



# Chapter 1 Introduction

## 1.1 Purpose

Yuba County, two incorporated communities, and nine special districts prepared this Local Hazard Mitigation Plan (LHMP) Update to the Federal Emergency Management Agency (FEMA) approved 2015 Yuba County LHMP. The purpose of this LHMP Update is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. This LHMP Update 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 LHMP Update was also developed, among other things, to ensure Yuba County and participating jurisdictions’ continued eligibility for certain federal disaster assistance: specifically, the FEMA Building Resilient Infrastructure and Communities (BRIC) Program, Hazard Mitigation Grant Program (HMGP), and the Flood Mitigation Assistance Program (FMA).

## 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 \$6 in avoided future losses in addition to saving lives and preventing injuries (National Institute of Building Science Multi-Hazard Mitigation Council 2017 Interim Report).

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 Yuba 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 in the community.

This Yuba County 2021 LHMP Update is a multi-jurisdictional plan that geographically covers the entire area within Yuba County’s jurisdictional boundaries (hereinafter referred to as the Planning Area). The following jurisdictions participated in the planning process and are seeking FEMA approval of the LHMP Update:

- Yuba County\*
- City of Marysville\*
- City of Wheatland\*
- Brown’s Valley Irrigation District (BVID)
- Marysville Levee Commission
- Reclamation District 10
- Reclamation District 784
- Reclamation District 817
- Reclamation District 2103
- South Sutter Water District
- Three Rivers Levee Improvement Authority (TRLIA)
- Yuba County Water Agency\*

\* Participated in 2015 Yuba County LHMP

All plan participants from the 2015 Yuba County LHMP are participating in this LHMP Update.

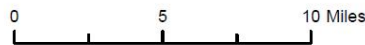
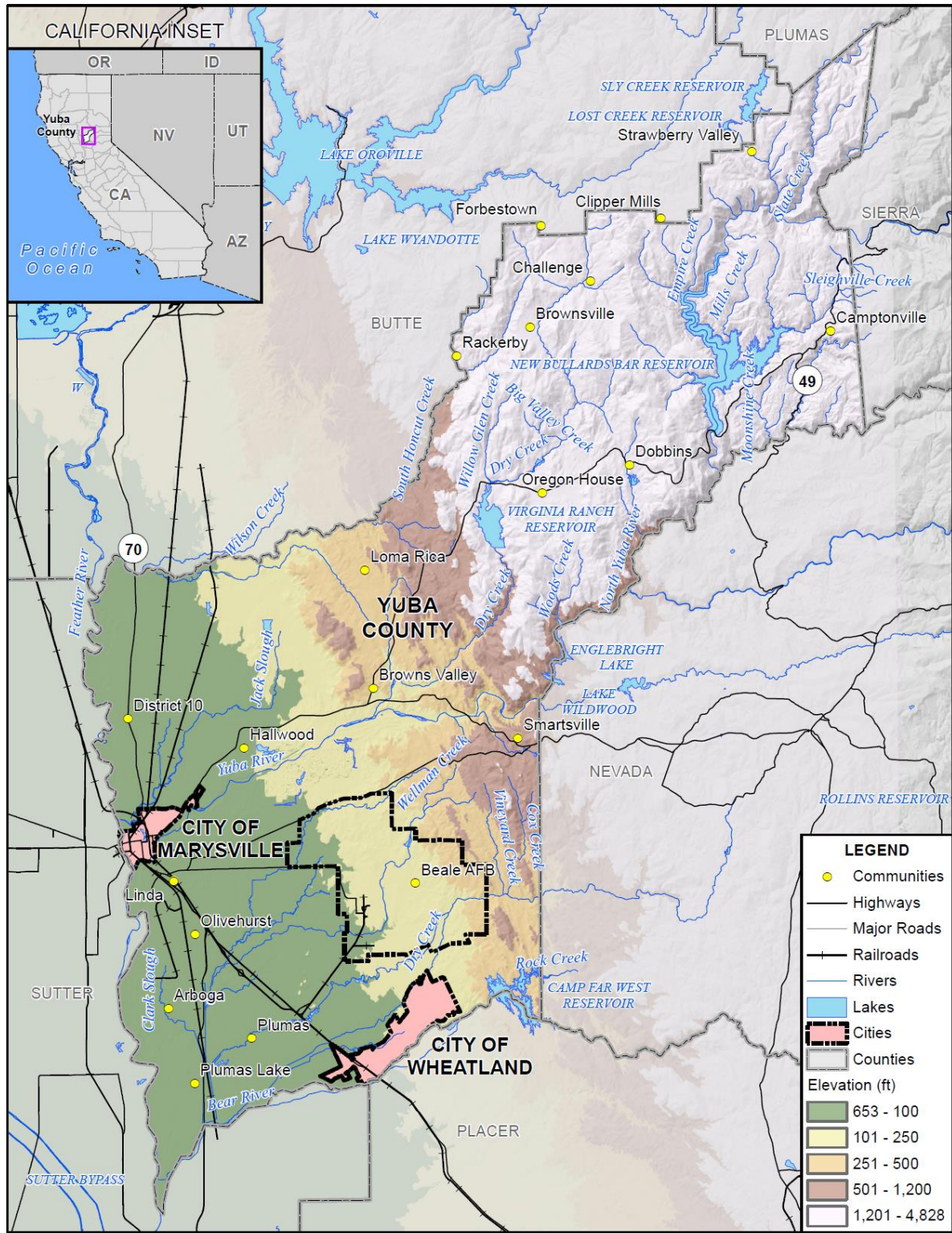
This LHMP Update was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. (Hereafter, 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). This planning effort also follows FEMA’s 2013 Plan Preparation Guidance. Because the Yuba County Planning Area is subject to many kinds of hazards, access to FEMA grant programs is vital.

Information in this LHMP Update 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 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 Yuba 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

Yuba County is located in the northern Sacramento Valley, approximately 40 miles north of the State Capital in Sacramento. Its boundaries stretch from the farms and orchards of the valley to the timberlands of the Sierras. Fifty–seven miles in length and 22 miles at its widest point, Yuba County encompasses 644 square miles. The County has a varied geography, which includes the Yuba, Feather and Bear Rivers, forested mountains, wooded foothills, streams, lakes, and agricultural croplands that vary from orchards and vineyards to large rice farms. Elevations range from 20 feet above sea level in the South County to nearly 4,820 feet in northern Yuba County. A map of the County is shown in Figure 1-1.

Figure 1-1 Yuba County



Data Source: Yuba County GIS, Cal-Atlas; Map Date: 1/15/2021.

### 1.3.1. History

Yuba County was named for the Yuba River by Captain John Sutter. The County is one of the original 28 counties in California, incorporated in 1850 at the time of California's statehood. Yuba County was created to function both as a local government and as an arm of the State of California providing services to the people of the county. The population in the County in the 1850's was over 60,000.

The County has a rich and colorful history dating back to the California Gold Rush. The historic town of Marysville was founded in 1851 and was the gateway for gold miners to the Mother Lode. Of significance in California history is Marysville's standing as the third largest city in 1852, after San Francisco and Sacramento. The City of Wheatland, geographically positioned at the only crossing of the Bear River, was incorporated by an Act of the Legislature in 1874.

The strategic location of the Yuba Basin and the confluence of the Yuba, Feather and the Bear Rivers have provided valuable resources yet continues to plague the County with a history of flood disasters. The county's history of disasters dates back to the Native Americans who relocated their camps to higher ground during the rainy season. Hydraulic mining during the Gold Rush Era filled rivers and streams with debris, adding to the flooding. The legendary floods of 1862 and 1866 emphasized the need to develop systems to protect lives and property. In 1862 the first levees were built to protect the City of Marysville, and by 1875 Marysville began to surround itself with levees. Hydraulic mining methods used high-pressure streams of water to wash away ancient, gold bearing river channel deposits hundreds of feet thick. The clay, silt, sand, gravel and cobbles were washed in sluice tunnels, which drained the hydraulic pits. These "tailings" were dumped into streams and rivers. From 1860 to 1890 several hydraulic mines in the Yuba River watershed generated millions of cubic yards of tailings, which choked the Yuba River and caused flooding of farmlands down river. In 1884 the dumping of hydraulic mine tailings into drainages was prohibited. As a result, this method of mining became uneconomical and all hydraulic mines shut down by the early 1900's.

### 1.3.2. Geography and Climate

Yuba County is located in the northern Sacramento Valley, approximately 40 miles north of the State Capital in Sacramento. Its boundaries stretch from the farms and orchards of the valley to the timberlands of the Sierras. Fifty-seven miles in length and 22 miles at its widest point, Yuba County encompasses 644 square miles. The County has a varied geography, which includes the Yuba, Feather and Bear Rivers, forested mountains, wooded foothills, streams, lakes, and agricultural croplands that vary from orchards and vineyards to large rice farms. Elevations range from 20 feet above sea level in the South County to nearly 4,820 feet in northern Yuba County.

The climate in Yuba County is considered Mediterranean and cycles through a cool rainy winter season and a dry summer season. Summers are hot and dry and winters are cool and wet, with most of the year's rain falling from late October through early April. While the higher County elevations receive snow, snowfall is rare at the lower elevations.

Precipitation increases with elevation in Yuba County. The total annual precipitation is 21.04 at Marysville, in the eastern extreme of the county at an elevation of 65 feet. While the majority of precipitation falls in

the autumn and winter months, nearly 34 percent usually falls in March through October. Thunderstorms occur on about 5 days each year, and most often occur in April.

The prevailing winds in Marysville are usually from the southwest and the average wind speed is highest (approximately 9.8 miles per hour) in June. The southwesterly winds in the valley result from the north–south orientation and heating of the valley floor, which deflect the westerly winds coming through the Carquinez Straits northward. Strong northerly winds occasionally occur

### 1.3.3. Population and Demographics

The California Department of Finance 2020 estimates for population of the County and its jurisdictions are shown in Table 1-1.

*Table 1-1 Yuba County Population by Jurisdiction, 2020*

Jurisdiction	Total Population
City of Marysville	12,201
City of Wheatland	3,610
Unincorporated County	63,596
<b>Total</b>	<b>79,407</b>

Source: California Department of Finance, 2020 E-1 Report

Select social and economic information for the County and participating jurisdictions are shown in Table 1-2.

*Table 1-2 Yuba County – Select Social and Economic Statistics*

Statistic	Number
<b>Populations</b>	
Population under 5	8.2%
Population over 65	13.0%
Median Age	33.7
<b>Racial Makeup</b>	
White	79.5%
Black or African American	3.4%
American Indian or Alaska Native	0.6%
Asian	5.4%
Native Hawaiian or Pacific Islander	0.8%
Some Other Race	2.3%
Two or more races	7.9%
<b>Income</b>	
Median income	\$58,765
Mean Income	\$74,158

Statistic	Number
<b>Poverty rate</b>	
All people	14.7%

Source: 2020 US Census, 2019 US Census Bureau American Community Survey, California Employment Development Department

### 1.3.4. Economy and Tax Base

Yuba County has a diverse economy. US Census estimate show economic characteristics for the County. These are shown in Table 1-3.

*Table 1-3 Yuba County Civilian Employed Population 16 years and Over*

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	1,470	9.4%
Construction	2,155	13.7%
Manufacturing	1,107	7.1%
Wholesale trade	584	3.7%
Retail trade	2,088	13.3%
Transportation and warehousing, and utilities	1,345	8.6%
Information	146	0.9%
Finance and insurance, and real estate and rental and leasing	918	5.8%
Professional, scientific, and management, and administrative and waste management services	1,823	11.6%
Educational services, and health care and social assistance	1,126	7.2%
Arts, entertainment, and recreation, and accommodation and food services	782	5.0%
Other services, except public administration	859	5.5%
Public administration	1,299	8.3%

Source: US Census Bureau American Community Survey 2018 Estimates

Major employers in the County are shown in Table 1-4.

*Table 1-4 Major Employers in Yuba County*

Employer Name	Location	Industry
Abraham Lincoln High School	Marysville	Schools
Adventist Health & Rideout	Marysville	Hospitals
Appeal Democrat	Marysville	Newspapers (publishers/manufacturers)
BEALE Air Force Base	Beale AFB	Military Bases
Bear River School	Wheatland	Schools
Bishop's Pumpkin Farm	Wheatland	Fruits & Vegetables & Produce-Retail
County of Sutter	Marysville	Clinics
Foodmaxx	Marysville	Grocers-Retail

Employer Name	Location	Industry
Hard Rock Hotel-Casino	Wheatland	Casinos
Linda Elementary School	Marysville	Schools
Lindhurst High School	Olivehurst	Schools
Lone Tree School	Beale AFB	Schools
Marysville Care & Rehab Ctr	Marysville	Nursing & Convalescent Homes
Marysville Joint Unified Sch	Marysville	Schools
Recology Yuba-Sutter	Marysville	Garbage Collection
Rideout Emergency	Marysville	Emergency Minor Medical Facilities/Services
Save Mart	Marysville	Grocers-Retail
Shoei Foods USA Inc	Olivehurst	Importers (wholesale)
Toyota Amphitheatre	Wheatland	Concert Venues
Transportation Department	Marysville	Government Offices-State
USPS	Marysville	Post Offices
Walmart Supercenter	Marysville	Department Stores
Wilbur Richard R Ranch	Linda	Ranches
Yuba County Health & Human Svc	Marysville	Government Offices-County
Yuba County Water Agency	Marysville	Flood Control Equipment

Source: Economic Development Department – from the America's Labor Market Information System (ALMIS) Employer Database, 2021 1st Edition. Retrieved on 6/7/2021.

The County has a wide and varied tax base. Tax base information is tracked and maintained by the Yuba County Assessor's Office. Table 1-5 shows the tax base for the County as well as for the incorporated jurisdictions.

*Table 1-5 Unincorporated Yuba County – Distribution of Value by Property Use\**

Property Use	2020 Value (\$)	Percent of Current Roll
Agricultural	\$869,480,234	16.67%
Commercial	\$298,476,691	5.72%
Government-Owned / Non-Taxable Property	\$607,584	0.01%
Industrial	\$146,887,432	2.82%
Miscellaneous	\$305,902	0.01%
Residential	\$3,898,722,037	74.77%
<b>Unincorporated County Total</b>	<b>\$5,214,479,880</b>	<b>100.0%</b>

Source: Yuba County 2020 Assessor's Office data

\*includes land and structure values

## 1.4 Plan Organization

This Yuba County LHMP Update is a multi-jurisdictional plan that geographically covers the entire area within Yuba County’s jurisdictional boundaries (i.e., the Planning Area). The Yuba County Local Hazard Mitigation Plan update is organized as follows:

### Base Plan

- Chapter 1: Introduction
- 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

### Annexes

- Annex A: City of Marysville
- Annex B: City of Wheatland
- Annex C: Browns Valley Irrigation District
- Annex D: Marysville Levee Commission
- Annex E: Reclamation District 10
- Annex F: Reclamation District 784
- Annex G: Reclamation District 817
- Annex H: Reclamation District 2103
- Annex I: South Sutter Water District
- Annex J: Three Rivers Levee Improvement Authority
- Annex K: Yuba County Water Agency

### Appendices

- Appendix A: Planning Process
- Appendix B: References
- Appendix C: Mitigation Strategy
- Appendix D: Adoption Resolution
- Appendix E: Threatened and Endangered Species
- Appendix F: Critical Facilities

The **Base Plan** provides the overall framework for this multi-jurisdictional LHMP. It is the umbrella document that includes the planning process, methodologies, and procedural requirements for all participating jurisdictions (i.e., unincorporated County and all Jurisdictional Annexes). As such, Chapters 1-7 of the Base Plan apply to the unincorporated County, the two incorporated communities, and the nine special Districts as participants to this LHMP Update seeking FEMA approval of the Plan. Because this is a multi-jurisdictional plan, the Base Plan addresses the LHMP hazard mitigation planning elements specific to the Yuba County Planning Area which includes data, information and analysis specific to all participating jurisdictions and also includes data, information, and analysis specific to unincorporated Yuba County.

The **Jurisdictional Annexes** detail the hazard mitigation planning elements specific to each additional participating jurisdiction to this Yuba County LHMP Update. Each annex is not intended to be a standalone document, but appends to, supplements, and incorporates by reference the information contained in the Base Plan document. As such, all Chapters 1-7 of the Base Plan, including the planning process and other procedural requirements and planning elements apply to and were met by each participating jurisdiction. The annexes provide additional information specific to each participating jurisdiction, with a focus on providing additional details on the risk assessment and mitigation strategy.

The **Appendices** provide additional information, data, and planning process documentation that applies to all participating jurisdictions (i.e., unincorporated County and all jurisdictional annexes) to this Yuba County LHMP Update.