

Chapter 1 Introduction

1.1 Purpose

Sacramento County, 7 incorporated communities, and 24 special districts prepared this Local Hazard Mitigation Plan (LHMP) Update to the Federal Emergency Management Agency (FEMA) approved 2016 Sacramento 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 Sacramento 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).

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 2019 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 Sacramento 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 Sacramento County 2021 LHMP Update is a multi-jurisdictional plan that geographically covers the entire area within Sacramento 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:

- Sacramento County*
- Brannan Andrus Levee Maintenance District (Reclamation Districts 317, 407, 2067)*
- City of Citrus Heights*

- City of Elk Grove*
- City of Folsom*
- City of Galt*
- City of Isleton*
- City of Rancho Cordova*
- City of Sacramento*
- American River Flood Control District
- Citrus Heights Water District
- Cosumnes Community Services District Fire*
- Los Rios Community College*
- Reclamation District 3*
- Reclamation District 341*
- Reclamation District 349
- Reclamation District 369*
- Reclamation District 551*
- Reclamation District 554*
- Reclamation District 556*
- Reclamation District 563*
- Reclamation District 800*
- Reclamation District 1000*
- Reclamation District 1002*
- Reclamation District 1601*
- Reclamation District 2111*
- Sacramento County Water Agency
- Sacramento Metro Fire District
- Sacramento Regional County Sanitation District*
- Sacramento Area Sewer District*
- Southgate Recreation and Park District*
- Twin Rivers School District*

* Participated in 2016 Sacramento County LHMP

All plan participants from the 2016 Sacramento County Plan 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 Sacramento 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

Sacramento 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.

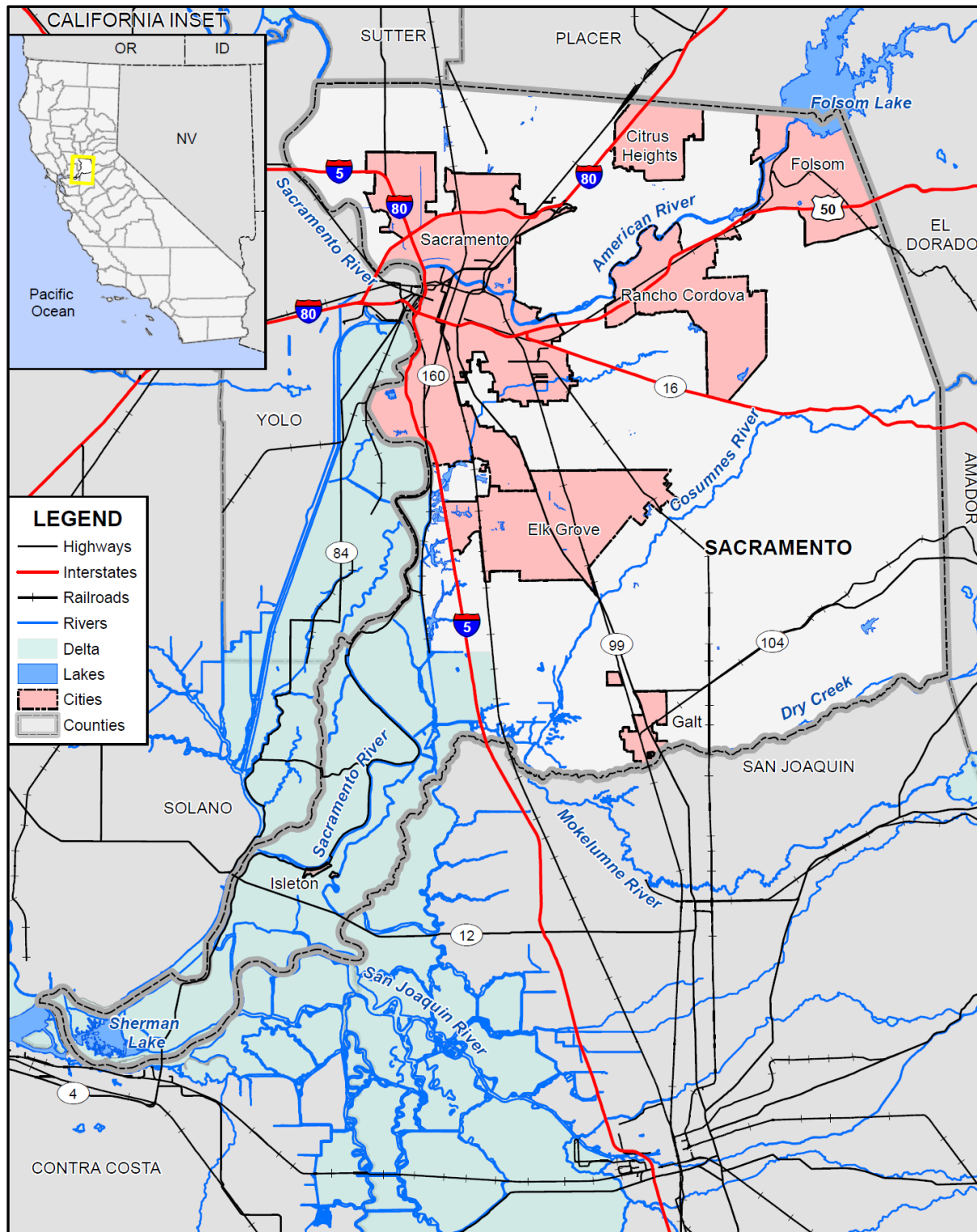
1.3 Community Profile

Sacramento County lies within the Central Valley of California, and is the County seat of the state capitol of Sacramento. The County has a history as a center of government, trade, transportation and agriculture, and as a consequence the City of Sacramento is a major transportation hub. Interstates 80 and 5; U.S. Highway 50; and State Highways 99, 16 and 160 all extend from the outer edges of the County and converge in downtown Sacramento. Similarly, all of the rail lines in the County converge in Sacramento at the site of the old Sacramento Rail Yard. Airports include Sacramento International, Sacramento Executive, Mather Air Force Base, McClellan Air Force Base and other smaller airports. Each of these major transportation corridors or locations impacts the land uses in the vicinity.

The County is divided into 25 community areas, seven of which are incorporated cities. Most of these communities are in the urbanized core in the western, northwestern or northern portion of the County. The southwestern, eastern and southern portions of the County are more agricultural and rural, residential. Many portions of the developed County are within the historic floodplains of the three major rivers (Sacramento, American, and Cosumnes Rivers) and are protected by a system of levees.

A map of the County is shown in Figure 1-1.

Figure 1-1 Sacramento County



FOSTER MORRISON
CONSULTING

SACRAMENTO
COUNTY

Data Source: Sacramento County GIS, Cal-Atlas; Map Date: 09/2020.

1.3.1. History

Early Spanish explorers and the Franciscan and Jesuit missionaries who followed them were the first Europeans to reach northern California. The interior of the Sacramento Valley, away from the easily defended and more accessible chain of coastal missions and pueblos, was left largely untouched by the Spanish and “Californios.” Established settlement of the Sacramento area did not begin until the late 1830s and early 1840s, when resourceful and independent individuals such as Sutter and Jared Sheldon obtained land grants from the Mexican government, usually in exchange for an agreement to protect Mexican interests in these remote interior regions.

With the initial Euro-American settlement of Sacramento County by John Sutter in 1839 at what would become Sutter’s Fort, the established outpost brought with it an increase in Euro-American trappers, hunters and settlers to the area. After the arrival of Sutter, several individuals obtained large Mexican Land Grants in the area. As a result of the Mexican War (1847-1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter’s Mill in Coloma. With the discovery of gold in 1848, a torrent of settlers from the east flooded into the Sacramento region. As the population increased and easily found gold decreased, newcomers who decided to stay turned to alternative vocations, particularly agriculture. Many found land comparatively plentiful and cheap. Raising grain, livestock, and produce to sell to the thousands of miners heading to the gold fields proved a profitable venture. These combined events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital, in 1854, also resulted in the area’s increase in socio-political importance.

The County is the major component of the Sacramento Metropolitan Statistical Area (SMSA) which includes Sacramento, El Dorado and Placer Counties. The County Charter was established in 1933 and is still used today. The official County Seal was adopted by the Board of Supervisors on January 18, 1961, following a contest for an appropriate design.

1.3.2. Geography and Climate

Sacramento County lies just north of the center of California’s Central Valley. The confluence of two of the state’s major rivers, the Sacramento and the American, occurs within the County. The southwestern panhandle of the County extends far into the Sacramento-San Joaquin Delta, to the point just north of Antioch, where nearly all waters of the Central Valley converge. To the south, San Joaquin County is primarily agricultural. The wooded foothills of the Sierra Nevada rise to the east in Amador and El Dorado Counties. On the north, Placer County has experienced dramatic growth over the past decade, and much of the grasslands adjacent to the northern Sacramento County boundary have been converted to residential uses. Yolo and Sutter Counties to the northwest and west have experienced growth as well, though agricultural uses remain.

The County is divided into 25 community areas, seven of which are incorporated cities. Most of these communities are in the urbanized core in the western, northwestern or northern portion of the County. The southwestern, eastern and southern portions of the County are more agricultural and rural residential. Many portions of the developed County are within the historic floodplains of the three major rivers (Sacramento,

American, and Cosumnes Rivers) and are protected by a system of levees. The California Department of Finance estimated the total population of the County to be 1,555,365 in 2020.

In general, topography in Sacramento County is characterized by a broad band of very flat valley floor land in the western sector, a transition zone of gently sloping alluvial plains in the central sector, and a low foothill region in the eastern sector. Elevations range from below sea level in the delta island area in the Southwest corner of the County to approximately 800 feet in the foothill region. Much of Sacramento County is low and flat. Some areas of the County are so flat that they have essentially no slope at all. Natural drainageways in these areas are usually poorly defined, and drainage of storm waters is slow. Most of these areas lie in the western and southern portions of the County. The general drainage pattern in Sacramento County is from northeast to southwest. As previously noted, all drainage is ultimately conveyed out of the county by the Sacramento and San Joaquin Rivers.

Sacramento County is characterized by a mild climate, with year-round sunshine. The summers are warm, with dry days and mild nights. During the winter “rainy season” (November through February), over half the total annual precipitation falls, yet rain in measurable amounts occurs only about ten days monthly during the winter. Mountains surround the Sacramento Valley to the west, north and east. Because of the shielding influence of the high mountains, winter storms reach the valley in a modified form. However, torrential rain and heavy snow frequently fall on the Western Sierra Slopes, the Southern Cascades, and to a lesser extent, the Coastal Range. As a result, flood conditions occasionally occur along the Sacramento River and its tributaries.

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 Sacramento County Population by Jurisdiction, 2020

Jurisdiction	Total Population
Citrus Heights	87,811
Elk Grove	176,154
Folsom	81,610
Galt	25,849
Isleton	828
Rancho Cordova	78,381
Sacramento	510,931
Unincorporated County	593,801
Total	1,555,365

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 Sacramento County – Select Social and Economic Statistics

Statistic	Number
Populations	
Population under 5	6.4%
Population over 65	14.1%
Median Age	36.4
Racial Makeup	
White	56.7%
Black or African American	9.9%
American Indian or Alaska Native	0.7%
Asian	16.1%
Native Hawaiian or Pacific Islander	1.2%
Some Other Race	7.8%
Two or more races	7.5%
Income	
Median income	\$69,767
Mean Income	\$89,707
Poverty rate	
All families	14.3%

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

1.3.4. Economy and Tax Base

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

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

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	6,521	0.9%
Construction	49,006	6.8%
Manufacturing	37,399	5.2%
Wholesale trade	16,671	2.3%
Retail trade	81,132	11.2%
Transportation and warehousing, and utilities	41,582	5.8%
Information	10,153	1.4%
Finance and insurance, and real estate and rental and leasing	46,752	6.5%
Professional, scientific, and management, and administrative and waste management services	85,489	11.8%
Educational services, and health care and social assistance	161,306	22.3%

Industry	Estimated Employment	Percent
Arts, entertainment, and recreation, and accommodation and food services	72,190	10.0%
Other services, except public administration	39,145	5.4%
Public administration	75,730	10.5%

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 Sacramento County

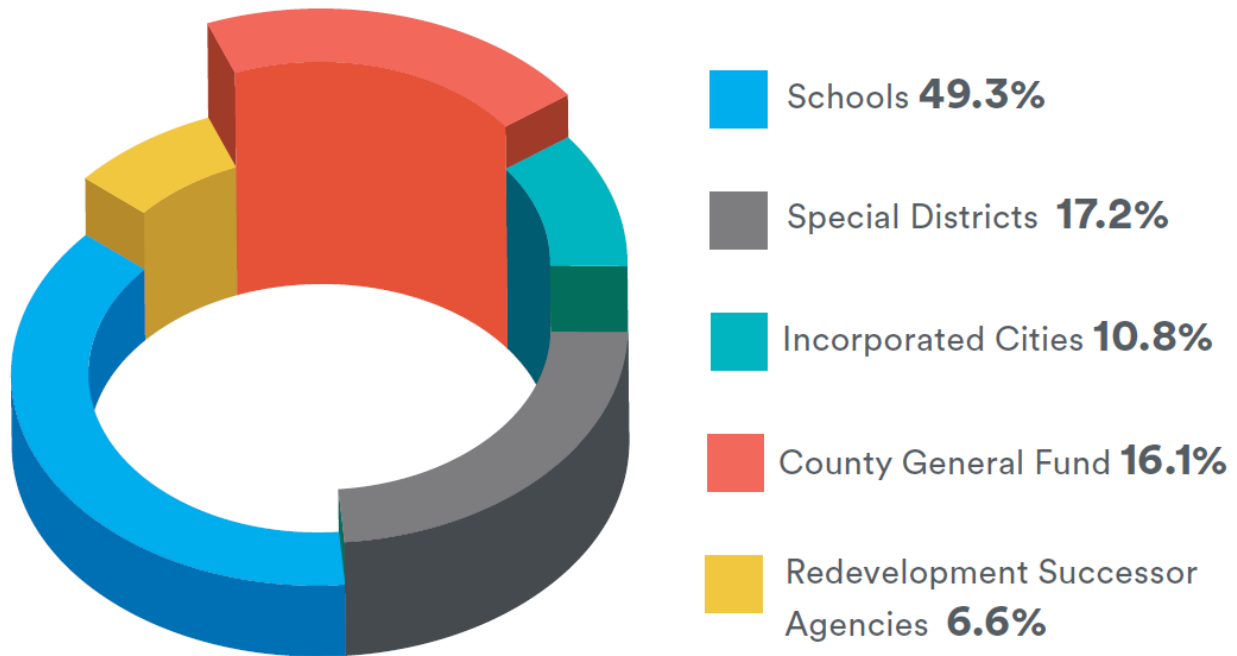
Employer Name	Location	Industry
Aerojet Rocketdyne Inc	Rancho Cordova	Aerospace Industries (mfrs)
Agreeya Solutions	Folsom	Information Technology Services
American River College	Sacramento	Junior-Community College-Tech Institutes
AMPAC FINE CHEMICALS LLC	Rancho Cordova	Electronic Equipment & Supplies-Mfrs
Apple Distribution Ctr	Elk Grove	Distribution Centers (whls)
California Department of Corrections	Sacramento	Insurance Agents Brokers & Service
California Prison Ind Auth	Folsom	Government Offices-State
California State Univ Sacramento	Sacramento	Schools-Universities & Colleges Academic
Corrections Department	Sacramento	State Govt-Correctional Institutions
Dept of Transportation In Ca	Sacramento	Government Offices-State
Disabled American Veterans	Sacramento	Veterans' & Military Organizations
Employment Development Dept	Sacramento	Government Offices-State
Environmental Protection Agency	Sacramento	State Government-Environmental Programs
Intel Corp	Folsom	Semiconductor Devices (mfrs)
Kaiser Permanente South	Sacramento	Hospitals
L A Care Health Plan	Sacramento	Health Plans
Mercy General Hospital	Sacramento	Hospitals
Mercy San Juan Medical Ctr	Carmichael	Hospitals
Sacramento Municipal Utility	Sacramento	Electric Contractors
Securitas Security Svc USA	Sacramento	Security Guard & Patrol Service
SMUD	Sacramento	Electric Companies
State Compensation Ins Fund	Sacramento	Insurance
Sutter Medical Ctr-Sacramento	Sacramento	Hospitals
United Loan Corp	Sacramento	Real Estate
Water Resource Dept	Sacramento	Government

Source: Economic Development Department, 2020

The County has a wide and varied tax base. Property taxes constitute the largest source of money for Sacramento County's General Fund. Property taxes are a one-percent tax on a property's assessed value

under California law. After the deduction of property tax exemptions for homeowners', disabled veterans', and charitable organizations, the County's total net assessed value for 2020-21 is over \$180 billion. Property tax revenue collected at the County level is distributed to over 175 local government agencies; cities, schools, and special districts such as fire, park, community service and cemetery districts. A distribution of property taxes can be seen on Figure 1-2.

Figure 1-2 Sacramento County – Property Tax Distribution



Source: Sacramento County Assessor's Office

Tax base information is tracked and maintained by the Sacramento County Assessor's Office. The following tables show the tax base for the County as well as for the incorporated jurisdictions. Table 1-5 shows the secured real property value by property type for the entire County. Table 1-6 shows the secured real property value by jurisdiction.

Table 1-5 2019-2020 Sacramento County Planning Area Distribution of Value by Property Use*

Property Type	Parcel Count		2019-2020		Assessed Values		2019-2020	
	2020	2019	# Change	% Change	2020	2019	\$ Change	% Change
Vacant Land - Residential	16,832	16,421	411	2.5%	2,150,977,648	2,003,590,342	147,387,306	7.4%
Single Family Residences	384,023	380,260	3,763	1.0%	115,292,649,366	108,723,604,319	6,569,045,047	6.0%
Condominiums	13,731	13,577	154	1.1%	2,502,757,313	2,295,187,758	207,569,555	9.0%
Manufactured Homes	7,150	8,177	-1,027	-12.6%	452,100,239	442,551,588	9,548,651	2.2%
Multi-Family 2 to 4 units	16,115	16,004	111	0.7%	4,731,914,231	4,426,256,841	305,657,390	6.9%
Agricultural	3,011	3,016	-5	-0.2%	1,618,524,538	1,565,358,366	53,166,172	3.4%
Multi-family 5 or more units	3,926	3,913	13	0.3%	13,167,916,674	11,923,037,719	1,244,878,955	10.4%
Commercial/Industrial	17,066	17,058	8	0.0%	38,706,173,716	37,022,190,692	1,683,983,024	4.5%
Vacant Commercial/Industrial Land	3,406	3,432	-26	-0.8%	1,247,859,646	1,246,889,702	969,944	0.1%
Oil, Gas, and Minerals	140	131	9	6.9%	51,426,197	47,126,283	4,299,914	9.1%
Church & Welfare Parcels	1,312	1,275	37	2.9%	1,867,120,463	1,821,338,015	45,782,448	2.5%
Common Area Parcels	3,052	2,873	179	6.2%	1,599,484	1,569,527	29,957	1.9%
Locally Assessed Utility Parcels (owned/leased)	599	604	-5	-0.8%	0	0	0	0.0%
Government Owned	7,721	7,558	163	2.2%	0	0	0	0.0%
Misc. Other	3,128	3,257	-129	-4.0%	186,294,809	190,180,750	-3,885,941	-2.0%
Totals	481,212	477,556	3,656	0.8%	181,977,314,324	171,708,881,902	10,268,432,422	6.0%

Source: Sacramento County Assessor's Office

*Values are gross totals (land, improvements, fixtures, and personal property) before exemptions

Table 1-6 Local Assessment Roll Totals by Jurisdiction

Jurisdiction	2020-21	2019-20	Net Increase	% Increase
Citrus Heights	7,736,564,948	7,386,280,380	350,284,568	5%
Elk Grove	22,571,199,959	21,279,713,049	1,291,486,910	6%
Folsom	15,621,129,725	14,672,408,347	948,721,378	6%
Galt	2,398,848,655	2,264,325,927	134,522,728	6%
Isleton	66,765,832	61,908,949	4,856,883	7%
Rancho Cordova	9,823,138,897	9,289,666,527	533,472,370	5%
Sacramento City	58,824,432,221	55,084,240,000	3,740,192,221	6%
Unincorporated Area	64,790,246,311	61,773,430,506	3,016,815,805	5%
Totals	181,832,326,548	171,811,973,685	10,020,352,863	6%

Source: Sacramento County Assessor's Office

1.4 Plan Organization

This Sacramento County LHMP Update is a multi-jurisdictional plan that geographically covers the entire area within Sacramento County's jurisdictional boundaries (i.e., the Planning Area). The Sacramento 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 Citrus Heights
- Annex B: City of Elk Grove
- Annex C: City of Folsom
- Annex D: City of Galt
- Annex E: City of Rancho Cordova
- Annex F: City of Sacramento
- Annex G: American River Flood Control District
- Annex H: Citrus Heights Water District
- Annex I: Cosumnes Community Services District Fire
- Annex J: Los Rios Community College
- Annex K: Reclamation District 800
- Annex L: Reclamation District 1000
- Annex M: Sacramento County Water Agency
- Annex N: Sacramento Metro Fire District
- Annex O: Sacramento Regional County Sanitation District
- Annex P: Sacramento Area Sewer District
- Annex Q: Southgate Recreation and Park District
- Annex R: Twin Rivers School District
- Annex S: Delta Annex:
 - ✓ Delta Annex Chapter 1: City of Isleton
 - ✓ Delta Annex Chapter 2: Brannan Andrus Levee Maintenance District (Reclamation Districts 317, 407, 2067)
 - ✓ Delta Annex Chapter 3: Reclamation District 3
 - ✓ Delta Annex Chapter 4: Reclamation District 341
 - ✓ Delta Annex Chapter 5: Reclamation District 349
 - ✓ Delta Annex Chapter 6: Reclamation District 369
 - ✓ Delta Annex Chapter 7: Reclamation District 551
 - ✓ Delta Annex Chapter 8: Reclamation District 554
 - ✓ Delta Annex Chapter 9: Reclamation District 556
 - ✓ Delta Annex Chapter 10: Reclamation District 563
 - ✓ Delta Annex Chapter 11: Reclamation District 1002
 - ✓ Delta Annex Chapter 12: Reclamation District 1601
 - ✓ Delta Annex Chapter 13: Reclamation District 2111

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: Survey
- Appendix H: RLAA
- Appendix I: Watershed Management Plan

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 seven incorporated communities, and the 24 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 Sacramento County Planning Area which includes data, information and analysis specific to all participating jurisdictions and also includes data, information, and analysis specific to unincorporated Sacramento County.

The **Jurisdictional Annexes** detail the hazard mitigation planning elements specific to each additional participating jurisdiction to this Sacramento 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 Sacramento County LHMP Update.