

1 Introduction

1.1 Purpose

Placer County and 15 other jurisdictions prepared this Local Hazard Mitigation Plan update to the 2005 Federal Emergency Management Agency (FEMA) approved Placer County Multi-Hazard Mitigation Plan. The purpose of this plan update is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. This plan demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This plan was also developed, among other things, to ensure Placer County and participating jurisdictions' continued eligibility for certain federal disaster assistance: specifically, the FEMA Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), and the Flood Mitigation Assistance Program (FMA). Completion also earns points for the National Flood Insurance Program's Community Rating System (CRS) which could lower flood insurance premiums in CRS communities.

1.2 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 incurred by 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 reduced 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 mitigation saves society an average of \$4 in avoided future losses in addition to saving lives and preventing injuries (National Institute of Building Science Multi-Hazard Mitigation Council 2005).

Hazard mitigation planning is the process through which hazards are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented. This plan documents Placer County's hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the County and participating jurisdictions will use to decrease vulnerability and increase resiliency and sustainability.

The Placer County Local Hazard Mitigation Plan (LHMP) update is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries (hereinafter referred to as the planning area). The following communities participated in the planning process and are seeking approval of the LHMP plan update:

- Placer County*
- City of Auburn*
- City of Colfax*
- Town of Loomis*
- City of Lincoln*
- City of Rocklin*
- Alpine Springs County Water District
- Foresthill Fire Protection District*
- Nevada Irrigation District
- North Tahoe Fire Protection District*
- Placer County Flood Control & Water Conservation District*
- Placer County Water Agency
- Placer Hills Fire Protection District
- Squaw Valley Public Service District*
- Tahoe-Truckee Unified School District*
- Tahoe City Public Utilities District

Two Districts that were approved for the 2005 LHMP, but are not seeking approval for this plan update include:

- Placer Consolidated Fire Protection District (no longer in existence)
- Sierra Joint Community College District

This plan update 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 (DMA) or DMA 2000.) While the act emphasized the need for mitigation plans and more coordinated mitigation planning and implementation efforts, the regulations established the requirements that local hazard mitigation plans 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). Because the Placer County Planning Area is subject to many kinds of hazards, access to these programs is vital.

Information in this plan will be used to help guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce

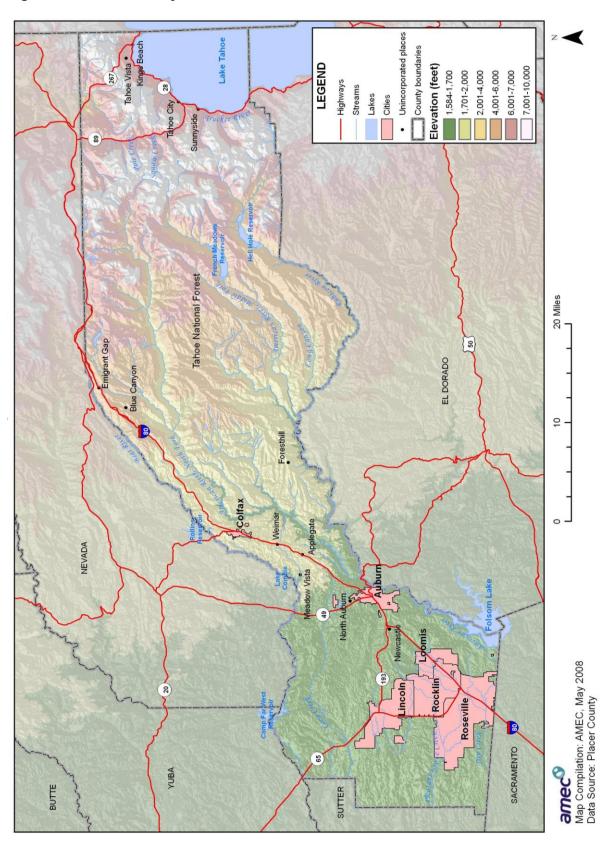
^{*} Participated in 2005 Plan

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 Placer County Planning Area has been affected by hazards in the past and is thus committed to reducing future impacts from hazard events and maintaining eligibility for mitigation-related federal funding.

1.3 Community Profile

Placer County is located in northern California and stretches from Sacramento County to Lake Tahoe and the Nevada border. The Counties of Sacramento, El Dorado, Sutter, Yuba, and Nevada border Placer County. Regional access to the County is provided via Interstate 80 (I-80), which runs east-west through the entire County. Placer County includes the incorporated communities of Auburn, Colfax, Lincoln, Loomis, Rocklin, and Roseville. Placer County is illustrated in Figure 1.1.

Figure 1.1 Placer County



1.3.1 History

Placer County was home to the Nisenan Native Americans for hundreds of years before the discovery of gold in 1848 when multitudes of miners migrated to the area. Auburn was settled in 1848 upon the discovery of gold and later became a shipping and supply center for the surrounding gold camps. Three years after the discovery of gold in the region, the fast-growing county was formed from portions of Sutter and Yuba Counties on April 25, 1851, with Auburn as the County seat. The name Placer comes from the Spanish word meaning "sand and gravel deposits containing gold." Gold mining remained a major industry through the 1880s, eventually overtaken by the industries of farming, timber, and the Southern Pacific Railroad. The commercial fruit industry also expanded rapidly in western Placer County in the late 1870s and early 1880s, with the Central Pacific Railroad providing a wide market in the east for California's agricultural products. Among the produce raised were citrus, apples, peaches, pears, plums, cherries, olives, almonds, and walnuts.

1.3.2 Geography and Climate

Placer County, spanning the eastern part of the Central Valley of California, increases in elevation from urban South Placer, through Western Placer, to the High Sierras of North Lake Tahoe, and the Nevada state line. Located on an area of over 1,500 square miles, 98 square miles of which are comprised of water, the County is generally divided into three geographically distinct areas: the Valley – Roseville to Penryn; the Gold Country - Newcastle to Dutch Flat; and the High Country - Alta to Tahoe. Figure 1.2 illustrates these areas.

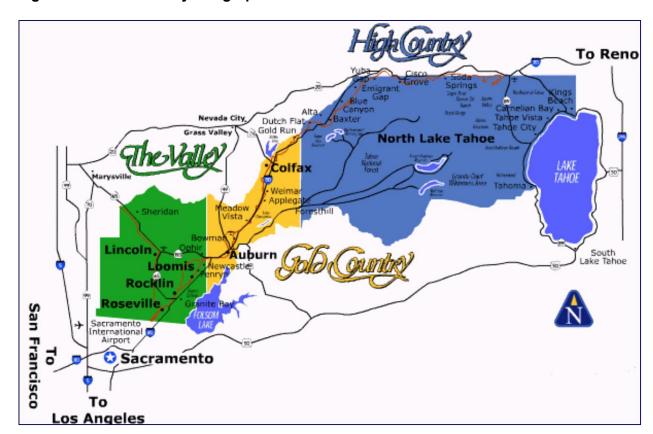


Figure 1.2 Placer County Geographic Areas

The County's topography is characterized by broad, relatively flat valley floors (the Valley) in the southwest; valley floors giving way to the foothills areas (Gold County) heading east; and foothills and high mountains (Sierra Nevada) in the east. Elevations range from 160 to 400 feet above mean sea level in the valley near Roseville to approximately 2,000 feet near Colfax in Gold Country, to more than 9,000 feet in the Sierra Nevada. Water resources within Placer County include approximately 700 miles of rivers and streams and 97,000 acres of lakes.

The climate varies throughout the County, primarily based on elevation. Summers are longer, relatively hot, and dry in the lower elevations and are relatively cooler in the higher elevations of the Sierra Nevada. There is little precipitation in the County during the summer. Winters in the lower elevations are shorter and precipitation is primarily in the form of rain. In the higher elevations of the Sierra Nevada, winters vary from short and mild with moderate snowfall to moderately severe with frequent snowfall. Most of the seasonal precipitation throughout the County occurs between October and April. More specific information about Placer County's climate can be found in Chapter 4 Risk Assessment.

1.4 Economy

Placer County has a healthy and diverse economy ranging from tourism, focused mainly in the North Lake Tahoe Area, to technology, predominately located in the southwestern portion of the County. Table 1.1 shows the employment and unemployment rates along with industry employment by major classification for all of Placer County and California for 2000 and 2005.

Table 1.1 Placer County's Economic Characteristics, 2006

| | Placer County | | | California | | | | |
|-------------------------------------|---------------|--------|---------|------------|------------|--------|------------|--------|
| | 2000 | | 2005 | | 2000 | | 2005 | |
| Civilian Labor Force | 132,042 | 100.0% | 166,233 | 100.0% | 16,857,575 | 100.0% | 17,740,383 | 100.0% |
| Civilian Employment | 127,292 | 96.4% | 159,058 | 95.7% | 16,024,333 | 95.1% | 16,782,258 | 94.6% |
| Civilian Unemployment | 4,758 | 3.6% | 7,183 | 4.3% | 833,242 | 4.9% | 958,125 | 5.4% |
| Total Industry Employment | 111,508 | 100.0% | 138,592 | 100.0% | 14,894,383 | 100.0% | 15,175,325 | 100.0% |
| Total Farm | 383 | 0.3% | 517 | 0.4% | 406,608 | 2.7% | 378,033 | 2.5% |
| Total Non-farm | 111,125 | 99.7% | 138,075 | 99.6% | 14,487,775 | 97.3% | 14,797,292 | 97.5% |
| Natural Resources and Mining | 100 | 0.1% | 100 | 0.1% | 26,458 | 0.2% | 23,542 | 0.2% |
| Construction | 11,875 | 10.7% | 16,658 | 12.1% | 733,450 | 5.1% | 905,267 | 6.1% |
| Manufacturing | 11,292 | 10.2% | 9,450 | 6.8% | 1,864,058 | 12.9% | 1,514,433 | 10.2% |
| Wholesale Trade | 2,958 | 2.7% | 3,275 | 2.4% | 646,192 | 4.5% | 675,775 | 4.6% |
| Retail Trade | 14,908 | 13.4% | 20,425 | 14.8% | 1,563,208 | 10.8% | 1,659,017 | 11.2% |
| Transport., Warehousing & Utilities | 2,683 | 2.4% | 2,767 | 2.0% | 518,292 | 3.6% | 487,067 | 3.3% |
| Information | 2,533 | 2.3% | 2,725 | 2.0% | 576,692 | 4.0% | 473,617 | 3.2% |
| Financial Activities | 6,692 | 6.0% | 10,992 | 8.0% | 806,883 | 5.6% | 927,133 | 6.3% |
| Professional and Business Services | 12,517 | 11.3% | 14,208 | 10.3% | 2,210,333 | 15.3% | 2,147,933 | 14.5% |
| Educational and Health Services | 9,500 | 8.5% | 13,500 | 9.8% | 1,401,025 | 9.7% | 1,586,417 | 10.7% |
| Leisure and Hospitality | 13,650 | 12.3% | 17,633 | 12.8% | 1,335,458 | 9.2% | 1,475,083 | 10.0% |
| Other Services | 4,683 | 4.2% | 4,142 | 3.0% | 487,733 | 3.4% | 505,458 | 3.4% |
| Government | 17,733 | 16.0% | 22,200 | 16.1% | 2,317,992 | 16.0% | 2,416,550 | 16.3% |

Source: Placer County Housing Element, 2009; California Employment Development Department

As Table 1.1 illustrates, Placer County had an unemployment rate of 4.3 percent in 2005, slightly lower than the 5.4 percent rate in California as a whole. Both Placer County and California had higher unemployment rates in 2005 compared to 2000. While no single industry dominates the County's economy, the most significant employment contributors in Placer County include tourist-related jobs (retail trade, and leisure and hospitality) and government jobs. Other important industries include professional and business services and construction. While most industries either grew or remained stable between 2000 and 2005, the manufacturing industry lost a significant proportion of jobs between 2000 and 2005, decreasing from 10.2 percent to only 6.8 percent of total industry employment.

1.4.1 Population

According to the 2009 Housing Element for Placer County, the County experienced rapid growth throughout the second half of the twentieth century and into the twenty-first century. The county grew the fastest between 1970 and 1980 when the average annual growth rate (AAGR) was 4.25 percent. Recently, Placer County has been one of the fastest growing counties in California and in the United States. Between 2000 and 2007, Placer County's population grew from 248,399 to 324,495 residents—an average annual growth rate (AAGR) of 4 percent.

Table 1.2 shows a breakdown of the population growth in Placer County's incorporated cities. As shown in the table, the majority of the County's population growth occurred in the incorporated areas of the County, particularly in Lincoln, Rocklin and Roseville. Lincoln was the fastest growing city in the County, with a population increase from 11,205 residents in 2000 to 37,410 residents in 2007 – a 19.6 percent AAGR. The cities of Rocklin and Roseville also experienced significant population increases over this seven year period, with AAGRs of 5.4 and 4.3 percent respectively. The unincorporated portion of Placer County had an AAGR of 1.0 percent from 2000 to 2007.

Table 1.2 Placer County Population Growth

| Area | 2000 | 2007 | Absolute Change | % Change | AAGR |
|-----------------------|---------|---------|--------------------|-------------|-------|
| Auburn | 12,462 | 13,112 | 650 | 5.22% | 0.8% |
| Colfax | 1,520 | 1,838 | 318 | 20.92% | 2.9% |
| Lincoln | 11,205 | 37,410 | 26,205 | 233.87% | 19.6% |
| Loomis | 6,260 | 6,529 | 269 | 4.30% | 0.6% |
| Rocklin | 36,330 | 51,951 | 15,621 | 43.00% | 5.4% |
| Roseville | 79,921 | 106,266 | 26,345 | 32.96% | 4.3% |
| Incorporated County | 147,698 | 217,106 | 69,408 | 46.99% | 5.9% |
| Unincorporated County | 100,701 | 107,389 | 6,688 | 6.64% | 1.0% |
| County Total | 248,399 | 324,495 | 76,096 | 30.63% | 4.0% |

Source: Placer County Housing Element, 2009; California Department of Finance, 2007.

Select demographic and social characteristics for Placer County from the 2009 Housing Element are shown in Tables 1.3 and 1.4.

Table 1.3 Placer County: Age Characteristics

| | Unincorporated | | Incorp | orated | California | |
|-------------|----------------|---------|---------|---------|------------|---------|
| Age Group | Number | Percent | Number | Percent | Number | Percent |
| Under 5 | 5,178 | 5.1% | 10,746 | 7.3% | 2,486,981 | 7.3% |
| 5 to 14 | 15,104 | 15.0% | 23,381 | 15.8% | 5,296,702 | 15.6% |
| 15 to 19 | 7,172 | 7.1% | 10,222 | 6.9% | 2,450,888 | 7.2% |
| 20 to 24 | 4,198 | 4.2% | 6,943 | 4.7% | 2,381,288 | 7.0% |
| 25 to 34 | 9,481 | 9.4% | 19,774 | 13.4% | 5,229,062 | 15.4% |
| 35 to 44 | 17,103 | 17.0% | 25,785 | 17.5% | 5,485,341 | 16.2% |
| 45 to 54 | 17,988 | 17.9% | 19,717 | 13.4% | 4,331,635 | 12.8% |
| 55 to 64 | 11,107 | 11.0% | 11,940 | 8.1% | 2,614,093 | 7.7% |
| 65 and over | 13,394 | 13.3% | 19,166 | 13.0% | 3,595,658 | 10.6% |
| Total | 100,725 | 100.0% | 147,674 | 100.0% | 33,871,648 | 100.0% |

Source: Placer County Housing Element, 2009; U.S. Census, 2000

Table 1.4 Placer County: Population Breakdown by Race/Ethnicity

| | Unincorporated County | | Incorpo Cou | | California | | |
|---|--------------------------|---------|----------------|---------|------------|---------|--|
| Race/Ethnicity | Number | Percent | Number | Percent | Number | Percent | |
| White (non-Hispanic) | 87,596 | 87.0% | 119,640 | 81.0% | 15,816,790 | 46.7% | |
| Hispanic | 7,711 | 7.7% | 16,308 | 11.0% | 10,966,556 | 32.4% | |
| Asian | 1,836 | 1.8% | 5,312 | 3.6% | 3,648,860 | 10.8% | |
| Two or more races | 2,056 | 2.0% | 3,697 | 2.5% | 903,115 | 2.7% | |
| Black or African- American | 468 | 0.5% | 1,428 | 1.0% | 2,181,926 | 6.4% | |
| American Indian & Alaska Native | 815 | 0.8% | 872 | 0.6% | 178,984 | 0.5% | |
| Some other race | 148 | 0.1% | 188 | 0.1% | 71,681 | 0.2% | |
| Native Hawaiian & Other Pacific Islander | 95 | 0.1% | 229 | 0.2% | 103,736 | 0.3% | |
| Total | 100,725 | 100.0% | 147,674 | 100.0% | 33,871,648 | 100.0% | |

Source: Placer County Housing Element, 2009; U.S. Census, 2000

More demographic information and information on growth can be found in Section 4.3.1 Placer County Vulnerability and Assets at Risk.

1.5 Plan Organization

The Placer County Local Hazard Mitigation Plan update is organized as follows:

- Chapter 2: What's New
- Chapter 3: Planning Process
- Chapter 4: Risk Assessment
- Chapter 5: Mitigation Strategy
- Chapter 6: Plan Adoption
- Chapter 7: Plan Implementation and Maintenance
- Jurisdictional Annexes
- Appendices