



Chapter 1 Introduction

1.1 Purpose

Plumas County prepared this single jurisdiction Local Hazard Mitigation Plan (LHMP) Update to the Federal Emergency Management Agency (FEMA) approved 2014 Plumas 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 Plumas County's continued eligibility for certain federal disaster assistance: including the FEMA Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), and the Flood Mitigation Assistance Program (FMA).

This Plumas County 2020 LHMP Update is single jurisdiction plan that geographically covers the unincorporated area within Plumas County's jurisdictional boundaries (i.e., the Plumas County Planning Area). The City of Portola is covered under its own LHMP.

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 Plumas County's hazard mitigation planning process and identifies relevant hazards, risks and vulnerabilities and mitigation strategies the County will use to decrease vulnerability and increase resiliency and sustainability in the community.

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 Plumas County Planning Area is subject to many kinds of hazards, access to FEMA grant programs is vital.

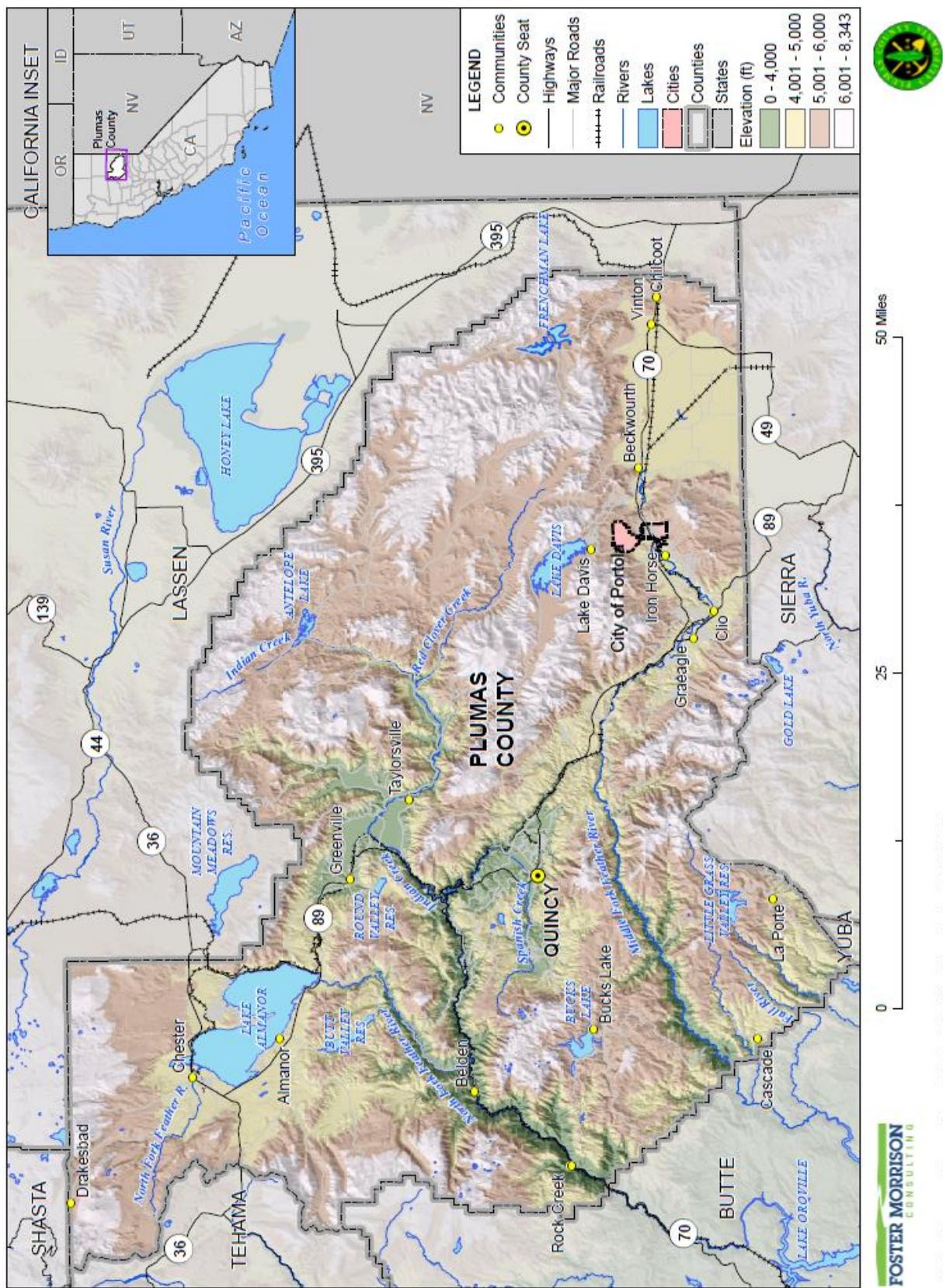
Information in this LHMP Update will be used to help guide and coordinate mitigation activities and decisions for local land use policy in the future. Proactive mitigation planning will help reduce the cost of disaster response and recovery to communities and their residents by protecting critical community facilities, reducing liability exposure, and minimizing overall community impacts and disruptions. The Plumas County Planning Area has been affected by hazards in the past and thus the County is committed to reducing future impacts from hazard events and maintaining eligibility for mitigation-related federal funding.

1.3 Community Profile

Plumas County is located in northern California, where the Sierra Nevada meets the Cascade Range. The County comprises 2,618 sq. mi., of which over 1 million acres (65 percent) is national forest land. There are approximately 1,000 miles of streams and 100 lakes, the 5,000-acre Plumas Eureka State Park, Lassen Volcanic National Park (southern part in Plumas County), ski areas, motels, and resorts throughout the County. Nearly 80 miles of the Pacific Crest National Scenic Trail passes through Plumas County. The City of Portola is located in the County. The nearest communities to Portola are Beckwourth, about 5 miles to the east and Blairsden/Graeagle, about 10 miles to the west. The Town of Quincy, the County seat, is about 35 miles to the west, and the City of Reno, Nevada, is about 50 miles to the southeast.

A map of Plumas County is shown on Figure 1-1. Multiple entities own land in Plumas County. Approximately 90.2% of the County is federal lands. A land ownership map can be seen on Figure 1-2 and is detailed in Table 1-1.

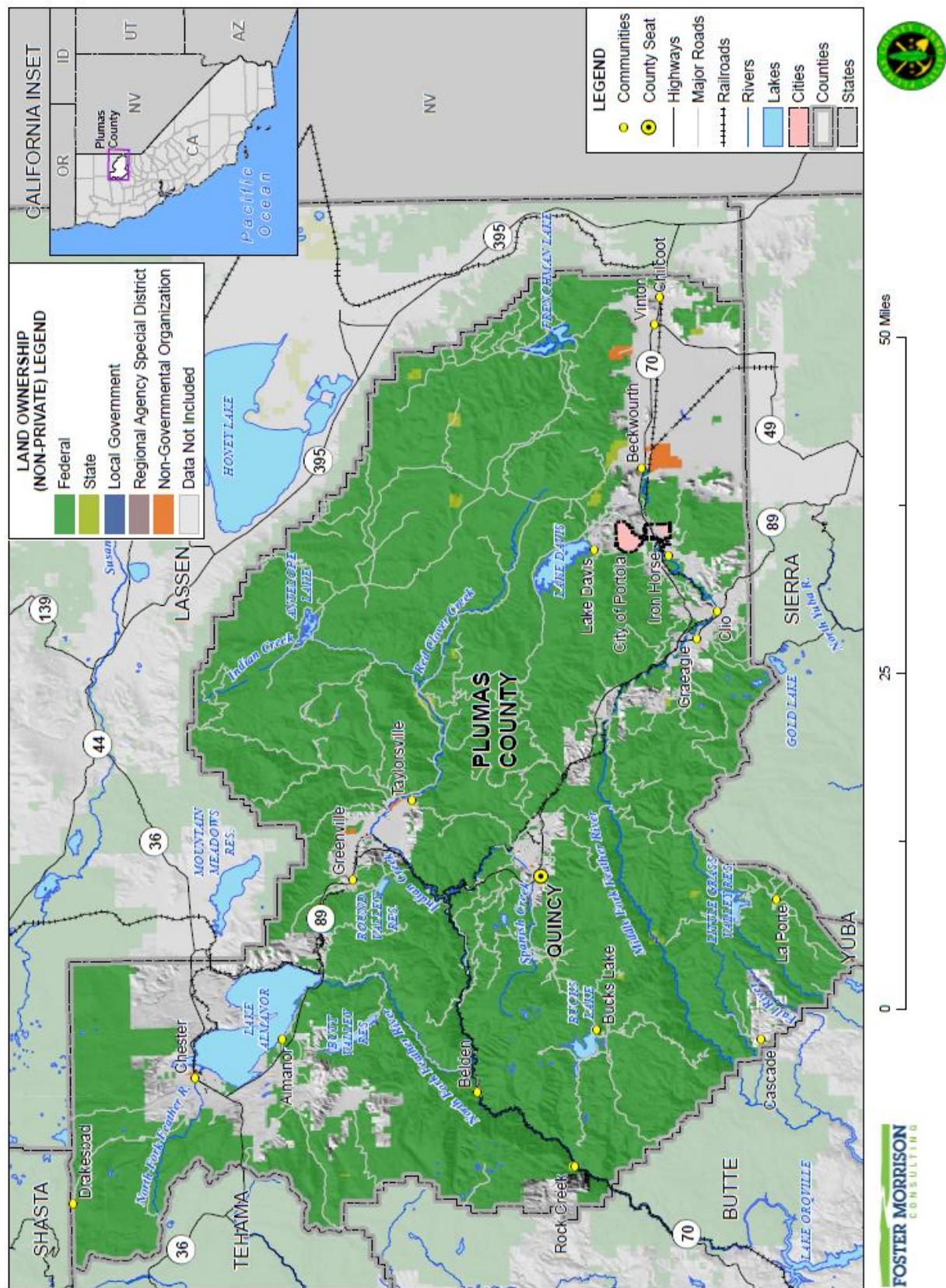
Figure 1-1 Plumas County



Data Source: Plumas County GIS, Cal-Atlas; Map Date: 03/01/2020.

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Figure 1-2 Plumas County – Land Ownership



Data Source: USGS, Gap Analysis Program (GAP), September 2018. Protected Areas Database of the United States (PAD-US), version 1.4, Plumas County GIS, Cal-Atlas; Map Date: 03/01/2020.

Table 1-1 Plumas County– Land Ownership

Land Ownership	Total Acres	% of Total Acres
Federal	2,714,951	90.20%
State	11,898	0.40%
Local Government	9	0.00%
Regional Agency Special District	3	0.00%
Non-Governmental Organization	6,811	0.23%
Data Not Included	276,395	9.18%
Grand Total	3,010,067	100.00%

Source: USGS September 2018

1.3.1. History

The area currently known as Plumas County has been a site for human activity since the Stone Ages approximately 8,000 to 10,000 years ago. As glaciers receded from the Sierra Nevada and the Cascades, humans migrated to the foothills and valleys protected by higher elevation. Since then, humans have become an integral part of the ecology in Plumas County. This is particularly apparent through documented use of fire to facilitate the propagation and gathering of plant species used for medicinal purposes, food, and other needs. Native peoples harvested or extracted and then processed stone, acorn, pine nut, basketry fiber, and other resources for their sustenance. This activity also resulted in visible alterations to the land and natural resources across Plumas County.

The Mountain Maidu were the last tribal group present in Plumas County when European migrants began to settle in the area. Some sources say the Mountain Maidu people have lived in various locations in Plumas County from hundreds to thousands of years and still do today. Other tribes, such as the Washoe and the Paiute, have also utilized the area but did not settle permanently. The existence of the Mountain Maidu people was disrupted in the 1850s by the gold-seeking miners, who, overnight, transformed Plumas County into a gold mining region. Rivers were diverted and ditches were dug to bring water from distant sources for mining purposes.

The North, Middle, and South forks of the Feather River were named in 1821 by Captain Luis Arguello as the Rio de las Plumas (“River of Feathers”) after the Spanish explorer saw what looked like bird feathers floating in the water. “Plumas,” the Spanish word for “feathers,” later became the name for the county. The river and its forks were the primary sites of early mining activity, with many smaller camps located on their tributaries. Gold mining remained the main industry in the area for the next five decades. In March of 1854, Plumas County was formed from the eastern and largest portion of Butte County with the town of Quincy chosen as the county seat. A large part of Plumas County was carved off to form present day Lassen County in 1864, shortly after Plumas County annexed a small portion of Sierra County, which included the town of La Porte.

1.3.2. Geography and Climate

Plumas County is east of Interstate 5 and north of Interstate 80. U.S. Highway 395 passes to the east. State Highway (SH) 36 passes near Lake Almanor on its way from the coast to Susanville. The Feather River National Scenic Byway begins 10 miles north of Oroville at SH 70 and winds through the Feather River Canyon and along the North Fork of the Feather River.

Plumas County is uniquely located at the northern end of the granitic Sierra Nevada where the range intersects with the volcanic Cascade Range. It is this geology that has laid the foundation for the diverse mineral resources and forest lands that are second only to the North Coast forests in production. Plumas County is also home to the largest high elevation valley-meadow complex in California, and is characterized by a large network of streams and rivers that are all part of the greater Feather River Watershed. The Feather River Watershed is the largest watershed in the Sierra Nevada and includes almost all of Plumas County. This watershed contributes to the water supply of over 25 million Californians (60 percent of California's population).

The County has a total area of 2,613 square miles, of which 2,554 square miles is land and 59.8 square miles is water. It is bounded by Shasta County to the northwest; Lassen County to the north and east; Sierra County, Yuba County to the south, and Butte County to the south and west; and Tehama County to the west. 65 percent of the County's land area is public lands managed by the United States Forest Service, the majority of which falls within the Plumas National Forest and other areas within the Lassen, Toiyabe, and Tahoe National Forests. Additionally, the County contains a portion of the Lassen Volcanic National Park and is home to the Plumas Eureka State Park.

Plumas County is topographically diverse. The elevation ranges from 1,180 feet in the Sierra Valley, to 8,376 feet in the Sierra Nevada range. The western portion of the County lies in the Sierra Nevada and is characterized by steep slopes, which become valleys and gentler rolling hills in the eastern portion of the County. This variation in topography has implications on the County's weather patterns, amount and type of precipitation, and overall vulnerabilities to natural hazards.

Plumas County has a Mediterranean climate, with a mean annual temperature of 49°F to 57°F. Precipitation varies from 70 inches on the western slope to 12 inches on the eastern slope of the Sierra Nevada. Mean annual precipitation is 43 inches, which falls mostly as rain below 4,000 feet and as snow above 4,000 feet in elevation.

1.3.3. Population and Demographics

The California Department of Finance (DOF) 2019 estimates for population of the County was 19,779, of which 17,803 people live in the unincorporated County. Select social and economic information for the County are shown in Table 1-2.

Table 1-2 Plumas County – Select Social and Economic Statistics

Statistic	Number
Populations	
Population under 5	4.4%
Population over 65	20.8%
Median Age	49.6
Racial Makeup	
White	89.0%
Black or African American	1.0%
American Indian or Alaska Native	2.7%
Asian	0.7%
Native Hawaiian or Pacific Islander	0.1%
Some Other Race	3.0%
Two or more races	3.6%
Income	
Median income	\$67,950
Mean Income	\$81,552
Poverty rate	
All families	8.1%
All people	13.3%
Unemployment Rate (December 2019)	7.7%

Source: 2010 US Census, 2017 US Census Bureau American Community Survey, California Employment Development Department

1.3.4. Economy and Tax Base

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

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

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	569	7.8%
Construction	690	9.5%
Manufacturing	436	6.0%
Wholesale trade	56	0.8%
Retail trade	727	10.0%
Transportation and warehousing, and utilities	400	5.5%
Information	110	1.5%
Finance and insurance, and real estate and rental and leasing	307	4.2%

Industry	Estimated Employment	Percent
Professional, scientific, and management, and administrative and waste management services	457	6.3%
Educational services, and health care and social assistance	1,622	22.3%
Arts, entertainment, and recreation, and accommodation and food services	936	12.9%
Other services, except public administration	407	5.6%
Public administration	543	7.5%

Source: US Census Bureau American Community Survey 2017 Estimates

Major employers in the County are shown in Table 1-4. It was noted by the County that this data represents best available data, and may not be fully accurate.

Table 1-4 Major Employers in Plumas County

Employer Name	Location	Industry
Almanor Ranger District	Chester	Ranger Services
Beckworth Ranger Plumas Natl Forest	Blairsden	Government Offices-US
C Roy Carmichael School	Portola	Schools
Collins Co	Chester	Lumber-Wholesale
County of Plumas	Quincy	Government Offices-County
Eastern Plumas Health Care	Portola	Hospitals
Environmental Alternatives	Quincy	Foster Care
Feather River Bulletin	Quincy	News Dealers
Feather River Family Dentistry	Quincy	Dentists
Indian Jim Elementary School	Quincy	Schools
Longboards Bar & Grill	Blairsden	Restaurants
Nakoma Golf Resort	Clio	Resorts
Plumas Bancorp	Quincy	Holding Companies (bank)
Plumas Bank	Chester	Banks
Plumas Co Sheriff's Office	Quincy	Sheriff
Plumas County Board of Supervisors	Quincy	Government Offices-County
Plumas County Public Health	Quincy	Clinics
Plumas County Public Works	Quincy	Government Offices-County
Plumas District Hospital	Quincy	Hospitals
Plumas Pines Golf Resort	Blairsden	Golf Courses
Portola Medical Clinic	Portola	Clinics
Safeway	Quincy	Grocers-Retail
Seneca Health Care	Chester	Physicians & Surgeons
Seneca Healthcare District	Chester	Health Care Management
Sierra Pacific Industries	Quincy	Lumber-Manufacturers

Source: Economic Development Department - 2019

The County has a wide and varied tax base. Tax base information is tracked and maintained by the Plumas County Assessor's Office. The following table shows the tax base for the County.

Table 1-5 Unincorporated Plumas County – Values at Risk by Property Use

Property Use	Total Land Value	Improved Structure Value	Total Value	Percent of Total
Agricultural	\$105,940,628	\$23,866,908	\$129,807,536	3.49%
Commercial	\$68,665,448	\$198,890,953	\$267,556,401	7.19%
Federal Lands	\$0	\$0	\$0	0.00%
Government	\$143,742	\$0	\$143,742	0.00%
Industrial	\$9,699,636	\$45,102,146	\$54,801,782	1.47%
Institutional	\$1,884,400	\$12,698,132	\$14,582,532	0.39%
Miscellaneous	\$8,119	\$0	\$8,119	0.00%
Recreational	\$14,115,908	\$30,370,139	\$44,486,047	1.20%
Residential	\$1,085,684,913	\$2,122,163,500	\$3,207,848,413	86.25%
ROW/Utilities	\$0	\$0	\$0	0.00%
Total	\$1,286,142,794	\$2,433,091,778	\$3,719,234,572	100.00%

Source: Plumas County February 2020 Parcel/Assessor's Data

1.4 Plan Organization

This Plumas County LHMP 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

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
- Appendix G: Wildfire History