7.

1.3.2 COORDINATION AMONG AGENCIES AND DEPARTMENTS

Coordination among state and federal agencies is essential for both updating the SHMP and implementing it successfully. A major step forward in coordination during the preceding 2007-2010 SHMP planning cycle was formal consolidation of the former Governor's Office of Emergency Services (OES) and the California Governor's Office of Homeland Security (OHS) into a single, Cabinet-level agency, Cal EMA. Since then, Cal EMA has been renamed the California Governor's Office of Emergency Services or Cal OES (effective July 1, 2013). The benefit from this reorganization was that it created a stronger relationship between Cal OES and the executive power of the Governor, giving Cal OES clearer authority to act on the Governor's behalf during emergencies.

State Hazard Mitigation Team (SHMT)

Preparation of the 2013 SHMP has relied heavily on the State Hazard Mitigation Team (SHMT) and its working groups to provide information regarding new laws, hazard conditions, and mitigation actions taken during the past three years. Comprised of over 80 agencies and organizations having responsibility for state-mandated hazard mitigation activities, the SHMT has been instrumental in the development of the 2013 SHMP, which contains substantial new information about individual agency mitigation program responsibilities.

In addition to the SHMT and its working groups, federal-state coordination is facilitated through various ad hoc consultation processes, including catastrophic event preparedness planning that has examined the role of mitigation in easing response and recovery requirements, as well as federal-state coordination related to emerging mitigation issues involving climate change, tsunamis, levee failure, flood hazards, and extensive fires in wildland-urban interface (WUI) areas.

Meeting continuously as a whole from 2009 through 2011, and again from January 2013 through August 2013, the SHMT has assessed, evaluated and carried out the following goals and functions related to the 2013 SHMP coordination efforts:

- Coordinated review of all state agencies' hazard mitigation roles
- Identified new legislative initiatives
- Actively worked to develop a sustainable statewide hazard mitigation program
- Reported on changes in hazards, agency progress toward achieving mitigation goals and ongoing projects, and new opportunities arising through advancements in technology, knowledge, or completed work
- Addressed most recent mitigation achievements to keep current on significant changes, new technologies, and advances in knowledge
- Encouraged and engendered cross-sector mitigation communication and knowledge-sharing
- Discussed how to promote land use mitigation
- Developed and promoted MyPlan, a new online GIS hazards Internet Mapping Service (IMS) supporting local hazard mitigation planning
- Formed new working groups for the Adaptation Planning Guide and California Vital Infrastructure Vulnerability Assessment (Cal VIVA) projects
- Reviewed the administrative drafts of the 2013 SHMP and recommended refinements

SHMT Strategic Working Group Initiatives

The SHMT meetings have in recent years provided a compelling forum for engaging team members in the plan update and revision process in a direct and more meaningful way through the formation of four strategic working groups. Surveys of SHMT members and focus group interviews conducted to explore members' interests and concerns regarding inter-agency coordination led to the activation of four strategic work groups:

- Mitigation Progress Indicators and Monitoring
- Cross-Sector Communications and Knowledge-Sharing
- Land Use Mitigation
- Geographic Information Systems Technical Advisory Working Committee (GIS TAWC)

Initiated in the fall of 2009, the strategic work groups were held on a voluntary participation basis, encouraging SHMT members to focus on subjects about which they felt knowledgeable and interested. Meetings averaged approximately one to two dozen people, a number small enough to allow for in-depth discussion. The four groups met throughout 2010 and the following year, formalizing their findings and recommendations in individual reports presented to the full SHMT in October 2011. The four working groups were supplemented by similar groups formed to advise on preparation of the Adaptation Planning Guide and the California Vital Infrastructure Vulnerability Assessment (Cal VIVA) projects.

FEMA representatives have been included in meetings of the four strategic working groups. Through these groups, FEMA Region IX representatives have been fully engaged in supporting forward movement of 2010 SHMP implementation and 2013 SHMP preparation

State Hazard Mitigation Team discusses hazard mitigation progress



Progress Summary 1.A: Plan Strategies

Progress as of 2013: California has made substantial progress in carrying out eight key strategies for action in the 2010 SHMP. Highlights include the following (elaborated further in Chapters 2 through 7 of this 2013 SHMP):

1. **Adopt Legislation Formalizing Mitigation Programs.** Based on legislation adopted earlier, major action was taken in 2012 by the Central Valley Flood Protection Board to adopt the Central Valley Flood Protection Plan with which local general plans must be consistent. In addition, legislation (Senate Bill 1241) was adopted requiring localities in State Responsibility Areas and Very High Fire Hazard Severity Zones (VHFHSZ) to update their general plan safety elements (and all elements of a general plan, whether mandatory or optional, must be consistent with one another) to recognize wildfire risks identified in CAL FIRE's fire hazard severity zone mapping and to adopt special findings of fact for subdivisions approved in such areas and zones.
2. **Strengthen Inter-Agency Coordination.** A major step forward in strengthening interagency coordination during the prior 2010 SHMP planning cycle was consolidation of the former Governor's Office of Emergency Services (OES) and Governor's Office of Homeland Security (OHS) into a single agency, more recently followed by renaming of the consolidated agency with the previous title of California Governor's Office of Emergency Services (Cal OES) to provide a stronger base of executive authority for the agency. Additionally, the State Hazard Mitigation Team (SHMT) was strengthened through formation and ongoing meetings of four strategic working groups: Cross-Sector Communications and Knowledge-Sharing, Mitigation Progress Indicators and Monitoring, Land Use Mitigation, and the Geographic Information Systems Technical Advisory Working Committee (GIS TAWC) - as well as similar groups formed to advise on the preparation of the Adaptation Planning Guide and the California Vital Infrastructure Vulnerability Assessment (Cal VIVA) projects. Recent wildfire legislation Senate Bill 1241 actualizes this strategy by requiring local governments to update their general plan safety elements (and all elements of a general plan, whether mandatory or optional, must be consistent with one another) to recognize wildfire risks in State Responsibility Areas (SRAs) and Very High Fire Hazard Severity Zones (VHFHSZ) identified by CAL FIRE.
3. **Broaden Public and Private Sector Mitigation Linkages.** Cal OES has extended its outreach to citizen, business, and local government groups. Participation in an online survey distributed to business and professional associations, local governments, and metropolitan planning organizations (MPOs) during the 2010 SHMP planning cycle was supplemented by meetings of the Cross-Sector Communications and Knowledge-Sharing Working Group through 2011. Recommendations of the working group are summarized in Chapter 3. Additionally, Cal OES conducted one-day Local Hazard Mitigation Plan (LHMP) preparation workshops for local government representatives in various parts of the state.
4. **Set Targets for Measuring Future Progress.** SHMT strategic planning has given attention to setting targets to measure mitigation progress. The Mitigation Progress Indicators and Monitoring Strategic Working Group met throughout 2011 to refine prior recommendations regarding establishment of baselines against which to measure and monitor progress, and to identify best practices examples by which to encourage new mitigation initiatives. Recommendations of the working group are summarized in Chapter 3.

5. **Enhance Data Systems and GIS.** The GIS Technical Advisory Working Committee (GIS TAWC) – a collaboration among Cal OES, the California Natural Resources Agency, U.C. Davis, and GIS sponsor agencies – was formed to guide mitigation-related GIS applications. In the fall of 2011, the GIS TAWC helped launch MyPlan, a new online GIS hazards data Internet Mapping Service (IMS) designed to assist local governments in undertaking more effective local hazard mitigation. Recommendations of the GIS TAWC for the second-phase expansion of MyPlan are summarized in Chapter 3.
6. **Establish a Mitigation Registry for Communicating Progress.** The Mitigation Progress Indicators and Monitoring Strategic Working Group collaborated with the full SHMT during 2011 to prepare a Mitigation Progress Report Form by which to report updates to the SHMP, mitigation success stories, and locally significant mitigation progress. This form, recently placed online, has been used by SHMT members and others during formulation of the 2013 SHMP and is expected to establish the basis for a future mitigation progress/project registry that can be integrated into MyPlan. Recommendations of the working group are summarized in Chapter 3.
7. **Implement SMART Mitigation Loss Avoidance Tracking.** The 2010 SHMP identified State Mitigation Assessment Review Team (SMART) as a refined concept for undertaking post-disaster assessments of benefit-cost aspects of mitigation projects completed prior to disasters, for the purpose of establishing a detailed record of effectiveness (actual cost avoidance). During the prior 2010 SHMP planning cycle Cal OES (then Cal EMA) and the California State University (CSU) system co-signed an implementing agreement for post-disaster deployment of pre-trained CSU faculty. Training of a pool of approximately 37 field investigators was undertaken in 2010 and 2011. Full SMART implementation is expected to get under way in conjunction with implementation of the 2013 SHMP.
8. **Connect Mitigation Planning with Regional Planning.** The Land Use Mitigation Strategic Working Group met with regional planning entities such as the Association of Bay Area Governments (ABAG) and the Sacramento Area Council of Governments during 2011 to explore methods of strengthening coordination between regional and local hazard mitigation planning. Among other things, the Land Use Mitigation Strategic Working Group coordinated local hazard mitigation planning with regional strategies of SB 375 and continued Cal OES encouragement of the California Strategic Growth Council to add hazard mitigation as a priority grant-eligible planning activity. Recommendations of the working group are summarized in Chapter 3.

For an expanded discussion of the SHMT strategic working group and GIS TAWC process, see Chapter 3. The meeting records of the State Hazard Mitigation Team (SHMT) and strategic working groups are in Appendix A. For a full list of organizations participating in the SHMT, see Appendix B.

1.3.3 PUBLIC INVOLVEMENT

Preparation of this SHMP has involved public participation at various times, venues, and levels of focus, including public participation with statewide single-hazard plans. The following is a brief description of how business, nonprofit, and other stakeholder organizations are engaged in the plan update process.

Prior Public Participation

Three hazard-specific plans—the California Earthquake Loss Reduction Plan, California Fire Plan, and State Flood Hazard Mitigation Plan—were all developed through collaborative processes that involved multiple stakeholders, including local, state, and federal agencies; nonprofit organizations; and the public. They continue to be revised with separate update and public participation cycles, in turn feeding into SHMP updates. For further information on statewide hazard-specific plan update processes, see Section 1.5.2.

Also contributing to public participation in the 2013 SHMP update are local preparation and adoption of 374 FEMA-approved Local Hazard Mitigation Plans as of December 2012 including those of 226 cities and counties and 148 special districts. Local governments are in a unique position to encourage grassroots organizations, public and private organizations, and the general public to directly participate in planning for

increased safety and sustainability of their own communities through the Local Hazard Mitigation Plan update process. Overall trends and patterns in these updates are in turn reflected in the 2013 SHMP.

Private Sector and Professional Association Participation

Cal OES has benefitted by the ongoing work of the SHMT Cross-Sector Communications and Knowledge-Sharing Strategic Working Group to assess challenges in this subject area. The work group found that cross-sector interaction between public and private sector organizations is primarily issue-focused, and cross-sector knowledge about each other's mitigation initiatives is limited, but that opportunities exist for expanded communication.

Among other things, the working group assisted Cal OES in bringing in private sector involvement into the SHMT, and in systematically organizing outreach, and customized messaging for various professional and business associations and local governments. For example, in October 2011 an article titled "Disaster Mitigation Planning Builds Sustainable Communities" was published as an online feature in *Western City*, the magazine of the League of California Cities.

Public Outreach Strategy

The public outreach strategy has been designed to reach a broader array of public agencies and private sector businesses than in the past and to find within those networks the individuals who would be most likely to provide comment and insight on the 2013 SHMP.

Cal OES has extended its outreach to professional, business, and local government groups through the Cross-Sector Communications and Knowledge-Sharing Strategic Working Group. This strategic working group presented formal recommendations to the full SHMT in late 2011. The working group focused special attention on the design of custom messaging aimed at various associations, local governments, and metropolitan planning organizations (MPOs) to underscore the importance of hazard mitigation.

Three key objectives of the outreach contacts were to 1) make effective use of networks and technology to broadly include in the update process relevant agencies and businesses, 2) solicit informed comment and ideas on the draft SHMP and mitigation planning initiatives, and 3) establish relationships with key interested parties in both public and private sectors having the potential to influence ongoing hazard mitigation actions. The strategy to accomplish those objectives involved the following actions:

- Developing a database of contacts based on professional networks, both public and private
- Communicating with the representatives in the database of umbrella network organizations, and soliciting their participation through announcements regarding the draft SHMP and its release
- Widely publicizing the release of the draft SHMP and extending invitations to provide online comment
- Laying the groundwork for further collaborations between the state and interested stakeholders

2013 Outreach Schedule

Outreach has targeted government, nonprofit, and business/trade associations who represent a broad spectrum of interests. Cal OES has identified organizations for contact and comment opportunities based on their level of interest and involvement in mitigation planning and projects. Drawing on findings from public survey conducted in conjunction with the 2010 SHMP, the Cross-Sector Communications and Knowledge-Sharing Strategic Working Group reached out to various public and private sector organizations to build partnerships with Cal OES for implementing hazard mitigation.

Table 1.A shows the 2013 SHMP public outreach schedule which had its roots in 2010 SHMP implementation. In 2011, the Cross-Sector Communications and Knowledge-Sharing Strategic Working Group reached out to various business and professional associations with targeted messaging using results from a public stakeholder survey taken in conjunction with the 2010 SHMP (see Annex 5). This was followed

in 2012 by online launching of the MyPlan GIS hazard mapping Internet Map Service (IMS) targeted for use by cities, counties, and special districts in preparation of local hazard mitigation plans. In 2013, the SHMT was convened for the purpose of providing updates for the 2013 SHMP draft, review was conducted by the SHMT, and the draft was released online for public review and comment in July. Various email notifications and newsletter publications were distributed to solicit review and comment of this draft.

Table 1.A: Public Participation Schedule

Activity	Date
Strategic Working Group outreach to business/professional associations	January – December 2011
Implementation of first phase of MyPlan online GIS hazards mapping	January – December 2012
SHMT outreach for 2013 SHMP update	January – August 2013
Formal public review and comment on draft 2013 SHMP	July – September 2013
State Clearinghouse state agency review of 2013 SHMP	July – September 2013
Revisions to the 2013 SHMP	August – September 2013
Formal FEMA review of the 2013 SHMP	August – September 2013

The objective of this extensive outreach effort has been to provide a variety of organizations with particular interest in the area of hazard mitigation the opportunity to maximize feedback.

Outreach Database

The outreach contacts database reflects representation from both public and private sector organizations. Public sector organizations include 538 city and county planning departments and 29 metropolitan planning organizations (MPOs), as well as representatives from over 80 agencies and other organizations in the State Hazard Mitigation Team. Private sector representation includes approximately 140 business, professional, nonprofit, and private sector organizations. The latter are typically umbrella associations representing a wide membership network.

Taking into account the diversity of memberships, this database encompasses a comprehensive and broad array of interests, creating the opportunity for the outreach effort to touch a greater number of individual agencies, nonprofits, and businesses. Appendix J lists the MPOs, city and county planning organizations, and other associations contacted for public review input.

2013 Outreach Procedures

The public outreach conducted for the 2013 SHMP was built upon prior efforts conducted in 2010. Notably, the outreach contacts database grew to include a more diverse representation of the private sector. Through distribution of the 2010 online surveys, Cal OES identified potential partnerships for implementing hazard mitigation on a broad basis. Stakeholder participation has been encouraged by Cal OES using the following outreach tools:

1. Cross-Sector Communications and Knowledge-Sharing Strategic Working Group outreach to various business and professional associations with targeted messaging regarding hazard mitigation planning and projects
2. Implementation in 2012 of the MyPlan online GIS hazards Internet Mapping Service (IMS) targeted to cities, counties, and special districts to improve the quality of local hazard mitigation planning
3. Solicitation of 2013 SHMP updates from the SHMT during the first half of 2013, together with formal review of the initial administrative draft from mid-June to mid-July
4. Posting of the Public Review Draft 2013 SHMP on the Cal OES “Hazard Mitigation” web portal for comment by organizations and individuals from mid-July to early September 2013
5. Notice of the Public Review Draft 2013 SHMP online posting to the State Hazard Mitigation Team members, contacts in the outreach database, contacts in the Earthquake Country Alliance (ECA)

database, and in several newsletters such as the BICEPP Bulletin, City Advocate Weekly, and CSAC Bulletin

6. Review of online comments received on the Public Review Draft 2013 SHMP with selected responses, as appropriate
7. Revisions to the 2013 SHMP based on public comments

Hazard Mitigation Web Portal

The Cal OES has been augmented by the addition of the “Hazard Mitigation” web portal which serves as a one-stop location for hazard mitigation information and resources. It represents an easy way for the public to participate in the 2013 SHMP revision process. The portal includes a comment/request form allowing individuals to communicate directly with Cal OES staff on a wide range of mitigation topics in addition to giving specific comments on the 2013 SHMP See link at:

http://hazardmitigation.calema.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp

Also included in the Hazard Mitigation web portal is a GIS application of direct use to individual citizens and property owners. This online Internet Map Service (IMS), known as MyHazards and created jointly by Cal OES and the California Natural Resources Agency (CNRA), provides homeowners, property owners, and residents with natural hazards data, both regulatory (e.g., areas having legal requirements related to real estate transfers such as flood, fault, liquefaction, and landslide zones) and informational, in one location on the web in response to a simple query involving user input of a location or address. For each location and hazard type, hazard mitigation strategies are displayed based on their applicability for that level of hazard. Links are included providing explanations of how to complete property-related mitigation actions (see Chapter 3, Section 3.5.5).

1.4 IMPLEMENTING THE 2013 SHMP

Implementation of the 2013 SHMP is a crucial aspect of the mitigation planning process. It is founded on the principle that planning and implementation must go hand-in-hand for either to be effective. The underlying foundation of any Enhanced State Mitigation Plan is the existence of a comprehensive mitigation program of which planning is only a part. Implied in this concept is the idea of the continuous feedback cycle by which planning informs implementation and vice versa. For better outcomes, hazard mitigation planning should guide implementation projects. Likewise, as implementation efforts are made, the outcomes help provide information for subsequent plans. To this end, the 2013 SHMP includes a series of text boxes summarizing implementation progress since adoption of the 2010 SHMP as well as highlighting best practices (for list of best practices highlight features, see table of contents).

1.4.1 CAL OES COORDINATION ROLE

Cal OES’ mission is to protect lives and property, build capabilities and support local communities for a more resilient California.

While Cal OES coordinates statewide hazard mitigation activities in California, many specific mitigation efforts are part of programs administered by other state agencies and departments such as the California Seismic Safety Commission, CAL FIRE, Department of Water Resources, Governor’s Office of Planning and Research, California Geological Survey, and Department of Housing and Community Development.

The foundation for state agency coordination of hazard mitigation is Governor’s Executive Order W-9-91, issued in 1991, which authorized the Director of the former OES to assign specific emergency functions to state agencies through standing administrative orders that are operational until superseded. A letter to agency secretaries on September 12, 2000, by then-Governor Davis initiated the updating of all standing orders related to emergency management and included hazard mitigation for the first time.

Standard hazard mitigation provisions in the standing administrative order included the following:

- Identify, document, and, when practical, implement those activities that potentially could reduce or lessen the impact of an emergency
- Establish hazard mitigation as an integral element in operations and program delivery as appropriate
- During a Presidential declaration of a major disaster, participate in the hazard mitigation planning process

These early administrative directions have been strengthened through consolidation of the former OES and OHS organizations into Cal OES, which is involved with coordination of various local, state and federal agencies; tribal governments; businesses; nonprofit organizations; and others involved in hazard mitigation planning efforts in California.

1.4.2 CAL OES IMPLEMENTATION ROLE

The primary responsibilities of Cal OES in preparing and implementing the SHMP are to:

1. Ensure that the SHMP meets FEMA requirements and is approved by FEMA as an Enhanced State Mitigation Plan
2. Coordinate the continued development of the SHMP, including coordination of the State Hazard Mitigation Team and local and federal agencies
3. Provide ample opportunity for public involvement in the development of the SHMP
4. Administer FEMA hazard mitigation grant programs, including the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), Flood Mitigation Assistance Program (FMA) and Severe Repetitive Loss Program (SRL) (*On July 6, 2012, President Obama signed the Biggert-Waters Flood Insurance Reform Act of 2012, which combined the SRL funding into the FMA program, and created a combined National Flood Mitigation Fund.*)

The 2013 SHMP outlines California State government's assessment of hazards the state faces together with goals, strategies, and activities to address and minimize them. Although this is only the fourth SHMP, California had been successfully implementing hazard mitigation over several decades, expending billions of dollars to reduce or eliminate long-term risks to life and property caused by hazards. Cal OES implements the state multi-hazard mitigation planning process put forward in the 2013 SHMP and its predecessors by:

- Inviting state agencies with key hazard mitigation roles to join the SHMT and become active participants in the development of the SHMP
- Providing outreach, technical assistance, and education at the local government levels regarding the SHMP and implementation of local plans
- Providing the public with the opportunity to review and comment on the SHMP

1.5 INTEGRATION WITH OTHER PLANNING EFFORTS

This SHMP integrates and enhances all state mitigation planning efforts within a statewide comprehensive framework. Various state agencies have been delegated mitigation planning responsibilities through state law or by executive order.

1.5.1 STATE EMERGENCY PLAN

Executive Order W-9-91 required the Director of OES to prepare the California State Emergency Plan (SEP) and to coordinate activities of all state agencies during the preparedness and response phases of emergencies. Subsequent administrative orders require hazard mitigation as part of emergency planning activities.

State Emergency Plan Linkage with SHMP

The SHMP is an important supporting document to the SEP. The SEP defines and describes the fundamental systems, strategies, policies, assumptions, responsibilities, and operational priorities that California uses to guide and support emergency management efforts. The SEP and the SHMP are closely linked; Section 8 of the SEP identifies mitigation as one of the four emergency management functions and references the role of the SHMP in describing and mitigating hazards, risks, and vulnerabilities, thereby reducing disaster losses. The SEP provides several examples of hazards, risks, and vulnerabilities giving rise to emergencies in California. However, it formally acknowledges the SHMP as the overriding comprehensive hazard analysis document that it relies upon for detailed hazard, risk, and vulnerability analysis, and other hazard mitigation-related information and programs.

Key State Emergency Plan Provisions

Essential elements of the SEP include:

- A description of what emergency services are provided by governmental agencies and how resources are mobilized
- An outline of the methods for carrying out emergency operations and the process for rendering mutual aid
- An overview of the system for providing public information
- Emphasis on the need for continuity planning to ensure uninterrupted government operations

The SEP implements Emergency Function working groups, which develop functional annexes that follow an established format to describe discipline-specific goals, objectives, operational concepts, capabilities, organizational structures, and related policies and procedures. The functional annexes are developed separately from the basic plan and make reference to existing agency and department plans and procedures. Subsequent plans and procedures that are developed in support of the SEP, such as mutual aid plans, the SHMP and other hazard-specific plans, catastrophic plans, and related procedures, are incorporated by reference and maintained separate from the SEP.

The State Emergency Plan (SEP) establishes the California Emergency Functions (CA-EFs) as a key component of California's system for all-hazards emergency management. The California Emergency Management Agency (Cal EMA) initiated the development of the CA-EFs in cooperation with California's emergency management community including federal, state, tribal, and local governments, public/private partners and other stakeholders to ensure effective collaboration during all phases of emergency management. The development of the CA-EFs involves organization of the participating stakeholders and gradual development of emergency function components. (For a complete list of CA-EFs see section 2.7 of Annex 2.)

Related Plans

The 2013 SHMP provides a common database and assessment concerning hazards, vulnerabilities, and risk from natural and human-caused hazards for the SEP and a variety of related operational emergency plans. The following is a list of Cal OES plans and guidance documents referencing mitigation:

- California Catastrophic Incident Base Plan: Concept of Operations
- California Earthquake and Tsunami Communications and Outreach Strategy
- California Emergency Plan
- Disaster Recovery and Mitigation Handbook
- Electric Power Disruption
- Emergency Management in California (2003)
- Emergency Planning Guidance for Local Government (revised 2007)

- Emergency Planning Guidance for Public and Private Water Utilities
- Recovery Manual
- Risk Communication Guide for State and Local Agencies
- Statewide Emergency Management Strategic Plan (2005-2010)

Various resources are available on the Cal OES website: www.caloes.ca.gov

The comprehensive hazard mitigation planning process captured in the 2013 SHMP provides an opportunity to integrate hazard mitigation into these other ongoing Cal OES and statewide planning documents. Where specific hazards are not dealt with in other state plans, the SHMP presents original research and analysis suggesting methods for achieving effective mitigation, tied to preparedness. For more information on relationships among the 2013 SHMP, State Emergency Plan and other plans, see Chapter 3 and Annex 2.

1.5.2 HAZARD-SPECIFIC MITIGATION PLANS

As a consequence of its experience with disasters, California has initiated a variety of ongoing hazard mitigation efforts for many years. Due to the frequency, intensity, and variety of natural disasters which occur in California and the corresponding statutory responses, mitigation efforts have tended to focus in a piecemeal fashion on mitigation of specific types of hazards. For example, after the 1971 Sylmar Earthquake, a wide variety of legislation was passed focusing on earthquake hazard mitigation. This single-focus legislation has expanded greatly since that time.

The state has undertaken particularly significant mitigation planning efforts for California's three primary impact disaster sources (earthquakes, floods, and wildfires) and is currently preparing an annex on volcanoes to the State Emergency Plan. As an outcome of past efforts, California has a number of hazard-specific mitigation plans in place. These include the following:

- **California Earthquake Loss Reduction Plan.** The California Seismic Safety Commission (CSSC) prepared the 2007-2011 California Earthquake Loss Reduction Plan to fulfill the requirements of the California Earthquake Hazards Reduction Act of 1986 (Government Code §8870, et seq.). Several organizations and individuals participated in the update of the 2002 plan, which reflects state-of-the-art seismic hazard mitigation techniques and is used as a tool to evaluate potential initiatives to reduce the impact of future earthquakes. The California Earthquake Loss Reduction Plan is periodically updated on a separate cycle and a new update with a narrower scope reflecting budget constraints is currently underway. (Visit: <http://www.seismic.ca.gov/mitigation.html>)
- **California Fire Plan.** The 2010 Strategic Fire Plan for California is the most recent document prepared under California law. It is the most recent version of the California Fire Plan, initially adopted in 1996. It differs from preceding versions in its brevity; it is comprised essentially of a core vision statement, with accompanying sets of goals and objectives comprising a broad statement of the state's priorities for fire protection and wildfire hazard mitigation services. Jointly developed by the California Board of Forestry and Fire Protection and CAL FIRE, the plan was prepared by a broad group of volunteers who served on the Fire Plan Steering Committee. Following comment from various levels of government, the business community, nonprofit organizations, and the public, the plan was adopted in 2010.
- **State Flood Hazard Mitigation Plan.** The State Flood Hazard Mitigation Plan was developed through a multi-agency collaborative effort that involved all levels of government, the private sector, and other stakeholders. The plan identifies high flood hazard areas and outlines mitigation strategies to address flood risk. FEMA initially approved the plan in 1996 on the condition that the state complete community profiles and state agency capability assessments. These two additional sections were approved by FEMA in 1997. Elements of the plan were updated through the FloodSAFE California initiative and other recently initiated Delta area levee retrofit programs.

The three plans include information on state and local risk that helped to form the foundation for the risk assessment in this SHMP. To the extent they are coordinated over time with each other and various other state and local plans dealing with hazard mitigation, they form an excellent foundation for comprehensive mitigation planning.

1.5.3 RELATED PLANNING EFFORTS

The following cooperative efforts served as models for the development of this SHMP. Cal OES and the SHMT reviewed and incorporated elements from numerous plans and documents in the development of the SHMP, including:

- California Fire Alliance outreach and coordination efforts
- OPR General Plan Guidelines
- OPR technical advice publications
- Sacramento-San Joaquin River Basins Comprehensive Study
- California Floodplain Management Task Force
- Hazardous materials plans
- Integrated Watershed Planning Principles
- Drought Task Force Report
- State of California Homeland Security Strategy
- Delta Risk Management Study (DRMS) report
- California Climate Change Adaptation Strategy
- California Tsunami Hazard Mitigation and Preparedness Program Action Plan

1.5.4 CAL OES LOCAL HAZARD MITIGATION PLANNING PROGRAM

Through Cal OES, the state has implemented a program to promote and support local hazard mitigation planning and local participation in state hazard mitigation planning. Principal among its own local hazard mitigation responsibilities is Cal OES's coordination of the planning requirements of the HMGP, FMA/SRL, and PDM, grant programs to promote multi-hazard mitigation planning by local governments. *(On July 6, 2012, President Obama signed the Biggert-Waters Flood Insurance Reform Act of 2012, which combined the SLR funding into the FMA program, and created a combined National Flood Mitigation Fund.)* Project grants funded through these programs are based upon priorities identified in this SHMP, as interpreted through Notices of Interest distributed to local jurisdictions after disasters.

Cal OES is working with the Governor's Office of Planning and Research (OPR) to incorporate information on hazard mitigation planning into the General Plan Guidelines, which provide guidance to California cities and counties in the preparation of their general plans. Assembly Bill 2140 (AB 2140), adopted by the California legislature in the fall of 2006, provides post-disaster financial incentives for local jurisdictions adopting their Local Hazard Mitigation Plans as part of their general plan safety elements. (For more information on AB 2140, see Chapter 3 and Appendix C.)

Assembly Bill 162, adopted by the California legislature in the fall of 2007, requires inclusion of flood hazard inundation mapping as part of general plan safety, land use, housing, and conservation elements. The Department of Water Resources has prepared user guidelines for implementation, in coordination with OPR, Cal OES, and other agencies. (For more information on AB 162 and related legislation, see Chapter 3 and Appendix D.) The schedules for requirements under AB 162 and companion bill SB 5, specifically related to the Central Valley, were extended by the legislature through approval of SB 1278 in 2012. This extension was intended to allow city and county local general plans as well as zoning in the Central Valley to be made consistent with the Central Valley Flood Protection Plan adopted in 2012.

Senate Bill 1241, adopted by the California legislature in the fall of 2012, requires inclusion of additional wildfire safety considerations as part of local general plans in all State Responsibility Areas and Very High Fire Hazard Severity Zones, together with special findings of fact supporting local approval of new subdivisions in such areas. OPR is required to prepare user guidelines for implementation, in coordination with Cal OES, and other agencies. (For more information on SB 1241 and related legislation, see Chapter 3 and Appendix D.)

Additionally, OPR, CAL FIRE, and the Regional Council of Rural Counties have developed a guidance document for incorporating wildland fire hazard mitigation language into general plans. OPR and CAL FIRE are providing outreach to local jurisdictions on wildfire mitigation planning through the Firewise Communities workshops and the California Fire Safe Communities programs. The Fire Hazard Planning document is part of OPR's General Plan Technical Advice Series.

1.6 ADOPTION BY THE STATE

Although this SHMP is coordinated and maintained by Cal OES, it is actually the culmination of recommendations from numerous stakeholders from local, state, and federal government agencies and private business organizations as well as individual citizens. Adoption of the 2013 SHMP is implemented by the Cal OES Director on behalf of the state government as a supporting document to the State Emergency Plan.

The 2013 SHMP represents a thorough description of the state's commitment to significantly reduce or eliminate impacts of natural and human-caused disasters through preparing and implementing comprehensive hazard mitigation plans and actions. This commitment is reflected in the newly revised SHMP goals and objectives discussed in Chapter 2.

1.7 UPDATING THE PLAN

The SHMP is subject to regular review and systematic, ongoing updates. The SHMP is a "living" document that reflects the state's continuous hazard mitigation commitment, planning, and implementation actions. Therefore, monitoring, evaluating, and updating the SHMP is ongoing and critically important to the effectiveness of hazard mitigation in California.

In the 2013 SHMP, over 50 Progress Summaries track significant mitigation initiatives, strategies, and actions completed since adoption of the 2010 SHMP. The seeds of this progress were reflected in the portions of the 2010 SHMP that described the systematic, ongoing update process. Cal OES monitors implementation of progress made toward plan goals and objectives, recommends new mitigation actions, and tracks specific events such as new federally declared disasters, monitors FEMA approval of Local Hazard Mitigation Plans (LHMPs), advances in knowledge regarding hazards by other state agencies, changes in federal and state legislation, performance of mitigation projects during hazard events, and grant administration.

Under 44 CFR 201.2, the State Hazard Mitigation Officer is the state's point of contact with FEMA, other federal agencies, and local governments for mitigation planning and implementation activities required under the Stafford Act and the Flood Insurance Act. Although review of SHMP progress previously was largely incremental, a new system of quarterly reports now makes monitoring, evaluation, and update process more continuous and systematic. The quarterly reports examine progress toward achieving goals and evaluating implementation activities.

Evaluation of the SHMP is a function of multiple stakeholders, including Cal OES, member agencies in the SHMT, local governments, and the public. During revision of the 2010 SHMP, a major plan evaluation effort

has been undertaken through the SHMT and through public outreach described in Chapters 1, 3, and 7, and Annex 6.

These sources of monitoring, review, and evaluation are systematically integrated and included in a new SHMP update every three years, in accordance with FEMA requirements and good planning practice. The 2010 SHMP identified mitigation factors that would be monitored and evaluated for inclusion in the 2013 SHMP. As discussed in detail in Chapter 3 of the 2013 SHMP, the SHMT has played an influential role in providing input, direction, and guidance for the three-year revision process.

Recommendations for implementation of SHMP revisions and actions were based on new technologies, such as use of the Cal OES web portal to disseminate plan concepts and to continuously collect information and comments, as well as new information from state agencies with scientific and/or regulatory responsibilities for hazard mitigation (e.g., additional California Geological Survey seismic mapping, CAL FIRE periodic wildfire risk map updates, and the new Department of Water Resources flood maps and user handbook) and adjustments to changes in federal or state laws, regulations, or policies.

What's New in the 2013 SHMP

What's New in Chapter 1

- Updated grant funding totals for 2010-2012
- Information on Cal EMA's reorganization to Cal OES
- Revised discussion on the enhanced plan
- Re-introduction of progress summaries started as green box features in the 2010 SHMP now as light blue box features in the 2013 SHMP
- Introduction of Best Practices Highlights, new to the 2013 SHMP, as light yellow box features
- Updated summary of plan strategies
- Updated outreach and public involvement activities for the 2013 SHMP

What's New in Chapter 2

- Minor re-wording of 2010 goals
- Re-wording of some 2010 objectives and addition of new objectives
- Updated status of LHMP program as of 2013
- Updated LHMP training workshop program status

What's New in Chapter 3

- Reformatted working group information
- New information on flood and fire hazard legislation and associated planning efforts
- Details of meetings and other activities of each of the working groups

What's New in Chapter 4

- Updated discussion of assets at risk
- Updated discussion of California's disaster history
- Expanded discussion on climate change
- New section on Multi-Hazards Demonstration Project
- New section on the National Preparedness System

What's New in Chapter 5

- Introduction of MyPlan Internet Map Service website
- Numerous updates to Earthquake Hazards Section 5.2 including: Great California ShakeOut update, Cal VIVA update, Mitigation activities for building sub-inventories update, CEA residential hazard, vulnerability, risk and mitigation assessment update, Mitigation activities for utilities and transportation update, Seismic Hazards Mapping Projects update

- Numerous updates to Flood Hazards Section 5.3 including: New flood laws update and information regarding new flood hazard related legislation, NFIP updates including discussion of the Biggert-Waters Act, Flood management plan updates: including information on the Central Valley Flood Management Plan, State Plan of Flood Control, Flood Protect Corridor Program, California's Flood Future, Delta/Water updates: including information on the California State Water Project, Bay Delta Conservation Plan
- Updates to the Wildfire Hazards Section 5.4 including: update of Fire Safe Councils grant funded mitigation projects and information regarding new wildfire hazard related legislation

What's New in Chapter 6

- Reorganization of hazards, other than levee failure, landslides, tsunamis and volcanoes, within one of the following three sub-groups: Weather and Climate Related Hazards, Other Hazards, or Additional Hazards
- Updated progress summary regarding levee hazard mitigation
- Updated progress summary regarding landslide hazard mapping
- Updated progress summary regarding tsunami hazard mapping
- Updated information in various climate-related hazards sections, including expanded information and progress summary updates regarding coastal flooding, erosion and sea level rise
- New and expanded section on volcano hazards
- Updated progress summaries and expanded discussion of hazards included in the Other Hazards group and cyber threats

What's New in Chapter 7

- Updated grant funding process information
- Updated program management capability information
- Updated State Mitigation Assessment Review Team (SMART) System, including addition of new information regarding recently undertaken field assessment

Other New Items in the 2013 SHMP

- A new annex on Lifelines Infrastructure and Hazard Mitigation Planning has been added as Annex 3
- Changes and renumbering of appendices

Page left intentionally blank