



1 Introduction

The City of Petaluma prepared this Local Hazard Mitigation Plan (LHMP) to guide planning efforts to better protect the people and property of the City from the effects of hazardous events. It serves as a tool to help decision makers direct mitigation activities, to coordinate city resources, and to be eligible for State and Federal funding. This plan updates the City's previous hazard mitigation plan that was developed as part of a regional effort. This plan also demonstrates the City's commitment to reducing risks from hazards to the community.

1.1 Background and Scope

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Many natural disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated.

Hazard mitigation is defined by FEMA as "any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." The results of a three-year, congressionally mandated independent study to assess future savings from mitigation activities provides evidence that mitigation activities are highly cost-effective. On average, each dollar spent on hazard mitigation saves society an average of \$6 in avoided future disaster costs (National Institute of Building Sciences 2018).

Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies to lessen impacts are determined, prioritized, and implemented. This plan documents the City of Petaluma's hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the City will use to decrease vulnerability, and increase resiliency and sustainability in Petaluma.

1.2 Previous Plan

In 2005 the Association of Bay Area Governments (ABAG) prepared a regional multi-jurisdictional LHMP for the San Francisco Bay Area referred to as *Taming Natural Disasters*. In 2010 the plan was updated and covered numerous jurisdictions in the Bay Area consisting of seven counties, 76 cities including the City of Petaluma, five school districts, 12 transit agencies, 13 water districts, and five special-purpose districts. The goal of the regional multi-jurisdictional LHMP was to maintain and enhance a disaster-resistant region by reducing the potential loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. The City participated in the original plan and update by preparing an annex that was approved by FEMA and adopted by resolution in 2012 by the Petaluma City Council as the City of Petaluma 2010 LHMP Annex. Today ABAG is no longer managing the update of the multi-jurisdictional LHMP and the 2010 *Taming Natural Disasters* plan has expired.

The City's 2019 LHMP supersedes the 2010 LHMP Annex prepared by ABAG. This new LHMP is a single jurisdictional stand-alone plan for the City of Petaluma that geographically covers everything within the City of Petaluma's jurisdictional boundaries and its Urban Growth Boundary (UGB) (hereinafter referred to as the Planning Area). The single jurisdictional and stand-alone plan is tailored to better suit the needs





and capabilities of the City and their planning partners. The updated 2019 LHMP differs from the 2010 ABAG plan as follows:

- The single jurisdictional and stand-alone plan focuses only on the City of Petaluma rather than being a subset of a larger regional and multi-jurisdictional planning effort.
- The risk assessment addresses natural and human-caused hazards specific to the City and includes a vulnerability assessment that evaluated property within the City's Planning Area, critical facilities and infrastructure, and City-owned facilities and infrastructure, specifically water and wastewater systems.
- The plan integrates best available data and tools, including information on climate change and sea level rise in a detailed risk and vulnerability assessment.
- The planning process was aligned with FEMA's National Flood Insurance Program (NFIP) Community Rating System (CRS) in order to maximize credits, improve the City's CRS rating, and ultimately reduce flood insurance premiums.
- The City and planning committee participants (referred to as the Hazard Mitigation Planning Committee) collaborated and involved the public through a coordinated outreach strategy targeted for both socially vulnerable and disadvantaged communities. The planning process involved the circulation of an online public survey to better understand the community's perception of natural and human-caused hazard risks and to engage and solicit input on risk reduction through mitigation actions for the whole community.
- The planning process involved review of mitigation activities and strategies identified in various City planning documents, such as the 2025 General Plan, 2015 Floodplain Management Plan, and 2010 LHMP Annex.
- The plan includes a more detailed and tailored mitigation action strategy than the previous 2010 ABAG plan.
- The City and planning committee identified specific mitigation actions that are best suited for the City of Petaluma and can be funded under HMA grants and state funding programs in order to meet multiple objectives.

1.3 Regulatory Authority

1.3.1 Federal

This plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. (Hereafter, these requirements and regulations will be referred to collectively as the Disaster Mitigation Act or DMA of 2000.) The DMA of 2000, also commonly known as "The 2000 Stafford Act Amendments," constitutes an effort by the Federal government to reduce the rising cost of disasters. The Act stresses the importance of coordinated mitigation planning and disaster preparedness prior to an event and emphasizes the need for mitigation planning.

Section 322 of the regulations established the requirements that LHMPs must meet in order for a local jurisdiction to be eligible for certain Federal disaster assistance and hazard mitigation funding under the Robert T. Stafford Disaster Relief and Emergency Act (Public Law 93-288). To facilitate implementation of the DMA 2000 and the Stafford Act Amendments, FEMA created an Interim Final Rule (the Rule), published in the Federal Register in February of 2002 in Section 201 of 44 CFR (44 CFR §201.6). The Rule spells out the mitigation planning criteria for States and local communities.





In March 2013 FEMA released *The Local Mitigation Planning Handbook* (Handbook) as the official guide for local governments to develop, update and implement local mitigation plans. The Handbook complements and references the October 2011, *FEMA Local Mitigation Plan Review Guide* (Guide) in order to help "Federal and State officials assess Local Mitigation Plans in a fair and consistent manner." Local jurisdictions must demonstrate that proposed mitigation actions are based upon a sound planning process that accounts for the inherent risk and capabilities of the individual communities as stated in Section 201.5 of the Rule. The Handbook and Guide were routinely reviewed during the development of the City's 2019 LHMP for the purpose of ensuring thoroughness, diligence, and compliance with the DMA of 2000 planning requirements.

This plan was also developed so the City can be eligible for certain federal disaster assistance, specifically, the FEMA Hazard Mitigation Assistance (HMA) grants including the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, and the Flood Mitigation Assistance (FMA) program. Additional FEMA mitigation funds include the HMGP Post Fire funding associated with Fire Management Assistance Grant (FMAG) declarations and the Building Resilient Infrastructure and Communities (BRIC) funding associated with the 2018 Disaster Recovery Reform Act (DRRA).

1.3.2 State and Local

During the development of the City's LHMP, City staff initiated a review of their 2025 General Plan Health and Safety Element to ensure consistency with hazards and mutually reinforcing policies. Following approval of the City's LHMP, the City intends to formally update the City's 2025 General Plan Health and Safety Element. In addition to following the DMA requirements the development of the 2019 LHMP addressed the following State of California legislation requirements that relate to the General Plan and LHMP:

- Senate Bill (SB) 379 requires inclusion of climate adaptation strategies in the General Plan Safety Element and encourages a climate change discussion in LHMP updates;
- SB 1000, the Planning for Healthy Communities Act requires environmental justice and social equity considerations in the General Plan update upon the next revision of two or more elements concurrently on or after January 1, 2018 or the next revision of a LHMP; these considerations were addressed in the social vulnerability and disadvantaged communities summary of the community profile in Chapter 2 and again in the mitigation action prioritization criteria detailed in Chapter 5.
- Assembly Bill (AB) 2140 requires adoption by reference or incorporation of the LHMP into the Safety Element of the General Plan, following LHMP approval.

Information in this plan will be used to guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce the cost of disaster response and recovery to communities and their residents by protecting critical community facilities, reducing liability exposure, and minimizing overall community impacts and disruptions. The City of Petaluma's Planning Area has been affected by hazards in the past and is committed to reducing future impacts from hazard events, building community resilience to future disasters, and becoming eligible for mitigation-related federal funding.





1.4 Plan Organization

The City of Petaluma's LHMP is organized as follows:

- Chapter 2: Community Profile
- Chapter 3: Planning Process
- Chapter 4: Risk Assessment
- Chapter 5: Mitigation Strategy
- Chapter 6: Plan Adoption
- Chapter 7: Plan Implementation and Maintenance
- Appendices

