

Annex C City of Folsom

C.1 Introduction

This Annex details the hazard mitigation planning elements specific to the City of Folsom, a previously participating jurisdiction to the 2021 Sacramento County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the City. This Annex provides additional information specific to the City of Folsom, with a focus on providing additional details on the planning process, risk assessment, and mitigation strategy for this jurisdiction.

C.2 Planning Process

As described above, the City of Folsom followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Sacramento County Hazard Mitigation Planning Committee (HMPC), the City formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table C-1. Additional details on Plan participation and City representatives are included in Appendix A.

Table C-1 City of Folsom – Internal Planning Team

Name	Position/Title	How Participated
Ryan Neves	Parks & Recreation / Capital Projects Manager	Project leader, attended larger meetings, read drafts, provided past occurrences, lead for stormwater information.
Jennifer Thiot	Public Works/ Management Analyst	Attended larger meetings, coordinated internal planning meetings.
Stephanie Henry	Community Development / Senior Planner	Provided past and future development information
Michelle Toldeo	Fire Department/ Deputy Fire Marshall	Reviewed mitigation actions
Matthew Mcgee	Fire Department/ Battalion Chief	Reviewed drafts and provided oversight for fire
Emma Atkinson	Utilities Department / Senior Management Analyst	Reviewed mitigation actions and provided water related planning documents
Aimee Nunez	Community Development Department / Urban Forester	Reviewed mitigation actions and provided information on past occurrences

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the City integrated the previously FEMA-approved 2021 LHMP into existing planning mechanisms and programs. Specifically, the City incorporated into or implemented the 2021 LHMP through other plans and programs shown in Table C-2.

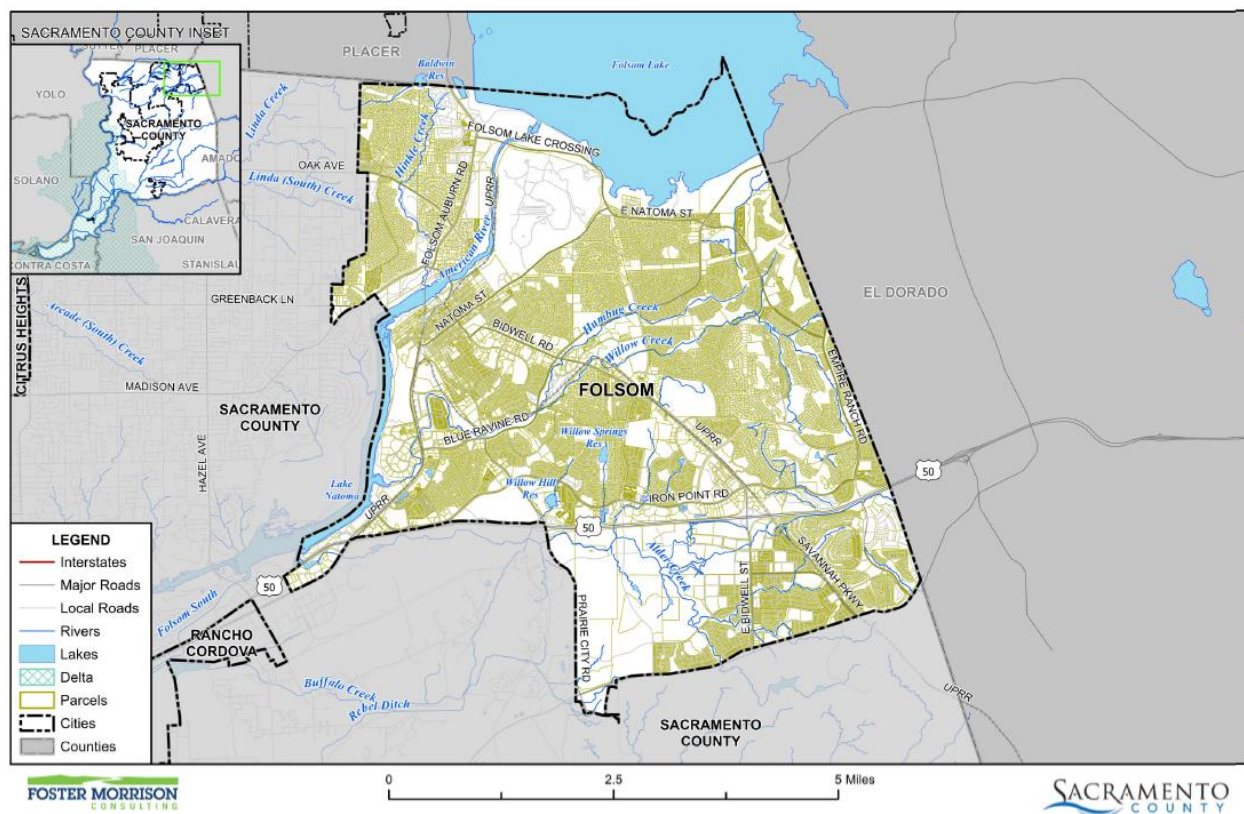
Table C-2 2021 LHMP Incorporation

Planning Mechanism 2021 LHMP Was Incorporated or Implemented Through	Details
General Plan	The Safety Element was updated in August 2024 and includes elements and references to the LHMP.
Emergency Operations Plan	The EOP was updated in 2021 and includes elements of the LHMP
Capital Improvement Program	The City's CIP is used to fund and implement a variety of capital improvement projects within the City including those related to the mitigation of hazards.

C.3 Community Profile

The community profile for the City of Folsom is detailed in the following sections. Figure C-1 displays a City map and the location of City of Folsom within Sacramento County.

Figure C-1 City of Folsom

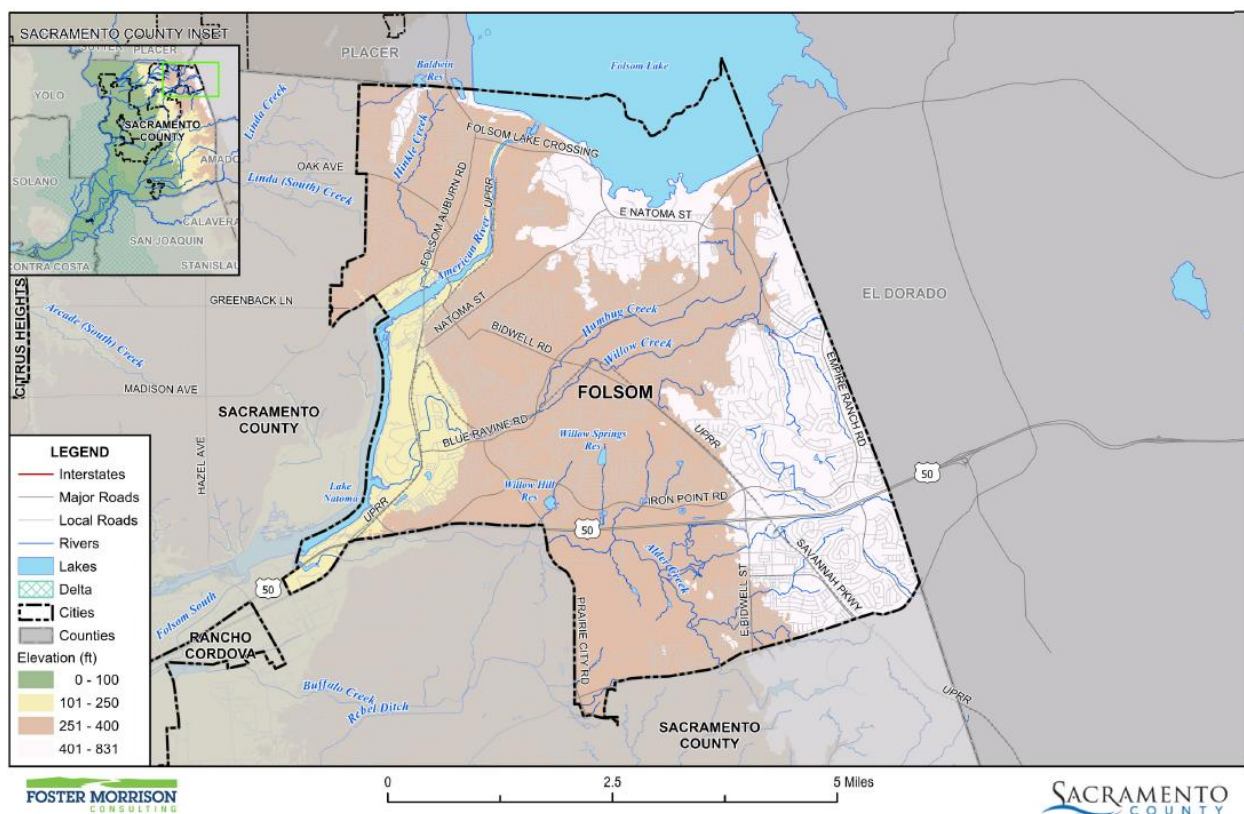


C.3.1. Geography and Climate

Folsom is located about 25 miles east of California's state capitol in Sacramento, 85 miles from Lake Tahoe and 110 miles from San Francisco. Residents have access to Sacramento International Airport and air cargo operations at Mather Field Airport. Folsom has direct access to Highway 50 with three interchanges. Highway 50 connects to Interstate 5 and Interstate 80. The Folsom Lake Crossing, a new bridge across the American River below Folsom Dam, opened in March 2009 helping to relieve local traffic between El Dorado and Placer counties. Public transportation includes light rail service from Folsom to Sacramento. Local bus service connects Folsom's three light rail stations to major employment centers and other points of interest. Amtrak Rail service is available from downtown Sacramento.

Folsom enjoys mild winters that are cool and moist with some fog and Mediterranean summers that are clear, hot, and dry. This climate is ideal for temperate fruit and nut crops, as well as some wine grapes and cold hardy citrus. Folsom's average temperature varies from low temperatures of 37 to 60 degrees to high temperatures of 53 to 94 degrees. Annual rainfall averages 23 inches per year falling primarily from November through March. The City does see elevation increase from west to east. Elevation ranges are shown on Figure C-2.

Figure C-2 City of Folsom – Elevations



C.3.2. History

Folsom is famous across the country thanks to a country song about a prison recorded by Johnny Cash in 1956. The City's rich history actually began more than a century earlier with California's great Gold Rush and arrival of the railroad. Gold was first discovered along the south bank of the American River in the area known as Negro Bar. The discovery led to massive gold mining operations, as well as a need for rail service.

In 1847, William Leidesdorff, a successful trader who owned a prosperous shipping business, traveled to Sacramento by steamboat to see the 35,000 acres he had purchased years earlier. His land holdings extended from today's Bradshaw Road along the south side of the American River to the present City of Folsom. That same year, U.S. Army Captain Joseph Folsom's regiment arrived in California. At the conclusion of the Mexican-American War, Folsom remained in the state and became interested in purchasing the land that Leidesdorff had left to his heirs following his death in 1848.

After a long fight to obtain the land, Folsom hired fellow railroad pioneer Theodore Judah to help establish a town site near the Negro Bar mining spot on the American River. Their early plans included shops along Sutter Street and a railroad depot. Folsom named the new town "Granite City." Judah and Folsom planned the town as a railroad terminus before there were railroads in California. Though Folsom didn't live to see it, his dream came true on Feb. 22, 1856 when the first train on the first railroad in the West arrived in Folsom from Sacramento.

Following Folsom's death at the age of 38, his successors renamed the town in his memory. By January 1856, every lot had been sold, and three new hotels were open in the town known as Folsom. Several decades later, construction began on Folsom Prison. Inmates helped construct the facility, which opened in 1880 when the first prisoners were moved to relieve over-crowding at San Quentin.

Following construction of the Folsom Powerhouse, Folsom made history in 1895 with the first long-distance transmission of electricity (22 miles from Folsom to Sacramento). The Powerhouse helped usher in the age of electricity with this notable accomplishment. The City's historic truss bridge was completed in 1893 to transport people, cattle and small vehicles across the American River. In 1917, the Rainbow Bridge opened to accommodate automobiles. It was the only option for crossing the river until the Lake Natoma Crossing opened in 1999.

Following a campaign spearheaded by the Chamber of Commerce in 1946, Folsom became a city. The final vote was 285 in favor of incorporation and 168 opposed. Members of the first City Council were Leland Miller, Harry Patton, Eugene Kerr, Wendell Van Winkle and Norbert Relvas. Hazel McFarland was elected city clerk and Wilma Hoxie was the first treasurer. Council members elected Eugene Kerr as the City's first mayor.

C.3.3. Economy and Tax Base

US Census estimates show economic characteristics for the City of Folsom. These are shown in Table C-3 and Table C-4. Based on 2023 estimates, mean household income in the City was \$172,367. Median household income in the City was \$135,855.

Table C-3 City of Folsom – Civilian Employed Population 16 years and Over

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	171	0.4%
Construction	3,240	8.0%
Manufacturing	3,309	8.2%
Wholesale trade	209	0.5%
Retail trade	3,472	8.6%
Transportation and warehousing, and utilities	1,441	3.6%
Information	767	1.9%
Finance and insurance, and real estate and rental and leasing	3,206	7.9%
Professional, scientific, and management, and administrative and waste management services	6,257	15.5%
Educational services, and health care and social assistance	8,720	21.6%
Arts, entertainment, and recreation, and accommodation and food services	2,572	6.4%
Other services, except public administration	971	2.4%
Public administration	6,096	15.1%

Source: US Census Bureau American Community Survey 2023 Estimates

Table C-4 City of Folsom – Income and Benefits

Income Bracket	Percent
<\$10,000	2.6%
\$10,000 – \$14,999	1.6%
\$15,000 - \$24,9999	4.1%
\$25,000 – \$34,999	4.0%
\$35,000 – \$49,999	3.9%
\$50,000 – \$74,999	9.6%
\$75,000 – \$99,999	12.7%
\$100,000 – \$149,999	16.5%
\$150,000 – \$199,999	13.0%
\$200,000 or more	34.0%

Source: US Census Bureau American Community Survey 2023 Estimates

Major employers include Intel Corporation, Folsom-Cordova Unified School District, Mercy Hospital, Kaiser Permanente, Maximus, Verizon, Costco, Walmart, Folsom State Prison, Home Depot, Target, Lowe's, Safe Credit Union, Trader Joe's, Kohl's, Best Buy, Winco, REI, Sam's Club, Cal-ISO, the City of Folsom, and Micron Technology.

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

base for the City. Table C-5 shows the secured real property value for the City (along with the other cities in the County) for the 2024-2025 and 2025-2026 tax years.

Table C-5 Local Assessment Roll Totals for the City (and other County jurisdictions) for 2024/2025 and 2025/2026

Jurisdiction	2025-26	2024-25	Net Increase	% Increase
Citrus Heights	10,025,689,554	9,655,026,938	370,662,616	4%
Elk Grove	30,447,141,962	28,732,989,483	1,714,152,479	6%
Folsom	21,947,218,449	20,668,487,354	1,278,731,095	6%
Galt	3,447,832,371	3,232,113,014	215,719,357	7%
Isleton	90,177,374	86,380,870	3,796,504	4%
Rancho Cordova	14,722,242,063	13,444,934,790	1,277,307,273	10%
Sacramento City	78,585,412,259	75,396,324,743	3,189,087,516	4%
Unincorporated Area	86,211,221,031	81,920,304,075	4,290,916,956	5%
Totals	245,476,935,063	233,136,561,267	12,340,373,796	5%

Source: Sacramento County Assessor's Office – 2025 Assessor's Annual Report

C.4 Risk Assessment

As defined by FEMA, risk is a combination of hazard, vulnerability, and exposure. “It is the impact that a hazard would have on people, services, facilities, and structures in a community and refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage.”

The City of Folsom risk assessment identifies and profiles relevant hazards and assesses the exposure of lives, property, infrastructure, and the environment to these hazards. The process allows for a better understanding of the City's potential risk and vulnerability to hazards and provides a framework for developing and prioritizing mitigation actions to reduce risk from future hazard events.

Building on the Community Profile above, a risk assessment was performed for the City utilizing the existing City boundaries. This includes the following sections:

- C.4.1 Assets Inventory and Growth and Development Trends
- C.4.2 Hazard Identification
- C.4.3 Hazard Profiles and Vulnerability to Specific Hazards

C.4.1. Assets Inventory and Growth and Development Trends

This section provides an inventory of the City of Folsom's total assets potentially at risk to hazards and an overview of growth and development trends. This section is broken into two parts:

- **Asset Inventory** – The assets inventory identifies the City of Folsom's total assets, including the people and populations; structures; critical facilities and infrastructure; community lifelines; natural, historic, and cultural resources; and economic assets and community activities of value. This data is not hazard specific, but is representative of total assets within the City, potentially at risk to identified hazards as discussed in Section C.4.3 Hazard Profiles and Vulnerability to Specific Hazards.

- **Growth and Development Trends** – A discussion of growth and development trends in the City, both current and future, is presented.

Assets Inventory

The City’s asset inventory is detailed in the following sections:

- People and Populations
- Structures
- Critical Facilities and Infrastructure
- Community Lifelines
- Natural, Historic, and Cultural Resources
- Economic Assets and Community Activities of Value

A discussion of each of these assets follows and serves as the template for the asset discussion for each hazard in Section C.4.3.

People and Populations

The most important asset within any community are the people and populations that reside in the community. This section includes an inventory of past and current populations of the City, and also discusses vulnerable populations and underserved communities as a subsection of people and populations located within the City and potentially at risk to hazards. Information from the City, US Census Bureau, California Department of Finance, and other sources as detailed below, form the basis of this discussion.

Historic Population Trends and Current Population

Population growth can increase the number of people living in hazard prone areas. The California Department of Finance reported that the City of Folsom has 92,577 residents, as of January 1, 2025. The City of Folsom has seen growth rates as shown in Table C-6. As shown, the City has grown consistently since 1950, with growth slowing recently since 2010.

Table C-6 City of Folsom – Population Changes Since 1950

Year	Population	Change	% Change
1950	1,690	–	–
1960	3,925	2,235	132.2%
1970	5,810	1,885	48.0%
1980	11,003	5,193	89.4%
1990	29,802	18,779	170.9%
2000	51,884	22,082	74.1%
2010	72,203	20,319	39.2%
2020	81,610	9,407	13.0%
2025	92,577	10,967	13.5%

Source: US Census Bureau, California Department of Finance (2025)

Underserved and Vulnerable Populations and Disadvantaged Communities

The City has a socially and economically diverse community, and many residents that are socially or economically disadvantaged or vulnerable due to varying reasons reside within the City. The City and surrounding County are no strangers to large natural disasters which have had a direct impact on the populations of the area. Thus, it is important to consider the potential effects of hazard events and disasters on these more vulnerable populations. Underserved and vulnerable populations and disadvantaged communities in the City are discussed by the following sources:

- US Center for Disease Control (CDC) Social Vulnerability Index
- California Department of Water Resources (CA DWR) Special Populations and Disadvantaged Community Mapping
- City Planning Team Input

CDC Social Vulnerability Index

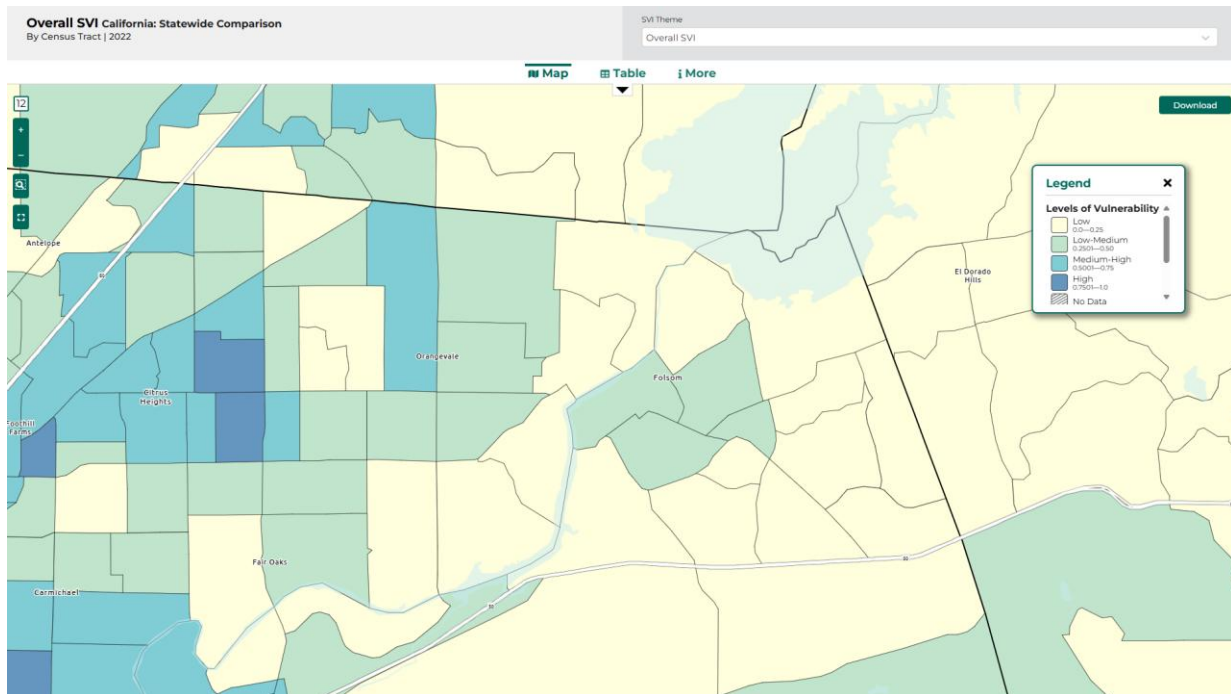
Every community must prepare for and respond to a hazard event, including the range of natural hazards addressed in this Plan, from severe weather extremes to large potentially catastrophic events such as floods or wildfires. A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability.

Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. The Agency for Toxic Substances and Disease Registry (ATSDR) Geospatial Research, Analysis & Services Program (GRASP) created databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event. The CDC used these databases to create the CDC Social Vulnerability Index (CDC SVI), which uses 15 U.S. census variables to help local officials identify communities that may need additional support before, during, or after disasters.

CDC SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The CDC SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. Each tract receives a separate ranking for each of the four themes, as well as an overall ranking. Maps of the four themes for the City are shown in the figures below.

The overall SVI map is shown in Figure C-3; the socioeconomic SVI for the census tracts in and around the City are shown in Figure C-4; the household composition SVI is shown in Figure C-5; the minority and language SVI is shown in Figure C-6; and the housing and transportation SVI is shown in Figure C-7. Overall, the maps indicate that, in general, there are minor to moderate changes in each SVI across the City.

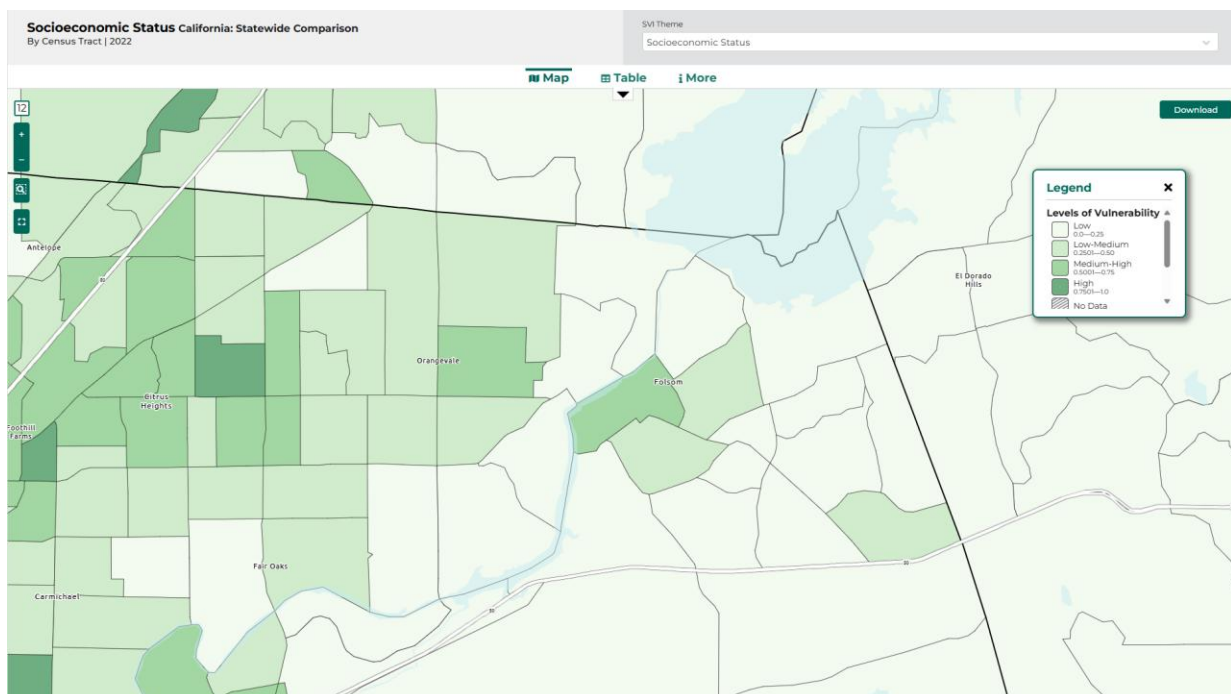
Figure C-3 City of Folsom – Overall Social Vulnerability



Source: CDC Social Vulnerability Index – map retrieved 9/22/2025

Level of Vulnerability Rating: **Yellow** – Low; **Green** – Low/Medium; **Aqua** – Medium/High; **Blue** – High; **Grey Hatched** – No Data; **Grey** – Not Available

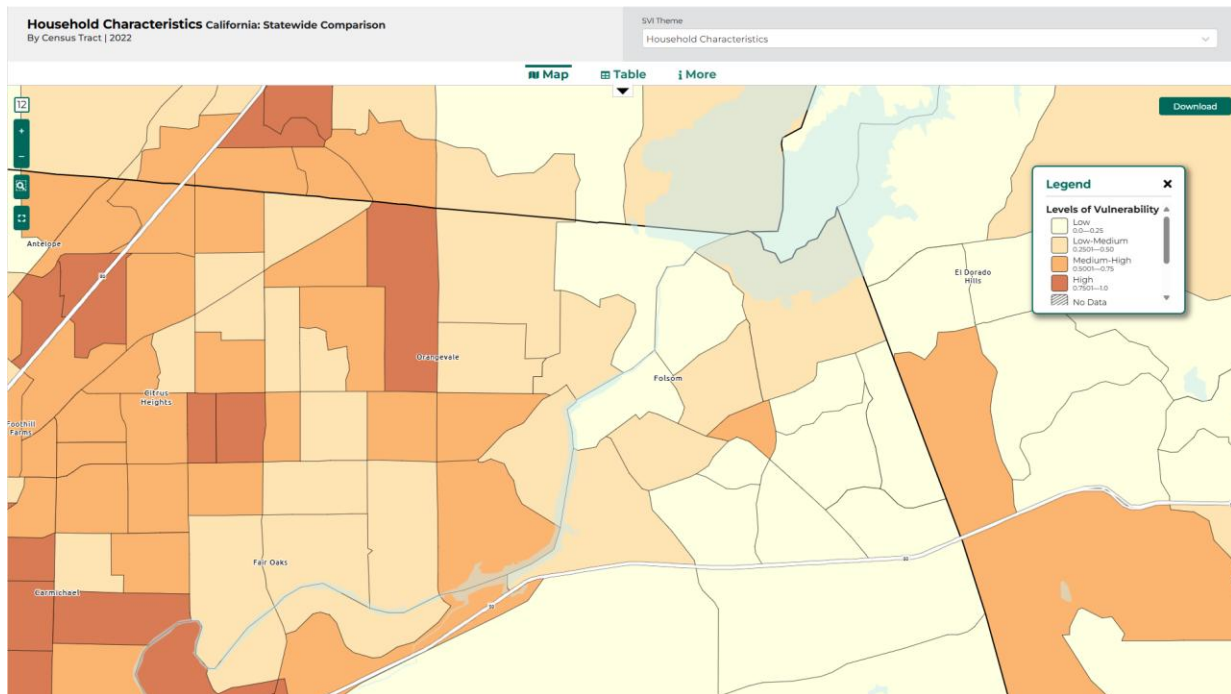
Figure C-4 City of Folsom – Socioeconomic Status Vulnerability



Source: CDC Social Vulnerability Index – map retrieved 9/22/2025

Level of Vulnerability Rating: **Faint Green** – Low; **Light Green** – Low/Medium; **Green** – Medium/High; **Dark Green** – High; **Grey Hatched** – No Data; **Grey** – Not Available

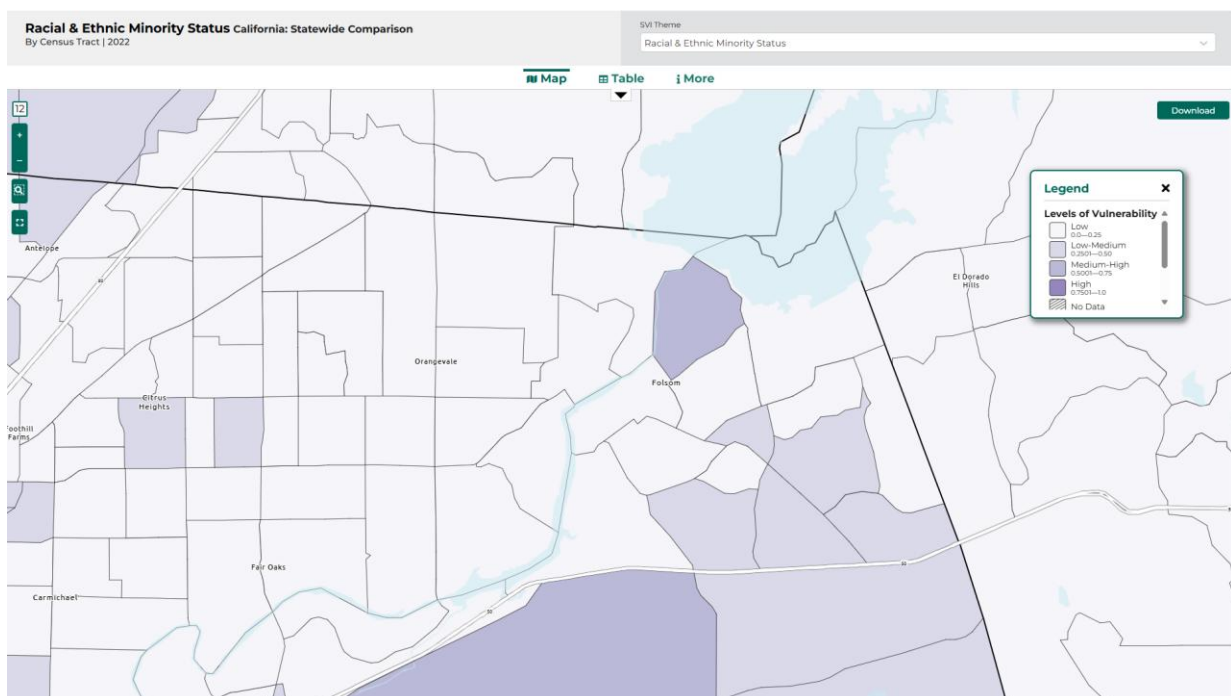
Figure C-5 City of Folsom – Household Characteristics



Source: CDC Social Vulnerability Index – map retrieved 9/22/2025

Level of Vulnerability Rating: **Faint Orange** – Low; **Light Orange**– Low/Medium; **Orange** – Medium/High; **Dark Orange** – High; **Grey Hatched** – No Data; **Grey** – Not Available

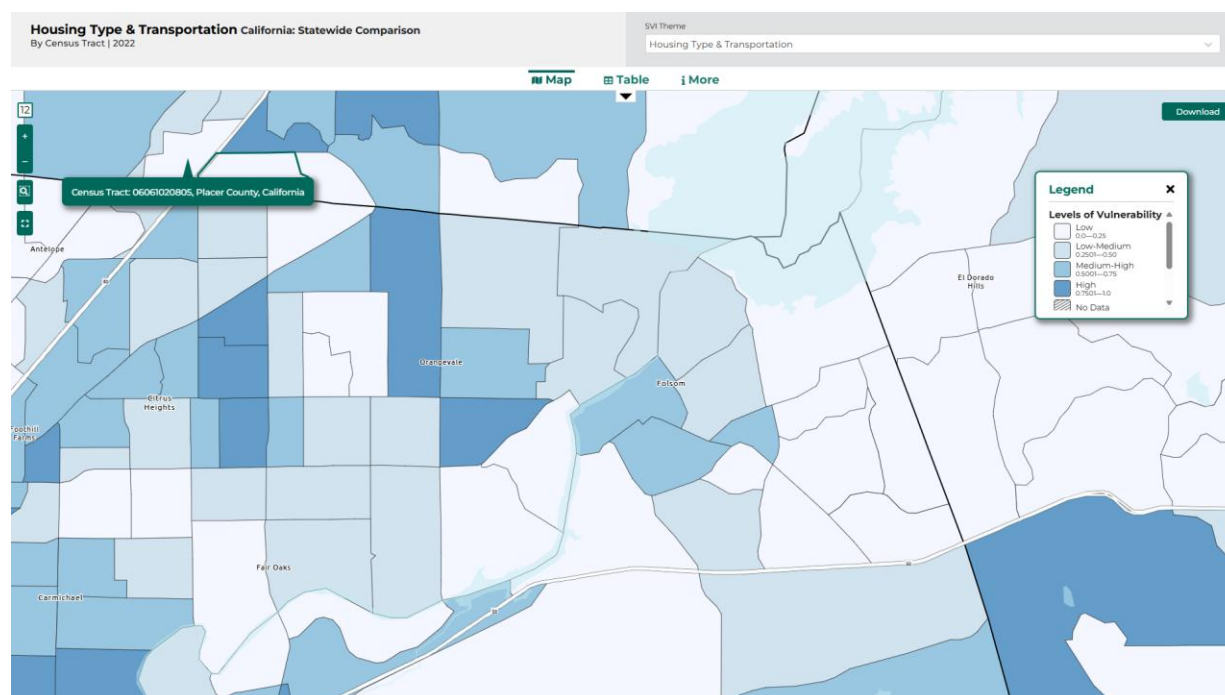
Figure C-6 City of Folsom – Racial and Ethnic Minority Status



Source: CDC Social Vulnerability Index – map retrieved 9/22/2025

Level of Vulnerability Rating: **Faint Purple** – Low; **Light Purple** – Low/Medium; **Purple** – Medium/High; **Dark Purple** – High; **Grey Hatched** – No Data; **Grey** – Not Available

Figure C-7 City of Folsom – Housing Type and Transportation



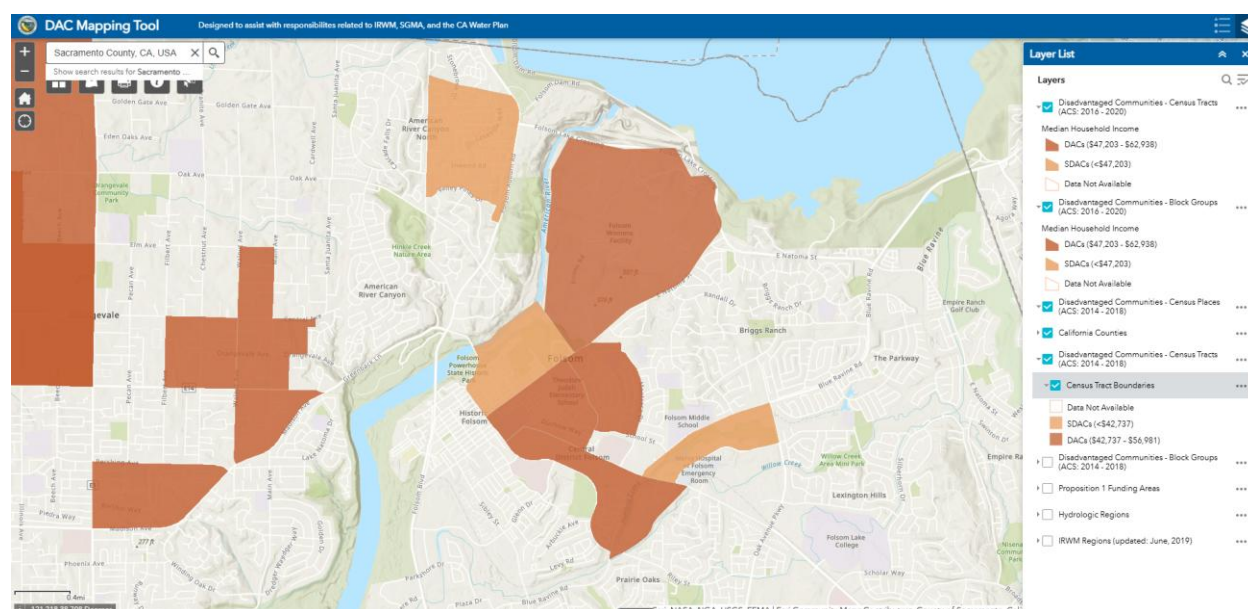
Source: CDC Social Vulnerability Index – map retrieved 9/22/2025

Level of Vulnerability Rating: **Faint Blue** – Low; **Light Blue** – Low/Medium; **Blue** – Medium/High; **Dark Blue** – High; **Grey Hatched** – No Data; **Grey** – Not Available

California DWR Disadvantaged Community Mapping Tool

The State of California’s Proposition 1 Disadvantaged Community (DAC) Involvement Program is designated to ensure the involvement of DACs as well as Economically Distressed Areas and Underrepresented Communities, which DWR collectively refers to as DACs. The Cal DWR definition for a Disadvantaged Community is a community with an annual median household income (MHI) that is less than 80% of the Statewide annual MHI (PRC Section 75005(g)), and those census geographies with an annual MHI less than 60% of the Statewide annual MHI are considered “Severely Disadvantaged Communities”. Those areas in the City considered disadvantaged are shown in Figure C-8. As shown, portions of the City falls in these DAC areas.

Figure C-8 City of Folsom – Disadvantaged Areas



Source: Cal DWR DAC Mapping Tool – retrieved 9/22/2025

City Planning Team Input

The City Planning Team provided additional local input on the vulnerable and underserved populations in the City. This is included in the sections below.

The City of Folsom noted that there are locations within the City with higher percentages of individuals who would be particularly vulnerable during a hazard event, including the elderly, disabled individuals, those with limited English skills and those without access to personal transportation. Increasing number of assisted living, memory care, and skilled nursing facilities within the City will escalate emergency service responses. Unhoused population throughout the wildland urban interface areas pose a potential significant fire risk during dry conditions.

City of Folsom 2021-2029 Housing Element

The City Planning Team noted that the Folsom 2021-2029 Housing Element discusses special populations in the City. Unique elements from the City's Housing Element are included here. Discussions for seniors, those with disabilities, developmental disabilities, people experiencing homelessness, large households, single headed households with children, and farmworkers are included. These are discussed below.

Seniors

The share of seniors increased in Folsom, Sacramento County, and California from 2010 to 2018. In 2018, seniors represented 13 percent of the population and 21.3 percent of all households in Folsom. Senior households have a high homeownership rate; 79.4 percent of senior households in Folsom owned their homes in 2018, compared to 70 percent of all households in the City. Although the proportion of the total population living below poverty level in Folsom (5.4 percent) is much lower than in Sacramento County

(15.8 percent), the data shows that Folsom seniors were more likely to experience poverty (6.6 percent) relative to the City's total population.

The City has two affordable senior housing developments. In 2003, USA Properties Fund, Inc. developed Vintage Willow Creek—a 184-unit housing development for low- and very low-income persons of 55 years or older. Creek View Manor, built by Mercy Housing in 2007, is a 138-unit affordable senior housing project located adjacent to Mercy Hospital in Folsom. The housing project offers cottage and apartment-style units, as well as a community center, for low- and very low-income persons who are 55 years or older. The City also has a program to assist senior homeowners, who often face the problem of maintaining their homes. Folsom's Seniors Helping Seniors program is designed to assist those seniors who do not have the financial resources to make necessary home repairs related to health and safety. Examples of the types of repairs made include repairing leaky faucets, installing grab bars, and replacing broken windows.

Disabled Citizens

According to the 2014-2018 American Community Survey five-year estimate, there are 5,859 people, or 8.2 percent of the civilian non-institutionalized population age 5 or older, in Folsom that have a disability. 5 percent (2,144 persons) of Folsom residents aged 18 to 64 (43,224 persons) in 2018 had a disability, which was less than Sacramento County (10 percent) and California (8 percent). Ambulatory and cognitive disabilities were the most common types of disabilities in Folsom.

While there are no special affordable housing projects designed exclusively for persons with disabilities in Folsom, the City adopted a Reasonable Accommodation Ordinance in 2011 to facilitate equal access to housing for persons with disabilities and to remove barriers for people with disabilities to live in the community. In addition, the City has adopted the 2019 CALGreen Code and 2019 California Building Code including Title 24 regulations dealing with accessibility for persons with disabilities. Thus, newer multi-family housing will at least meet minimum standards for disabled access.

People with Developmental Disabilities

The 2014-2018 American Community Survey estimates that 1,003 Folsom residents have a cognitive difficulty, which comprises 46.8 percent of disabilities in the City. According to the California Department of Developmental Services, as of June 2020, 582 Folsom residents received services for developmental disabilities. Of those receiving services, approximately 96 percent live in the home of a parent, family, or guardian, while only approximately 4 percent reside in independent/supported living. Many developmentally disabled persons are able to live and work. However, more severely disabled individuals require a group living environment with supervision, or an institutional environment with medical attention and physical therapy.

The California Department of Development Services reports that as of June 2020, in Folsom, 60.7 percent of those receiving services were aged 17 years or younger and 39.3 percent were aged 18 or older. Because developmental disabilities exist before adulthood, the first housing issue for the developmentally disabled is the transition from living with a parent/guardian as a child to an appropriate level of independence as an adult.

People Experiencing Homelessness

The most recent point-in-time count from January 2019 identified 17 unsheltered homeless individuals in Folsom and 5,570 individuals throughout Sacramento County. However, the true size of the homeless population in Folsom is difficult to estimate because there are a limited number of formal homeless shelters or other facilities such as daytime drop-in service centers where homeless persons might seek services and their numbers could be more easily counted. The Folsom Police Department has tracked approximately 50 individuals experiencing homelessness in Folsom. Service providers in Folsom say the homeless population in the City fluctuates, but they estimate it is closer to 70 individuals.

Large Households

8.4 percent of all households in Folsom had five or more persons. Of these large households, 1,762 were owner households and 524 were renter households. The proportion of large households in Folsom was less than that of both Sacramento County (12.1 percent) and California (14 percent).

Single Headed Households with Children

There were 2,132 single-headed households with children, comprising 7.8 percent of total households, at the time of the 2014-2018 American Community Survey. Approximately two-thirds of these households are single-female households, which make up 5.2 percent of all households in Folsom. Single male-headed households make up approximately 33 percent of all single-headed households, and 2.6 percent of all households in the city. The percentage of single-headed households, both male- and female-headed, is low compared to the county and state.

Farmworkers

The City of Folsom is not an agricultural community. The 2014-2018 American Community Survey reported that 122 individuals were employed in the agricultural, forestry, fishing, and hunting industry. However, the survey did not report specifically on whether these individuals were seasonal laborers, farm or ranch owner-operators, or “hobby” farmers. Since there are no large agricultural operations nearby that would attract a substantial seasonal farmworkers population, there is no identifiable need for farmworker housing in Folsom.

Structures

This section inventories the parcels (and associated structures) that make up the built environment of the City. The 2025 Sacramento County Assessor’s data and the associated parcel layer was used as the basis of this inventory. The methodology used to derive the number of total and improved parcels (i.e., those with an improved structure value) and land and improved property values (as well as content replacement values) follows the same methodology detailed in Section 4.2.1 of the Base Plan. This data should only be used as a guideline to overall values in the City, as the information has some limitations. The most significant limitation is created by Proposition 13. With respect to Proposition 13, instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the City. It is also important to note, in the event of a disaster, it is often the value of

the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table C-7 shows the Sacramento County Parcel/Assessor Data land and structure values, and content replacement values (e.g., the values at risk) broken down by property use for the City.

Table C-7 City of Folsom – Total Value of Parcels and Structures by Property Use

Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Agricultural	10	0	\$64,907,594	\$0	\$0	\$64,907,594
Care / Health	37	32	\$54,952,606	\$317,612,673	\$317,612,673	\$690,177,952
Church / Welfare	48	32	\$14,183,463	\$73,640,177	\$73,640,177	\$161,463,817
Industrial	49	35	\$48,213,396	\$172,615,160	\$258,922,740	\$479,751,296
Miscellaneous	1,480	5	\$1,744,056	\$2,124,479	\$2,124,479	\$5,993,014
Office	310	284	\$220,641,951	\$1,179,417,544	\$1,179,417,544	\$2,579,477,039
Public / Utilities	63	0	\$27	\$0	\$0	\$27
Recreational	21	16	\$30,355,509	\$85,747,981	\$85,747,981	\$201,851,471
Residential	26,652	26,323	\$4,729,854,645	\$12,952,103,264	\$6,476,051,632	\$24,158,009,541
Retail / Commercial	387	365	\$412,513,160	\$1,064,317,679	\$1,064,317,679	\$2,541,148,518
Unknown	1	0	\$0	\$0	\$0	\$0
Vacant	1,056	30	\$372,136,577	\$20,544,208	\$0	\$392,680,785
Folsom Total	30,114	27,122	\$5,949,502,984	\$15,868,123,165	\$9,457,834,905	\$31,275,461,054

Source: 2025 Sacramento County Parcel/Assessor Data

Critical Facilities and Infrastructure

Beyond just the buildings and structures that comprise the built environment, it is important to identify the critical facilities and infrastructure that are critical for life safety and property protection. This is done for the City of Folsom below.

For purposes of this plan, a critical facility is defined as:

Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.

A critical facility is classified by the following categories: (1) Essential Services Facilities, (2) At-risk Populations Facilities, (3) Hazardous Materials Facilities.

- Essential Services Facilities include, without limitation, public safety, emergency response, emergency medical, designated emergency shelters, communications, public utility plant facilities and equipment, and government operations facilities.
- At Risk Population Facilities include, without limitation, pre-schools, public and private primary and secondary schools, before and after school care centers with 12 or more students, daycare centers with 12 or more children, group homes, and assisted living residential or congregate care facilities with 12 or more residents.
- Hazardous Materials and Solid Waste Facilities include, without limitation, any facility that could, if adversely impacted, release of hazardous materials or waste in sufficient amounts during a hazard event that would create harm to people, the environment and property.

An inventory of critical facilities in the City of Folsom from Sacramento County GIS is shown on Figure C-9. Table C-8 gives summary information about the critical facilities in the City. Table C-9 details the facility categories and breaks them down by facility type.

Figure C-9 City of Folsom – Critical Facilities

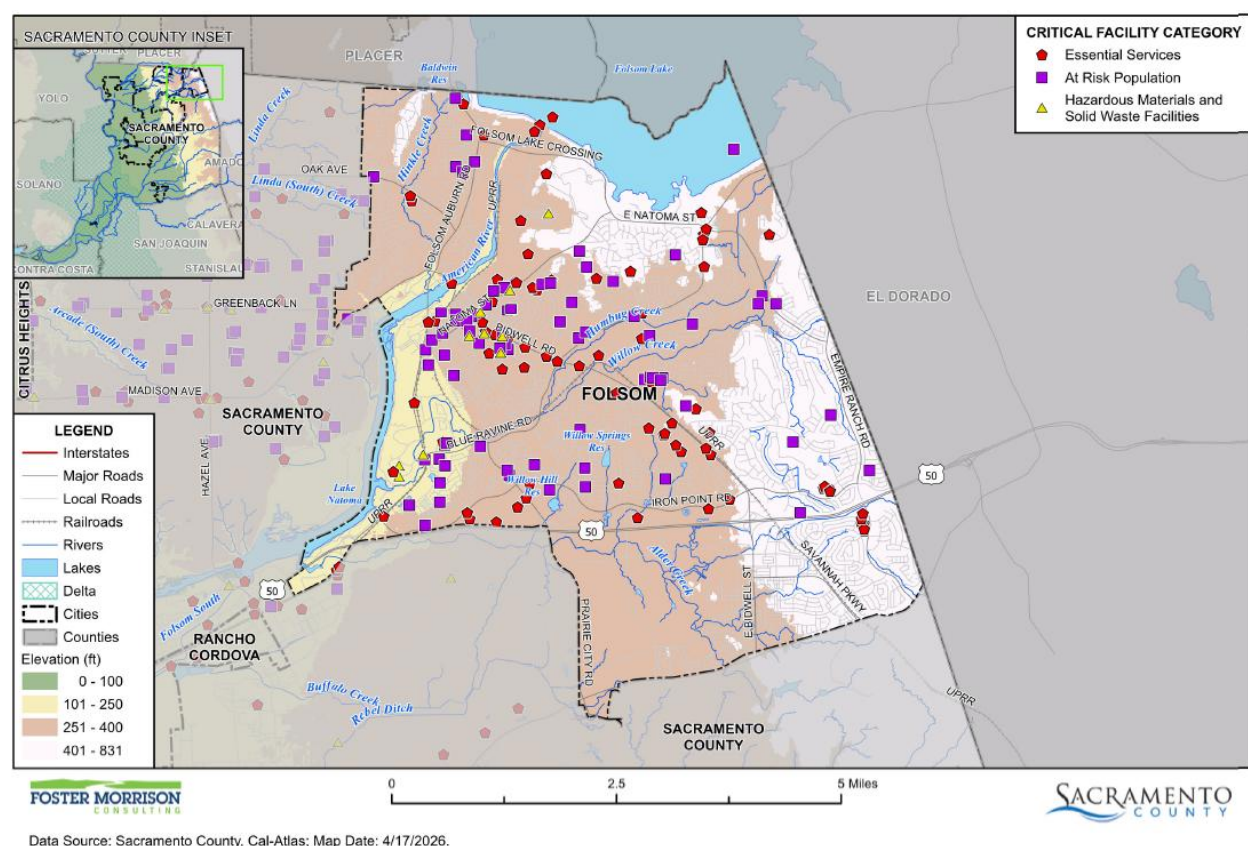


Table C-8 City of Folsom – Critical Facilities by Category

Critical Facility Category	Facility Count
Essential Services Facilities	152
At Risk Population Facilities	89

Critical Facility Category	Facility Count
Hazardous Materials and Solid Waste Facilities	10
Folsom Total	251

Source: Sacramento County GIS

Table C-9 City of Folsom – Critical Facilities by Category and Type

Critical Facility Category	Critical Facility Type	Facility Count
Essential Services Facilities	Bridge	1
	Cellular Tower	7
	Emergency Evacuation Center	4
	FDIC Insured Banks	19
	Fire Station	5
	Hospital or Urgent Care	4
	Law Enforcement	4
	Microwave Service Towers	86
	Power Plants	5
	Public Transit Stations	3
	Water Well	14
	Total	152
At Risk Population Facilities	Colleges, Universities, and Professional Schools	1
	Community Center	1
	Day Care Center	13
	Mobile Home Parks	6
	Places of Worship	40
	School	28
	Total	89
Hazardous Materials and Solid Waste Facilities	EPA ER TRI Facility	2
	Leaky Underground Storage Tank	8
	Total	10
Folsom Total		251

Source: Sacramento County GIS

Community Lifelines

Assessing the vulnerability of the City of Folsom to natural hazards and disasters also involves reviewing and inventorying the community lifelines in place that could be affected. It is important to include these items in hazard discussions as the continuous operation of critical government and business functions is essential to human health and safety, property protection, and economic security. The importance of community lifelines is discussed below:

- Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function.
- FEMA has developed a method for objectives-based response that prioritizes the rapid stabilization of Community Lifelines after a disaster.
- The integrated network of assets, services, and capabilities that provide lifeline services are used day-to-day to support the recurring needs of the community and enable all other aspects of society to function.
- When disrupted, decisive intervention (e.g., rapid re-establishment or employment of contingency response solutions) is required to stabilize the incident.

Community lifelines, as defined by FEMA, include the following:

- **Safety and Security** – Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety
- **Food, Hydration, Shelter** – Food, Water, Shelter, Agriculture
- **Health and Medical** – Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management
- **Energy** – Power Grid, Fuel
- **Communications** – Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch
- **Transportation** – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime
- **Hazardous Material** – Facilities, HAZMAT, Pollutants, Contaminants
- **Water Systems** – Potable Water Infrastructure, Wastewater Management

It should be noted that these community lifelines are all in place and functional as part of regular government operations in the Sacramento County Planning Area serving as a partnership between the cities, local special districts and agencies, and Sacramento County. Most all of the City’s community lifelines overlap with the Planning Area’s, and include many of the critical facilities and infrastructure assets inventoried for this LHMP. As such, specific information on these community lifelines in the City and how they may be affected by a hazard event or disaster are discussed collectively for all jurisdictions in the Base Plan.

Natural, Historic, and Cultural Resources

Assessing the vulnerability of the City of Folsom to natural hazards and disasters also involves inventorying the natural, historic, and cultural assets of the area. This step is important for the following reasons:

- Environmental and natural resources add to a community’s identity and quality of life. They also help the local economy through agriculture, tourism, and recreation. They support ecosystem services, such as clean air and water.
- Conserving the environment may help people mitigate risk. It can also protect sensitive habitats, develop parks and trails, and build the economy.
- The community may decide that these types of resources warrant a greater degree of protection due to their unique and irreplaceable nature and contribution to the overall economy.
- If these resources are impacted by a disaster, knowing so ahead of time allows for more prudent care in the immediate aftermath, when the potential for additional impacts are higher.

- The rules for reconstruction, restoration, rehabilitation, and/or replacement are often different for these types of designated resources.
- Natural resources can have beneficial functions that reduce the impacts of natural hazards, such as wetlands and riparian habitat, which help absorb and attenuate floodwaters.

Natural Resources

The City contains a variety of natural resources. Natural resources are unique to each area, often provide an important function, and are difficult to replace. Should a natural disaster occur, these species, resources, and locations are at risk. The following natural resource discussion is sourced from the City of Folsom 2035 General Plan Natural and Cultural Resources Element (last amended August 27, 2024).

Vegetation Communities

The City of Folsom Planning Area includes the following vegetation communities:

- Chamise Chaparral
- Interior Live Oak Woodland
- Blue Oak Woodland and Savanna
- California Annual Grassland
- Cottonwood/Willow Riparian
- Freshwater Marsh
- Seasonal Wetlands
- Vernal Pools
- Lake Shoreline Fluctuation Zone
- Ruderal and Barren Areas

Special Status Animal Species

According to the California Department of Fish and Game, twenty nine special status wildlife species are known or suspected to occur in the Folsom area.

- Valley Elderberry Longhorn Beetle
- California Red-legged Frog
- Foothill Yellow-legged Frog
- Western Spadefoot
- Western Pond Turtle
- California Horned Lizard
- Bald Eagle
- Golden Eagle
- Peregrine Falcon
- Prairie Falcon
- Burrowing Owl
- Osprey
- Northern harrier
- Sharp-shinned hawk
- Cooper's hawk
- Ferruginous hawk
- Merlin (*Falco columbarius*)

- Long-eared owl
- Short-eared owl
- Loggerhead Shrike
- Tricolor blackbird
- Yellow-breasted Chat
- Yellow Warbler
- Greater Sandhill Crane
- Willow Flycatcher
- Purple Martin
- Pallid bat
- Townsends big-eared bat
- California mastiff bat

Special Status Plant Species

A special-status plant species, as defined here, meets one or more of the following criteria:

- Officially listed by the California Department of Fish and Game (CDFG) as rare, threatened, or endangered and/or by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered or proposed for listing.
- A federal or State candidate species for listing as threatened or endangered or State candidate for listing as rare. Such a species may become formally listed during the course of a project.
- Listed under one of the following categories in the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994) and/or the Electronic Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994; update 2001):
 - ✓ List 1A – Plants presumed extinct in California.
 - ✓ List 1B – Plants rare, threatened, or endangered in California and elsewhere.
 - ✓ List 2 – Plants rare, threatened, or endangered in California but more common elsewhere.

Table C-10 lists the special status plant species in the vicinity of Folsom.

Table C-10 Special-Status Plant Species Occurring in the General Vicinity of Folsom

Species	Status/Federal /State/CNPS ¹	Habitat Requirements ²	Blooming Period
<i>Atriplex joaquiniana</i> San Joaquin spearscale	-/-/1B	Chenopod scrub, alkali meadow, grassland; in seasonal alkali wetlands or alkali sink scrub.	Apr-Oct
<i>Balsamorhiza macrolepis</i> var <i>macrolepis</i> Big-scale balsamroot	-/-/1B	Grassland, cismontane woodland; sometimes on serpentine.	Mar-Jun
<i>Calystegia stebbinsii</i> Stebbin's morning glory	FE/SE/1B	Chaparral, cismontane woodland; in open areas on red clay soils of the Pine Hill formation, or on gabbroic or serpentine soils. (Endemic to Pine Hill formation in El Dorado and Nevada counties.)	Apr-Jul
<i>Ceanothus roderickii</i> Pine Hill ceanothus	FE/SR/1B	Cismontane woodland, chaparral; on gabbroic soils, often in "historically disturbed" areas. (Endemic to the Pine Hill Area in Eldorado County.)	May-Jun

Species	Status/Federal /State/CNPS ¹	Habitat Requirements ²	Blooming Period
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	-/-/1B	Cismontane woodland, chaparral, lower montane coniferous forest; on serpentine and gabbro substrates; often on “historically disturbed” sites.	May-Jun
<i>Clarkia biloba ssp. Brandegeae</i> Brandegee’s clarkia	-/-/1B	Chaparral, cismontane woodland; often on roadcuts.	May-Jul
<i>Cordylanthus mollis ssp. Hispidus</i> Hispid bird’s-beak	-/-/1B	Meadows, playas, grassland; in damp alkaline soils, especially in alkali meadows and sinks.	Jun-Sep
<i>Downingia pusilla</i> Dwarf downingia	-/-/2	Mesic grassland, vernal pools; on margins of different types of vernal pools and vernal lakes.	Mar-May
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	-/-/1B	Cismontane woodland, lower montane coniferous forest, vernal pools; on mesic sites.	Jun-Aug
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	FE/SR/1B	Chaparral, cismontane woodland; on rocky ridges, often among rocks and boulders. Endemic to gabbroic and serpentine soils. (Endemic to Eldorado and Nevada Counties.)	Apr-Jul
<i>Fritillaria eastwoodiae</i> Butte County fritillary	-/-/3	Chaparral, cismontane woodland, lower montane coniferous forest; usually on dry slopes in serpentine, red clay, or sandy loam soils; sometimes on mesic sites.	Mar-May
<i>Galium californicum ssp. Sierra</i> El Dorado bedstraw	FE/SR/1B	Cismontane woodland, chaparral, lower montane coniferous forest; on gabbroic soils in mostly oak woodland. (Endemic to El Dorado County.)	May-Jun
<i>Gratiola heterosepala</i> Boggs Lake hedge- hyssop	-/SE/1B	Freshwater marshes and swamps, vernal pools; in clay soils, usually in vernal pools, sometimes on lake margins.	Apr-Aug
<i>Helianthemum suffrutescens</i> Bisbee Peak rush rose	-/-/3	Chaparral; in openings, often on serpentine, gabbroic, or Ione formation soils.	Apr-Jun
<i>Juncus leiospermus var. abartii</i> Ahart’s dwarf rush	-/-/1B	Vernal pools; restricted to edges of pools.	Mar-May
<i>Juncus leiospermus var. leiospermus</i> Red Bluff dwarf rush	-/-/1B	Chaparral, grassland, cismontane woodland, vernal pools; in vernal mesic sites or at edges of vernal pools.	Mar-May
<i>Lathyrus sulphureus var. argillaceus</i> Dubious pea	-/-/3	Cismontane woodland, lower and upper montane coniferous forest.	Apr
<i>Legenere limosa</i> Legenere	-/-/1B	Vernal pools; in beds of pools. (Many historical occurrences extirpated.)	Apr-Jun
<i>Navaretia myersii ssp. Myersii</i> Pincushion navaretia	-/-/1B	Vernal pools, mesic grassland; on clay soils within non-native grassland.	May
<i>Orcuttia tenuis</i> Slender Orcutt grass	FT/SE/1B	Vernal pools.	May-Oct
<i>Orcuttia viscid</i> Sacramento Orcutt grass	FE/SE/1B	Vernal pools. (Endemic to Sacramento County.)	Apr-Jul

Species	Status/Federal /State/CNPS ¹	Habitat Requirements ²	Blooming Period
<i>Sagittaria sanfordii</i> Sanford's arrowhead	-/-/1B	Marshes and swamps; in standing or slow-moving, fresh-water ponds and ditches.	May-Oct
<i>Senecio layneae</i> Layne's ragwort	FT/SR/1B	Chaparral, cismontane woodland; on ultramafic soils; occasionally along streams.	Apr-Jul
<i>Wyethia reticulata</i> El Dorado County mule ears	-/-/1B	Chaparral, cismontane woodland, lower montane coniferous forest; in openings on stony red clay and gabbroic soils. (Endemic to El Dorado County.)	May-Jul

Footnotes:

1 Status:

FE - Federally-listed as endangered.

FT - Federally-listed as threatened.

SE - State-listed as endangered.

SR - State-listed as rare.

1B - CNPS (California Native Plant Society): Plants rare, threatened or endangered in California and elsewhere.

2 - CNPS: Plants rare, threatened, or endangered in California but more common elsewhere.

3 - CNPS: Plants about which we need more information – a review list.

4 - CNPS: Plants of limited distribution – a watch list.

2 Sources: CNPS (2001); CNDDDB (2002); Hickman (1993) 3 Source: CNDDDB (2002)

Wetlands and their Natural and Beneficial Functions

Wetlands are habitats in which soils are intermittently or permanently saturated or inundated. Wetland habitats vary from rivers to seasonal ponding of alkaline flats and include swamps, bogs, marshes, vernal pools, and riparian woodlands. Wetlands are considered to be waters of the United States and are subject to the jurisdiction of the U.S. Army Corps of Engineers as well as the California Department of Fish and Wildlife (CDFW). Where the waters provide habitat for federally endangered species, the U.S. Fish and Wildlife Service may also have authority.

Wetlands are a valuable natural resource for communities providing beneficial impact to water quality, wildlife protection, recreation, and education, and play an important role in hazard mitigation. Wetlands provide drought relief in water-scarce areas where the relationship between water storage and streamflow regulation is vital and reduce flood peaks and slowly release floodwaters to downstream areas. When surface runoff is dampened, the erosive powers of the water are greatly diminished. Furthermore, the reduction in the velocity of inflowing water as it passes through a wetland helps remove sediment being transported by the water.

Wetlands are often found in floodplains and depressional areas of a watershed. Many wetlands receive and store floodwaters, thus slowing and reducing downstream flow. Wetlands perform a variety of ecosystem functions including food web support, habitat for insects and other invertebrates, fish and wildlife habitat, filtering of waterborne and dry-deposited anthropogenic pollutants, carbon storage, water flow regulation (e.g., flood abatement), groundwater recharge, and other human and economic benefits.

Wetlands, and other riparian and sensitive areas, provide habitat for insects and other invertebrates that are critical food sources to a variety of wildlife species, particularly birds. There are species that depend on these areas during all parts of their lifecycle for food, overwintering, and reproductive habitat. Other species

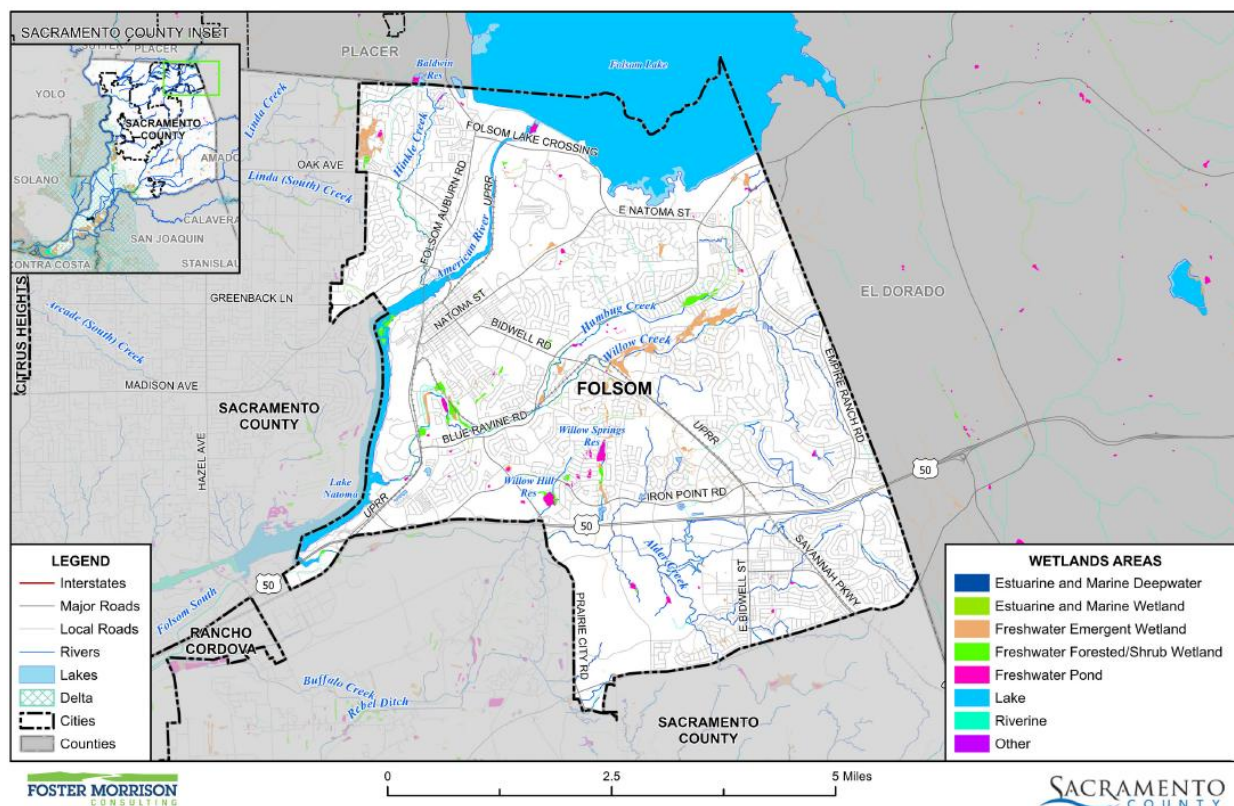
use wetlands and riparian areas for one or two specific functions or parts of the lifecycle, most commonly for food resources. In addition, these areas produce substantial plant growth that serves as a food source to herbivores (wild and domesticated) and a secondary food source to carnivores.

Wetlands slow the flow of water through the vegetation and soil, and pollutants are often held in the soil. In addition, because the water is slowed, sediments tend to fall out, thus improving water quality and reducing turbidity downstream.

These natural floodplain functions associated with the natural or relatively undisturbed floodplain that moderates flooding, such as wetland areas, are critical for maintaining water quality, recharging groundwater, reducing erosion, redistributing sand and sediment, and providing fish and wildlife habitat. Preserving and protecting these areas and associated functions are a vital component of sound floodplain management practices for the City.

Wetlands in the City are shown in Figure C-10 and detailed in Table C-11.

Figure C-10 City of Folsom – Wetlands Areas



Data Source: U.S. Fish and Wildlife Service National Wetlands Inventory 10/2024 (downloaded 01/2025), Sacramento County, Cal-Atlas; Map Date: 1/29/2026.

Table C-11 City of Folsom – Wetland Types and Acreages

Jurisdiction / Wetlands Area Type	Wetlands Count	Wetlands Area (in Acres)	% of Total Acres of the Planning Area*	% of Total Acres of the Jurisdiction**
Freshwater Emergent Wetland	1,424	244	0.6%	51%
Freshwater Forested/Shrub Wetland	342	86	0.2%	18%
Freshwater Pond	199	52	0.1%	11%
Lake	22	52	0.1%	11%
Riverine	564	42	0.1%	9%
Folsom Total	2,551	476	1.1%	100%

Source: US Fish and Wildlife Service, 2025.

Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk. The City of Folsom has a stock of historically significant homes, public buildings, and landmarks. The California Department of Parks and Recreation Office of Historic Preservation (OHP) was the primary source of information. OHP administers the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest programs. Each program has different eligibility criteria and procedural requirements. These requirements are detailed in Section 4.2.1 of the Base Plan. Table C-12 shows 12 historic buildings in the City from the OHP Database.

Table C-12 City of Folsom – Historic Resources

Name (Landmark Plaque Number)	National Register	State Landmark	California Register	Point of Interest	Date Listed	City/Area
Chinese Diggings, Natoma Station Ground Sluice (P712)				X	11/22/1988	Folsom
Chung Wah Cemetery (N1918)	X				8/21/1995	Folsom
Cohn House (N1001)	X				1/21/1982	Folsom
Coloma Road at Nimbus Dam (746)		X			7/5/1960	Folsom
Folsom Depot (N1035)	X				2/19/1982	Folsom
Folsom Powerhouse (N258)	X				10/2/1973	Folsom
Folsom-Overland Pony Express Route in California (702)		X			9/11/1959	Folsom
Negro Bar (P798)				X	5/31/1994	Folsom
Old Folsom Powerhouse (633)		X			3/3/1958	Folsom
Southern Pacific Railroad Superintendent House (N2411)	X				6/13/2008	Folsom
Terminal of California's First Passenger Railroad (558)		X			12/31/1956	Folsom

Name (Landmark Plaque Number)	National Register	State Landmark	California Register	Point of Interest	Date Listed	City/Area
Yeong Wo Cemetery (P810)				X	5/30/1995	Folsom

Source: California Department of Parks and Recreation Office of Historic Preservation. Retrieved 12/15/2025.

It should be noted that these lists may not be complete, as they may not include those currently in the nomination process and not yet listed. Additionally, as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), any property over 50 years of age is considered a historic resource and is potentially eligible for the National Register. Thus, in the event that the property is to be altered, or has been altered, as the result of a major federal action, the property must be evaluated under the guidelines set forth by CEQA and NEPA. Structural mitigation projects are considered alterations for the purpose of this regulation.

Economic Assets and Community Activities of Value

Assessing the vulnerability of the City of Folsom to natural hazards and disasters also involves inventorying the economic assets and community activities of value in the City.

Economic Assets

After a disaster, economic resiliency is one of the major drivers of a speedy recovery. Each community has specific economic drivers. These include:

- Primary Economic Sectors
- Major employers
- Commercial Centers

Folsom's economic resiliency is strongly supported by a diverse set of economic drivers. The City's primary economic sectors, major employers, and commercial centers all contribute to its stability and capacity for long term recovery.

Primary Economic Sectors

Technology and Professional Services: Folsom hosts a significant concentration of high tech, engineering, and professional service firms. This includes operations related to software development, semiconductor engineering, and corporate support services that enhance the regional innovation economy.

Retail and Commercial Services: Retail is one of the city's strongest sectors, driven by large commercial districts that serve both residents and visitors. The retail sector provides substantial employment and supports local and regional consumer activity.

Healthcare: Folsom has a growing healthcare presence supported by clinics, specialty medical centers, and regional hospital networks located nearby. This sector continues to expand due to population growth and increasing service demands.

Education and Public Sector: Public administration, city government functions, public safety, and local schools are important economic anchors. They provide stable employment and essential services that remain critical during and after emergencies.

Major Employers

The City of Folsom's largest employers include major technology firms such as Intel, significant public-sector institutions like the Folsom Cordova Unified School District and the City of Folsom, and key healthcare providers including Mercy Hospital of Folsom and Kaiser Permanente clinics. The city also benefits from major retail and commercial employers, including large national retailers and destination shopping centers, as well as substantial employment generated by Folsom State Prison. Together, these organizations form the backbone of Folsom's diverse economy, supporting stability, jobs, and essential services throughout the community.

Commercial Centers

Palladio at Broadstone: A major lifestyle and entertainment center offering retail, dining, hotel accommodations, entertainment, and professional services. Palladio serves as one of the city's most significant economic generators and a regional draw.

Historic Folsom District: A key commercial and tourist area supporting small businesses, restaurants, specialty shops, and community events. Its historic character makes it both an economic and cultural anchor.

Broadstone Marketplace and adjacent commercial corridors: These areas support a large mix of retail, grocery, dining, and service businesses and generate strong daily consumer activity.

Folsom's Central Business District: Located along a key corridor, the Central Business District plays a major role in daily economic activity and provides a diversified commercial base.

Folsom Premium Outlets: As a regional shopping destination, the outlets attract visitors from across the Sacramento metropolitan area. With numerous retail stores and adjacent dining and service businesses, the outlet center contributes significantly to sales tax revenue, employment, and tourism driven spending in the City.

Note: This inventory of economic assets is only included in this overall asset inventory for the City. To limit redundancy, it is not discussed further in the hazard profiles and vulnerability assessments in Section C.4.3 below. However, depending on the type, location, magnitude and extent of future hazard events and disasters, these City's economic assets may be vulnerable.

Community Activities of Value

Inventorying economic assets in the City and their vulnerability to natural hazards and disasters also involves inventorying activities that have value to the community. This includes activities that are important to a community, like long-standing traditions such as a festival or fair. Some areas rely on seasonal industries to sustain them throughout the year. Many of these activities also provide economic

benefits to the City. A hazard event that cancels or shortens these can affect a community's livelihood and can make disaster recovery more difficult or prolonged. This includes activities such as:

- Festivals and Fairs
- Sporting Events
- Tourism
- Local Pools

The City noted the following community activities of value:

Festivals and Fairs

- Folsom Rodeo (annual multi day event at the Folsom Rodeo Grounds)
- Holiday Tree Lighting & Winter Festivities (City Hall / Historic District)
- Spring Eggstravaganza (City sponsored at Lembi Park)
- Historic Folsom Holiday Markets and Street Fairs (seasonal craft fairs, Christmas markets)
- Palladio Festivals (e.g., summer concert series, harvest festival style events)
- Weekly Farmers Markets (Historic Folsom Plaza and Palladio, year round community events)

Sporting Events

- Recreational sports league tournaments (soccer, baseball, softball—City Parks & Recreation)
- Folsom High and Vista High School athletic events (football, track and field, swimming, basketball)
- Cycling races and running events along the Johnny Cash Trail and near Folsom Lake. Including the California International Marathon.
- Swim meets and aquatic competitions at Steve Miklos Aquatic Center
- Rodeo Grounds sporting activities (adjacent equestrian and competition events). Including the annual Folsom Pro Rodeo

Tourism Activities

- Folsom Lake State Recreation Area (boating, camping, hiking, fishing)
- Folsom Powerhouse State Historic Park (guided tours and heritage interpretation)
- Johnny Cash Trail & Art Walk (major cycling and tourism attraction)
- Folsom Zoo Sanctuary (family tourism, educational programming, special events)
- Historic Folsom District attractions (Railroad Museum, shopping, dining, cultural events)
- Folsom Premium Outlets (regional retail tourism destination)
- Palladio at Broadstone (entertainment, dining, retail—major draw for regional visitors)

Local Pools and Aquatic Facilities

- Steve Miklos Aquatic Center (community swims, lessons, lifeguard training, summer programs)

Note: This inventory of community activities of value only occurs in this overall asset inventory for the City. To limit redundancy, it is not discussed further in the hazard profiles and vulnerability assessments in Section C.4.3 below. However, depending on the type, location, magnitude and extent of future hazard events and disasters, the City's community activities of value may be vulnerable.

Growth and Development Trends

As part of the planning process, the City looked at changes in growth and development, both current and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time.

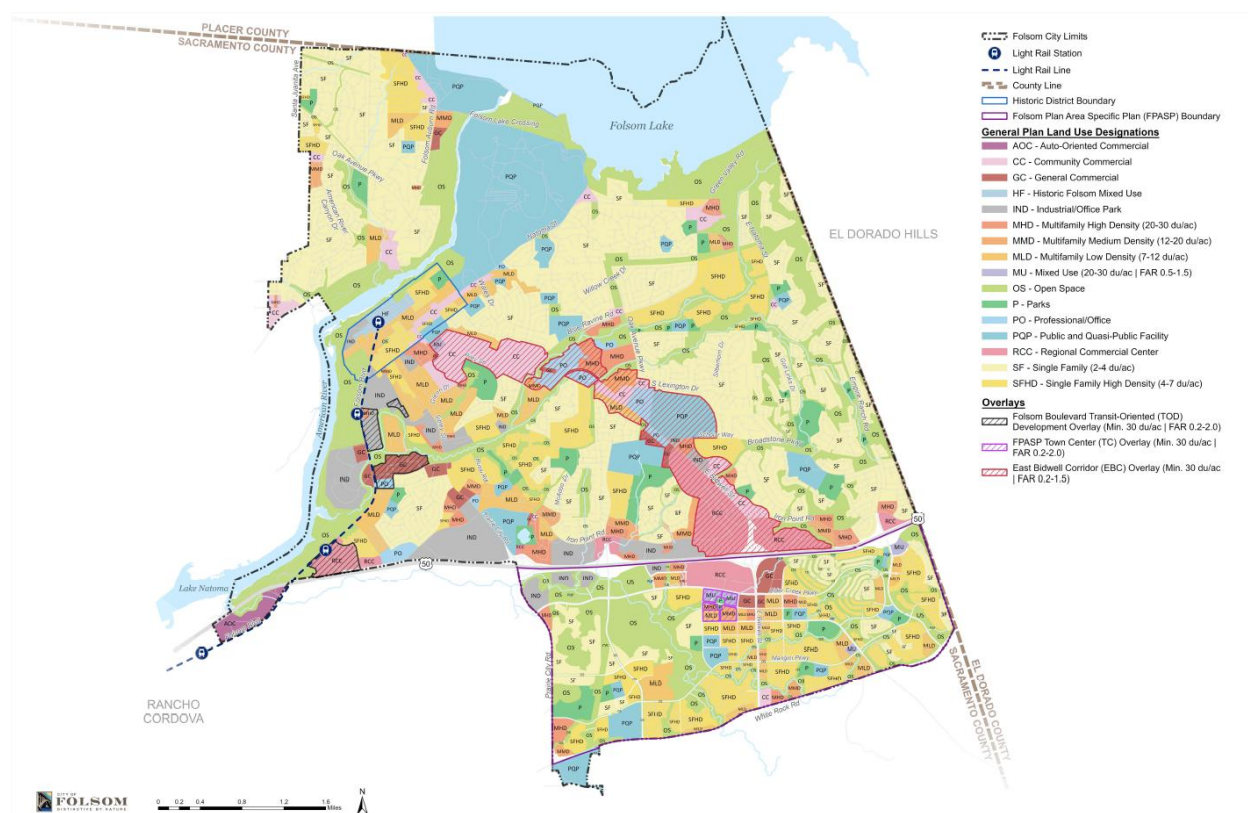
Land Use

State planning law requires that a land use element of a general plan includes a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The City's land use designations are generally described below and mapped on the Land Use Diagram (Figure C-11). The City of Folsom Municipal Code provides detailed land use and development standards for development.

The Municipal Code works hand in hand with the City's General Plan Land Use Element. The purpose of the Land Use Element is to provide goals, policies, actions diagrams and standards to guide future land use decisions in the City of Folsom. While all elements of the General Plan have equal weight under California law, in some respects this Element is the most far-reaching. It informs all other elements of the General Plan, shaping the future transportation network and the location of future housing sites, and influencing public facility requirements and park and recreation needs. It defines the City's future open space system and responds to natural resource conservation issues and safety hazards. It establishes the basic pattern of development in the City for the next 20-25 years, including land uses and densities, and presents the policies and actions to ensure that future development will enhance the quality of life for all City of Folsom residents.

Future land use for the City of Folsom from the 2035 City of Folsom General Plan Land Use Element (and last amended in 2024) is shown on Figure C-11.

Figure C-11 City of Folsom – Land Use Diagram



Source: City of Folsom. Retrieved 1/22/2026.

Population Trends and Projections

The Sacramento Council on Governments (SACOG) modeled population projections for the City of Folsom and other areas of the region in 2012 for a Metropolitan Transportation Plan/Sustainable Communities Strategy report. This forecast uses a 2008 base year estimate with projections to 2020 and 2035 for population, housing units, households and employment. SACOG estimated the City population in 2020 and 2035 to be 74,664 and 78,689 respectively.

The City of Folsom’s Housing Element noted that Folsom’s household population is projected to increase from 66,228 in 2008 to 81,064 in 2020 and 96,852 in 2035 (with an AAGR of 1.42 percent each year from 2008 to 2035). The number of households is projected to grow from 24,360 in 2008 to 30,520 in 2020 and 34,004 in 2035 (with an AAGR of 1.24 percent).

Development since 2021 Plan

Development has occurred in the City since the last Plan. Some of this has occurred in hazard prone areas. The City Planning Department tracked total building permits issued since 2021 for the City. These are tracked by total development, property use type, and hazard risk area. These are shown in Table C-13 and Table C-14.

Table C-13 City of Folsom – Total Development Since 2021

Property Use	2021	2022	2023	2024	2025	2026
Residential	971	852	952	699	429	–
Commercial	19	15	112	49	10	–
Industrial	0	0	0	0	0	–
Other	1	2	6	2	0	
Total	991	869	970	750	439	–

Source: City of Folsom Planning Department

Table C-14 City of Folsom – Development in Hazard Areas since 2021

Property Use	1% Annual Chance Flood	Levee Protected Area	Wildfire Risk Area ¹	Other
Residential	0	0	0	–
Commercial	0	0	0	–
Industrial	0	0	0	–
Total	0	0	0	–

Source: City of Folsom Planning Department

¹Moderate or higher wildfire risk area

Ongoing development continues in the Folsom Plan Area south of Highway 50. Recent entitlements include the Toll Brothers at Alder Creek project consisting of 1,424 residential lots in 18 Villages over an area of approximately 464.2 acres.

Recent development since the 2021 LHMP has been primarily occurring outside of identified hazard areas. All development was completed in accordance with current and applicable development codes, including floodplain ordinances, and other applicable standards and should be adequately protected. Thus, with the exception of more people living in the area potentially exposed to natural hazards, this growth should not cause a significant change in vulnerability of the City to identified priority hazards.

Future Development Areas

It is important to review future development plans for the City. Future development should be sited in areas that are away from known hazard risks. If this is not possible, mitigation should be done to ensure that future development is protected against future hazards.

GIS Analysis

The City of Folsom provided X future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Figure C-12 show the locations of the future development areas. Table C-15 shows the details of the future development areas by map identification area, acreage, and parcel count.

Figure C-12 City of Folsom – Future Development Areas

Table C-15 City of Folsom – Future Development Areas by Parcels and Acres

Source: City of Folsom

C.4.2. Hazard Identification

The City of Folsom identified the hazards that affect the City and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to the City (see Table C-16). Those hazards identified as a high or medium significance in Table C-16 are considered City of Folsom priority hazards for mitigation planning. Those hazards that occur infrequently or have little or no impact in the City were determined to be of low significance and not considered a priority hazard. Significance was determined based on the hazard data and profile, focusing on key criteria such as frequency, extent, and resulting damage, including deaths/injuries and property, natural and cultural resources, and economic damage. The ability of a jurisdiction to reduce losses through implementation of existing and new mitigation measures was also considered as to the significance of a hazard. This assessment was used to prioritize those hazards of greatest significance, enabling the City to focus resources where they are most needed.

Table C-16 City of Folsom—Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/Severity	Significance	Climate Change Influence
Aquatic Nuisance Species (plant/animal)	Limited	Likely	Negligible	Medium	Low
Climate Change	Significant	Likely	Limited	Medium	–
Dam Failure	Significant	Unlikely	Catastrophic	High	Medium
Drought & Water Shortage (w/tree mortality)	Extensive	Likely	Critical	High	High
Earthquake (w/subhazards)	Extensive	Unlikely	Catastrophic	Low	Low
Flood: 1%/0.5%/0.2% annual chance	Significant	Occasional	Critical	Medium	Medium
Flood: Localized Stormwater	Significant	Highly Likely	Limited	Medium	Medium
Landslides, Mudslides, and Debris Flow	Limited	Occasional	Limited	Low	Medium
Levee Failure	Limited	Unlikely	Negligible	Low	Medium
Sea Level Rise	Limited	Likely	Negligible	Low	High
Severe Weather: Extreme Cold and Freeze	Extensive	Highly Likely	Limited	Medium	Medium
Severe Weather: Extreme Heat	Extensive	Highly Likely	Critical	High	High
Severe Weather: Heavy Rains and Storms (Hail, Lightning, Wind)	Extensive	Highly Likely	Limited	Medium	Medium
Severe Weather: High Winds and Tornadoes	Extensive	Likely	Limited	Medium	Low
Subsidence	Limited	Unlikely	Limited	Low	Medium
Wildfire (with smoke and air quality)	Extensive	Likely	Catastrophic	High	High
Geographic Extent Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area Likelihood of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year, or happens every year. Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years. Magnitude/Severity Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact Climate Change Influence Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact					

C.4.3. Hazard Profiles and Vulnerability to Specific Hazards

This section includes the hazard profiles and vulnerability assessment for hazards ranked of medium or high significance specific to the City of Folsom (as identified in the Significance column of Table C-16) and also includes a hazard profile for the four primary hazards to the State of California: dam failure, earthquake, flood, and wildfire, regardless of the significance ranking by the City. Chapter 4 of the Base Plan provides more detailed information about these hazards and their impacts on the Sacramento County Planning Area. Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.2 of the Base Plan.

Hazard Profiles and Vulnerability Assessment

Each hazard is profiled in the following format:

- **Hazard Profile** – A hazard profile is included for each hazard. This includes information on:
 - ✓ **Hazard Overview** – A general discussion of the hazard and related issues is detailed here.
 - ✓ **Location and Extent** – Location is the geographic area within the City that is affected by the hazard. Extent is the expected range of intensity for each hazard. These are discussed in specific detail for mapped hazards, and in more general detail for those hazards that do not have discrete mapped hazard areas.
 - ✓ **Past Occurrences** – Past occurrences are discussed for each hazard. A discussion of disaster declarations is included in each hazard section. NCDC events are also discussed. Other past occurrences data specific to the City follow the disaster declarations and NCDC events for each hazard.
 - ✓ **Climate Change** – This section contains the effects of climate change (as applicable). The possible influence of climate change on the hazard is discussed.

After the hazard profile, a vulnerability assessment is presented. As part of the vulnerability assessment, an estimate of the vulnerability of the City to each identified hazard, in addition to the estimate of risk of future occurrence, is provided in each of the hazard-specific sections. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

After this classification, a general discussion of hazard vulnerabilities occurs. This is done in the following format:

- **General Vulnerability Discussion** – A general discussion of the hazard and its vulnerability on the City is provided.
- **Local Concerns** – This includes City provided information on how the City is uniquely affected by or vulnerable to each hazard.
- **Assets at Risk** – A discussion of the assets at risk follows, presented in the same order as in Section C.4.1 above, with a few exceptions. This includes sections on: People and Populations; Structures; Critical Facilities and Infrastructure, and Natural, Historic, and Cultural Resources. These are discussed in specific terms for mapped hazards, and in more general terms for those hazards that are unmapped. Sections on Community Lifelines and Economic Assets and Community Activities of Value are not included in the Sections below, as they are fully covered in Section C.4.1 above and in Chapter 4 of the Base Plan.
- **Impacts** – A discussion on hazard impacts follows. Impacts describe how each hazard can affect the City and its assets. The type and severity of impacts reflect both the potential magnitude of the hazard and the vulnerability of the asset.
- **Future Conditions/Future Development** – A discussion of how future conditions and future development may affect the hazard is also included. This is addressed specifically for mapped hazards, and in more general terms for those hazards that are unmapped.

Power Interruption/Power Failure: A Common Vulnerability of all Hazards

An impact or vulnerability of almost all hazards evaluated as part of this LHMP Update relates to power shortage and/or power failures. There are two major power providers in the Sacramento County Planning Area - Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric (PG&E). The US power grid crisscrosses the country, bringing electricity to homes, offices, factories, warehouses, farms, traffic lights and even campgrounds. According to statistics gathered by the U.S. Department of Energy, major blackouts are on the upswing. Incredibly, over the past two decades, blackouts impacting at least 50,000 customers have increased 124 percent. The electric power industry does not have a universal agreement for classifying disruptions. Nevertheless, it is important to recognize that different types of outages are possible so that plans may be made to handle them effectively. In addition to blackouts, brownouts can occur. A brownout is an intentional or unintentional drop in voltage in an electrical power supply system. Intentional brownouts are used for load reduction in an emergency. Electric power disruptions can be generally grouped into two categories: intentional and unintentional. More information on types of power disruptions can be found in Section 4.3 of the Base Plan.

Public Safety Power Shutoff (PSPS)

An intentional disruption type of power shortage/failure event has been recently implemented in California as a result of wildfires starting as a result of downed power lines or electrical equipment. This was the case for the Camp Fire in 2018. As a result, California's three largest energy companies (including PG&E), at the direction of the California Public Utilities Commission (CPUC), are preparing all Californians for the threat of wildfires and power outages during times of extreme (fire) weather. To help protect customers and communities during extreme fire weather events, electric power may be shut off for public safety in an effort to proactively prevent wildfire. This is called a PSPS. More information on PSPS criteria can be

found in Section 4.3 of the Base Plan. SMUD noted that it has had no PSPS events for its service territories. PG&E has had no PSPS events since the 2021 LHMP.

Local Concerns

There have been no intentional (including PSPS events) power outage issues associated with hazard events affecting the City since 2021. However, with an increase in climate change related issues (e.g., extreme heat conditions, atmospheric river storms) occurring in the City and larger Sacramento County Planning Area, the potential for future hazard related power outages remain a concern.

Hazard Profiles and Vulnerability Assessment by Hazards

The following sections provide the hazard profile and vulnerability assessments for each of the hazards identified in Section C.4.2 Hazard Identification.

Aquatic Nuisance Species (plant/animal)

Likelihood of Future Occurrence–Highly Likely

Vulnerability–High

Hazard Profile

Invasive and nuisance species are organisms that cause economic or environmental harm. A non-indigenous species is considered an invasive species when it becomes established in a new location, causing impacts. Invasive species may be introduced intentionally or unintentionally as a result of human activity. Once introduced, they can become a permanent part of an ecosystem, creating environmental imbalances, presenting risks to human health, and causing significant economic problems.

Under certain conditions, species that are native to an area or that are found worldwide may become a nuisance. Native species and cosmopolitan species (those found worldwide) may be classified as nuisance species when they become out of balance. Invasive and nuisance species vary widely, and their impacts can range from clogging water pipes to killing wildlife, from harming crops and forests to posing a human health hazard. The introduction of non-indigenous species into California’s marine, estuarine, and freshwater environments can cause significant economic, human health, and ecological impacts.

Location and Extent

All of the waterways in the City are at risk to aquatic nuisance species. There is no scientific scale to measure aquatic nuisance species. The speed of onset can be quite short once an aquatic nuisance species is introduced into a river or water body. The duration of the aquatic nuisance species infestation can range from short term to long term, until measures are taken to reduce the presence of the offending species.

Past Occurrences

Disaster Declaration History

There have been no past federal or state disaster declarations due to aquatic nuisance species, as shown in the Base Plan. There have also been no USDA disaster declarations from aquatic nuisance species.

NCDC Events

The NCDC does not track aquatic nuisance species.

City of Folsom Events

Localized flooding of impacted creek corridors from water hyacinth has occurred since 2021. It was noted that this localized flooding impacted bike trails. No property damage or claims were submitted.

Climate Change and Aquatic Nuisance Species

According to the 2024 CAS, addressing climate change will encompass reducing vulnerability through adapting to the ongoing and predicted impacts of climate. Waterways in California are vulnerable to predicted impacts of climate change, including less reliable water supplies, increased temperatures, and increased aquatic nuisance species.

The 2023 California State Hazard Mitigation Plan noted that California farmers, water providers, and those who recreate or use water bodies contend with a wide range of aquatic nuisance pests. Continued climate change is likely to alter the abundance and types of many aquatic nuisance species, lengthen aquatic nuisance pests' breeding season, and increase pathogen growth rates. It also noted that change in climate can directly impact new temperature patterns and northward shifts of previously unseen aquatic nuisance species. Additionally, longer growing seasons may enable nuisance species to complete more reproductive cycles, which can increase severity of infestations.

It also noted that climate change, which is warming marine waters, freshwater, and estuarine environments and altering the water chemistry (such as changes to water salinity and pH), can also bolster nuisance species populations and range. The changes in marine environment can weaken native species not accustomed to warmer temperatures or altered water chemistry. Non-indigenous species tend to be more tolerant and resilient to changes in their environment; therefore, shifts in species composition due to climate change events can favor invasive non-indigenous species over native species.

Finally, the 2023 State Plan noted that temperature is not the only climatic influence on pests. For example, some aquatic nuisance species thrive or become more troublesome during periods of extreme drought. Furthermore, while warming speeds up the life cycles of many aquatic nuisance species, suggesting that problems could increase, some aquatic nuisance species may grow more slowly as elevated carbon dioxide levels decrease the protein content of the leaves on which they feed.

Vulnerability to Aquatic Nuisance Species

According to historical hazard data, aquatic invasive and nuisance species are an annual occurrence in the Sacramento County Planning Area. If left unchecked, invasive and nuisance species can threaten native species, biodiversity, ecosystem services, recreation, water resources, agricultural production, cultural resources, economies and property values, public safety, and infrastructure.

An assessment of a community's vulnerability to climate change begins with an understanding of local exposure to aquatic nuisance species. This is included in the Local Concerns section below followed by a discussion of the City's assets at risk and impacts to this hazard.

Local Concerns

The City's main concerns are with impacts to native aquatic habitat caused by the nuisance species overtaking the waterways, specifically water hyacinth, pennywort, and red azolla. Additional concerns include nuisance species clogging culverts or bridges and causing flooding to adjacent trails, roadways, and private property. Impacts to other aquatic life and habitat have not been quantified.

Assets at Risk

Assets at risk from climate change include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

Aquatic nuisance species have a minimal effect on people and populations in the City, including vulnerable populations. Damage from aquatic nuisance species can cause economic issues for water companies, who then must pass those costs on to customers. Water price increases could affect populations in the City. In addition, those species contributing to increased flooding conditions in the City may also affect populations in flood prone areas. Also to note, nuisance animal species can cause damage to area levees further increasing the flood potential.

Structures

Structures in the City may be indirectly affected by aquatic nuisance species. Some species can impact vegetation and can result in stream bank instability, erosion, and increased sedimentation, impacting ground stabilization and possibly causing foundation issues for nearby structures. If species cause trees and other vegetation to die, there is an increased risk of damage to roadways, powerlines, and buildings, and increased risk to wildfire. Some nuisance plants have been shown to destabilize soil due to high densities and shallow root systems, negatively impacting nearby buildings and septic systems. Other nuisance plant species have been known to clog culverts and streams, increasing flooding risk.

Critical Facilities and Infrastructure

Critical facilities and infrastructure in the City may be affected by aquatic nuisance species, though these effects are expected to be limited. The 2023 State of California Hazard Mitigation Plan noted that water

treatment plants could be impacted by invasive and nuisance species. Water that becomes polluted due to increased sedimentation and erosion will require additional treatment. If the system becomes clogged with these pollutants or with nuisance aquatic species, the ability of water treatment plants to operate may become impaired. Additionally, soil that becomes unstable due to decaying vegetation can impact critical facilities that are built on or around these soils.

Natural, Historic, and Cultural Resources

Natural resources can be affected by aquatic nuisance species hazards. Negative impacts of these species to natural resources include the following:

- Loss of wildlife habitat and reduced wildlife numbers;
- Loss of native plant species;
- Increased soil erosion and topsoil loss;
- Diminished water quality and fish habitat.

Historic and cultural resources have a more limited risk from aquatic nuisance species.

Impacts from Aquatic Invasive Species

According to the California Invasive Plants Council, California annually suffers over \$3 billion in agricultural losses due to invasive and nuisance species. The magnitude of this problem cannot be understated, as both the United States and California Departments of Agriculture are mandated to protect against the invasion of exotic pests and diseases.

Potable water supply can be degraded due to the proliferation of algae blooms. Water treatment plants could be impacted by invasive and nuisance species. Water that becomes polluted due to increased sedimentation and erosion will require additional treatment. If the system becomes clogged with these pollutants or with aquatic nuisance species, the ability of water treatment plants to operate may become impaired. Additionally, soil that becomes unstable due to decaying vegetation can impact critical facilities that are built on or around these soils. Invasive and nuisance species are as harmful to native species and ecosystems in the environment as they are to the agricultural and built environments associated with human activities.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile section above), changes in population patterns, and changes in land use and development. The influencing effects of these factors on this hazard are discussed further in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future hazard conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City include the following:

- Climate change is likely to exacerbate future conditions that may impact the waterways in the City. This was discussed in greater detail in the Climate Change and Aquatic Nuisance Species section of the Hazard Profile above.
- Future population growth should be considered as having more or less people in a community affects the overall hazard vulnerability to the City. **DISCUSS CURRENT GROWTH FROM FUTURE DEVELOPMENT.** Population growth in the City is expected to increase. Population changes are unlikely to affect the vulnerability of the City to this hazard unless the population growth significantly increases, causing additional pressure on water companies to keep pipes free of nuisance species. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth, the nature, location, and extent of any aquatic nuisance species issues in the City, and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. **DISCUSS CURRENT GROWTH FROM FUTURE DEVELOPMENT.** As the City continues to add new development, land uses may change resulting in a changes to waterways. However, for the next five years covered by this LHMP Update, changes in land use and development will likely not increase the impacts and associated vulnerabilities of the City to this hazard.

Future Development

Future development in the City is not likely to have an impact on aquatic invasive species in the City. The City is expected to continue to grow. With additional development in the City, there may be additional competition for water resources.

Climate Change

Likelihood of Future Occurrence–Likely

Vulnerability–Medium

Hazard Profile

Climate change adaptation is a key priority of the State of California. The 2023 State of California Multi-Hazard Mitigation Plan noted that climate change is affecting California. Sea levels have risen by as much as seven inches along the California coast over the last century, increasing erosion and pressure on the State's infrastructure, water supplies, and natural resources. The State has also seen increased average temperatures, more extreme hot days, fewer cold nights, a lengthening of the growing season, shifts in the water cycle with less winter precipitation falling as snow, and earlier runoff of both snowmelt and rainwater in the year. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing.

California's Adaptation Planning Guide: Understanding Regional Characteristics (from 2017) has divided California into 11 different regions based on political boundaries, projected climate impacts, existing environmental setting, socioeconomic factors and regional designations. The City falls in the North Central Valley Region. A map and climate projections for this region are shown in Section 4.3.7 of the Base Plan and include an increase in temperatures, moderate changes in rainfall, and increased risk to wildfire.

Location and Extent

Climate change is a global phenomenon. It is expected to affect the whole of the City of Folsom, the Sacramento County Planning Area, surrounding counties, and State of California. There is no scale to measure the extent of climate change. Climate change exacerbates other hazards, such as drought, extreme heat, flooding, wildfire, and others. The speed of onset of climate change is very slow. The duration of climate change is not yet known but is feared to be tens to hundreds of years.

Past Occurrences

Disaster Declaration History

Climate change has never been directly linked to any declared disasters.

NCDC Events

NCDC does not track climate change events.

City of Folsom Events

No direct climate change events could be recalled. The City of Folsom has seen quite a few mature redwoods (a very thirsty species) decline since the 2021 LHMP due to drought stress.

Vulnerability to Climate Change

The whole of the City is at some measure of vulnerability to climate change. The City Planning Team has concerns that the vulnerability of the City to climate change will continue to increase in the future. An assessment of a community's vulnerability to climate change begins with an understanding of local exposure to climate change. This is included in the Local Concerns section below followed by a discussion of the City's assets at risk and impacts to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The extreme temperature swings resulting from climate change impact vulnerable populations, and increase population hazards such as wildfire, flooding, and drought.

Assets at Risk

Assets at risk from climate change include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

Climate change affects people and populations within a community, especially those climate change issues related to increases in temperature over time. While all populations can be affected by temperature extremes, populations particularly vulnerable include the very old and very young, medically fragile people, people without means of shelter (and air conditioning or heat) or transportation, people who are socially isolated and other vulnerable or underserved populations (as shown in the discussion in Section C.4.1). Acclimatization to extreme temperatures and other weather extremes may help reduce impacts from these extreme events, such as from heat waves, in the healthy general population but may not be sufficient to protect those with underlying medical conditions.

Structures

Climate change, on its own, does not generally impact structures. However, structures in areas of increased flood, wildfire, or other areas exacerbated by the effects of climate change would be at increased risk, as described in the other hazard sections throughout this LHMP.

Critical Facilities and Infrastructure

As with structures, critical facilities and infrastructure in areas of increased wildfire, flood, or other areas due to the effects of climate change would be at increased risk. Climate change is expected to increase the vulnerability of critical facilities and infrastructure to many natural hazards.

Natural, Historic, and Cultural Resources

The rivers, streams, and open space areas of the City supports rich biodiversity, including many special-status species and habitat areas. These are all at risk from the effects of climate change. In addition, if heat continues to contribute to changes in wildfire patterns, all areas of the City are at increased risk from fire – including natural, historic, and cultural resources. Furthermore, as climate change exacerbates the drought hazard, areas of wetlands in the City may be reduced or dry up temporarily, which could damage habitat areas for waterfowl and other species that depend on these areas.

Impacts from Climate Change

The California APG: Understanding Regional Characteristics identified the following impacts specific to the North Central Valley Region in which the City is part of:

- Increased temperatures
- Reduced precipitation
- Public health – heat and air pollution
- Reduced agricultural productivity
- Inland flooding

➤ Reduced tourism

In addition to these sources, the 2023 State of California Hazard Mitigation Plan noted that according to California's Fourth Climate Change Assessment, the state will experience the following climate impacts:

- Annual average daily high temperatures are expected to rise by 2.7° F by 2040, 5.8°F by 2070, and 8.8°F by 2100 compared to observed and modeled historical conditions. These changes are statewide averages.
- Heat waves are projected to become longer, more intense, and more frequent.
- Warming temperatures are expected to increase soil moisture loss and lead to drier conditions. Summer dryness may become prolonged, with soil drying beginning earlier in the spring and lasting longer into the fall and winter.
- Droughts are likely to become more frequent and persistent through 2100.
- The strength of the most intense precipitation and storm events affecting California is expected to increase.
- Snowpack levels are projected to decline significantly by 2100 due to reduced snowfall and faster snowmelt.
- Marine layer clouds are projected to decrease.
- Extreme wildfires (i.e., fires larger than 24,710 acres) would occur 50 percent more frequently. The maximum area burned statewide may increase 178 percent by the end of the century.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile section above), changes in population patterns, and changes in land use and development. The influencing effects of these factors on this hazard are discussed further in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City include the following:

- As climate change continues to accelerate over time, climate related impacts to the City will continue to increase.
- Climate change can influence population growth in the City over time. While the City is expected to see slow and steady growth, the City could see population fluctuations as a result of climate impacts relative to those experienced in other regions, and these fluctuations are expected to impact demand for housing and other development. FUTURE DEVELOPMENT DISCUSSION. Changes in population and population patterns that would come with the 33 future development areas would likely increase the impacts associated with this hazard.
- Land use planning should be proactive to address future hazard conditions FUTURE DEVELOPMENT DISCUSSION. The increasing severity and frequency of storms and other weather events and natural

hazards due to the changing climate should be taken into account while considering land use planning and development in the City. Changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard depending on where and how this future growth occurs and the extent of future climate change influence in the City.

Future Development

Future development considerations should be ongoing and proactive. Ensuring that comprehensive land use planning is conducted, regulatory requirements, such as building codes, are followed, and varying needs for different demographic groups that reside within the City are considered can help to make for a more disaster resilient community.

Dam Failure

Likelihood of Future Occurrence–Unlikely

Vulnerability– Extremely High

Hazard Profile

Dams are manmade structures built for a variety of uses including flood protection, power generation, agriculture, water supply, and recreation. When dams are constructed for flood protection, they are usually engineered to withstand a flood with a computed risk of occurrence. For example, a dam may be designed to contain a flood at a location on a stream that has a certain probability of occurring in any given year. If prolonged periods of rainfall and flooding occur that exceed the design requirements, that structure may be overtopped or fail. Overtopping is the primary cause of earthen dam failure in the United States. In addition, with storms increasing in volume and intensity, as seen with the atmospheric river events of recent years, controlled releases from dams can also impact downstream levees and flood control structures resulting in increased and widespread flooding.

Dam failures, for purposes of this Plan, can also result from any one or a combination of the following:

- Earthquake
- Overtopping and uncontrolled releases
- Controlled releases
- Inadequate spillway capacity resulting in excess overtopping flows
- Internal erosion caused by embankment or foundation leakage, or piping or rodent activity
- Improper design
- Improper maintenance
- Negligent operation
- Failure of upstream dams on the same waterway

Dam failure is a natural disaster from two perspectives. First, the inundation from released waters resulting from dam failure is related to naturally occurring floodwaters. Second, a total dam failure would most probably happen as a consequence of the natural disaster triggering the event, such as an earthquake.

Location and Extent

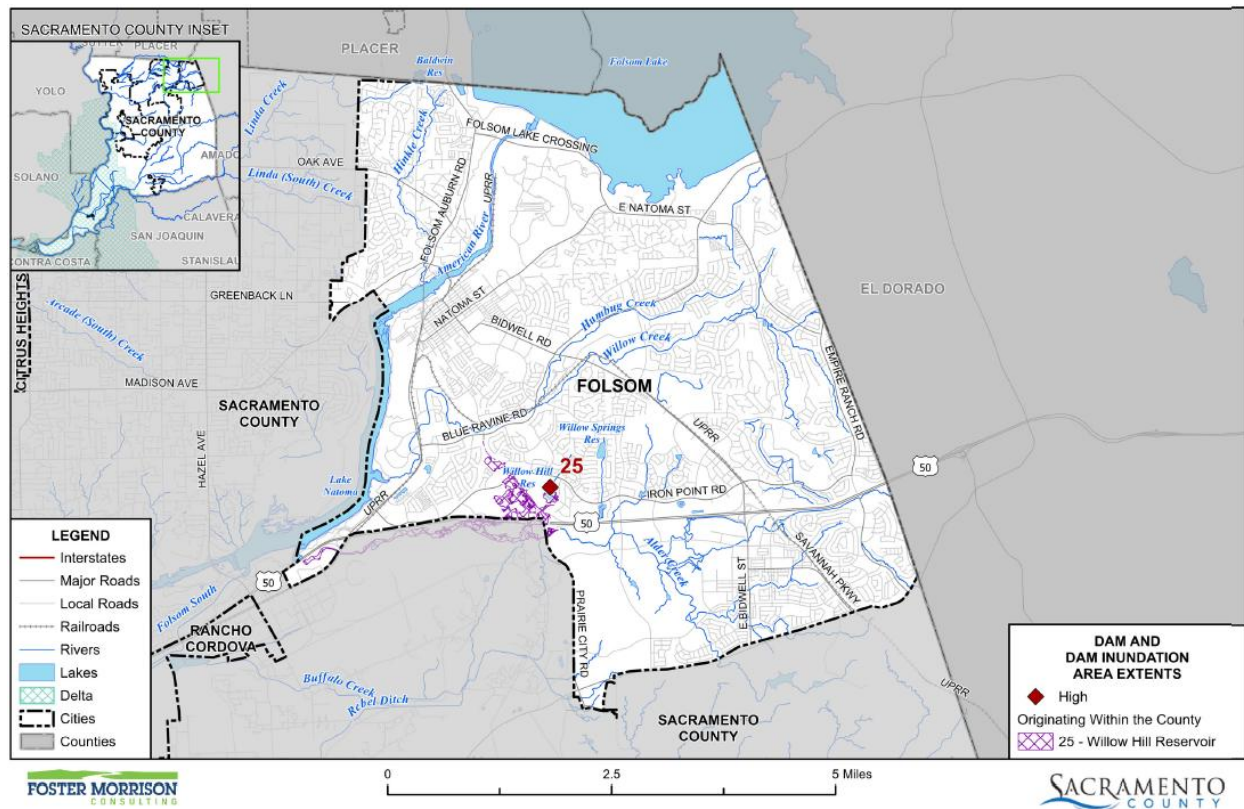
An inventory map of dams located within and around Sacramento County was shown in Section 4.3.8 in the Base Plan. Inundation mapping and analyses were conducted on Extremely High and High Hazard dams with inundation areas located in the Sacramento County Planning Area. Dams with an inundation area within the City of Folsom are shown on Figure C-13 for Extremely High Hazard dams from outside the County, Figure C-14 for High Hazard dams from inside the County, and Figure C-15 for High Hazard dams from outside the County. The City is affected by one Extremely High Hazard dams (Union Valley), one High Hazard dam from within the County (Willow Hill), and three High Hazard dams from outside the County (Hinkle, L. L. Anderson, Lower Hell Hole). In addition, based on the Folsom dam inundation analyses included in the 2021 and 2016 Sacramento County LHMPs, areas of the City fall within previous dam inundation areas for Folsom. It is thus assumed that, while not quantified, the City remains at risk and vulnerable to a future Folsom dam incident.

There is no scale with which to measure dam failure. However, FEMA and CA DWR Division of Safety of Dams (DSOD) assign hazard potential classifications to dams within the State that provides information on the potential impact should a dam fail. The following two factors are considered when assigning hazard ratings: existing land use and land use controls (zoning) downstream of the dam. FEMA categorizes the downstream hazard potential into three categories in increasing severity: Low, Significant, and High. DSOD adds a fourth category of Extremely High. Dams are classified in these four categories that identify the potential hazard to life and property. These were discussed in more detail in Section 4.3.8 of the Base Plan.

While a dam may fill slowly with runoff from winter storms, a dam break has a very quick speed of onset. The duration of dam failure is generally not long – only as long as it takes to empty the reservoir of water the dam held back. For dam overtopping, the speed of onset is somewhat slower than that of a dam break, and the duration is longer (as evidenced in the 2017 Oroville Dam spillway event). The City would be affected for as long as the flood waters from the dam failure took to drain downstream.

An inventory map of dams located within and around Sacramento County was shown in Section 4.3.8 in the Base Plan. Inundation mapping and analyses were conducted on Extremely High and High Hazard dams with inundation areas located in the Sacramento County Planning Area. Geographic flood extent from the DSOD/NID dam inundation areas within the City of Folsom are shown in Table C-17 for Extremely High Hazard dams originating from outside the County, in Table C-18 for High Hazard dams originating from inside the County, and in Table C-19 for High Hazard dams originating from outside the County.

Figure C-14 City of Folsom – High Hazard Dam (Inside the County) Inundation Areas



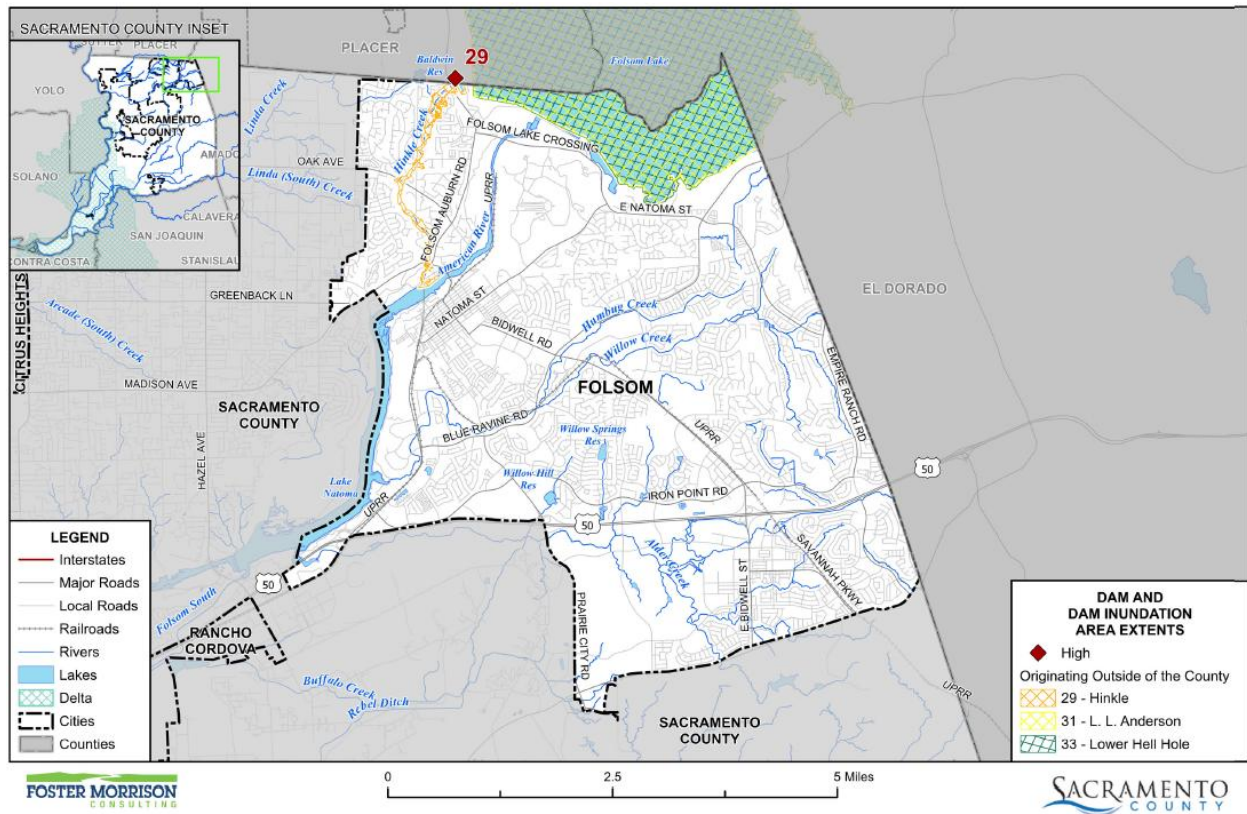
Data Source: DWR DSOD dam inundations (updated 7/2025; data downloaded 10/2025),
NID dam inventory and inundation data (updated 11/6/2025; data downloaded 11/6/2025),
Sacramento County, Cal-Atlas; Map Date: 4/2/2026.

Table C-18 City of Folsom – Geographical Extents of High Hazard Dam (Inside the County) Inundation Areas

Jurisdiction / Dam Inundation Area	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Willow Hill Reservoir	273	2%	152	2%	121	1.4%

Source: DWR DSOD, NID

Figure C-15 City of Folsom – High Hazard Dam (Outside the County) Inundation Areas



Data Source: DWR DSOD dam inundations (updated 7/2025; data downloaded 10/2025),
NID dam inventory and inundation data (updated 11/6/2025; data downloaded 11/6/2025),
Sacramento County, Cal-Atlas; Map Date: 4/2/2026.

Table C-19 City of Folsom – Geographical Extents of High Hazard Dam (Outside the County) Inundation Areas

Jurisdiction / Dam Inundation Area	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Hinkle	101	1%	69	1%	32	0.4%
L. L. Anderson	41	0.3%	-	0%	41	0.5%
Lower Hell Hole	52	0.3%	-	0%	52	1%

Source: DWR DSOD

Past Occurrences

Disaster Declaration History

There have been no state or federal disaster declarations for dam failure in Sacramento County.

NCDC Events

The NCDC does not contain any dam failure events for Sacramento County.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMP and then those occurring prior to 2021.

Events since 2021 LHMP

There have been no new occurrences of dam failure affecting the City since the 2021 LHMP.

Events prior to 2021

Folsom Dam. On the morning of **July 17, 1995**, spillway gate 3 failed at the Folsom Dam. The failure resulted in an uncontrolled release of nearly 40 percent of Folsom Lake at a peak rate of approximately 40,000 cubic feet per second. The failure caused no fatalities.

Climate Change and Dam Failure

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with dam failure. More information on future impacts to the City can be found below and in the Future Conditions/Future Development section of the Vulnerability Assessment below.

The 2023 California State Hazard Mitigation Plan noted that modeling described in California's Fourth Climate Change Assessment projects less frequent but more extreme daily precipitation. Year-to-year precipitation will become more volatile, and the number of dry years will increase by mid-century. As the climate continues to warm, atmospheric rivers will carry more moisture, and extreme precipitation may increase. Climate model projections show a tendency for the northern part of the State to become wetter. Increases in both precipitation and heat causing snow melt in areas upstream of dams could increase the potential for dam failure and uncontrolled releases in Sacramento County. The City could be affected by these changes, especially in those areas of the City located within dam inundation areas.

The 2024 Sacramento County CAP noted that climate change is likely to lead to changes in the frequency, intensity, and duration of extreme weather events. The County is projected to experience a steady increase in average annual precipitation through the end of the century, with much of that precipitation likely to occur during extreme precipitation events, which can lead to flood impacts. According to Cal-Adapt, the historic average annual precipitation in Sacramento County is 18.3 inches, and the historic average annual number of extreme precipitation events is four. The average annual precipitation across the County may rise upwards of 22 inches, with the number of extreme precipitation events potentially exceeding 7 per year by the end of the century, depending on the level of current and future GHG emissions.

In general, California exhibits "booms and busts," which refers to the existence of both very wet years and very dry years. The amount of precipitation that falls in any particular year is largely influenced by occurrences of large, discrete winter storms, also known as atmospheric rivers, which often provide a

substantial fraction of the region's annual precipitation, inclusive of the county. In California, atmospheric rivers vary in intensity; some are beneficial for water supply and replenish snowpack that naturally melts during the summer, serving as the water supply for people and agriculture, while others are responsible for widespread and adverse impacts (NOAA 2023). Extreme precipitation from these atmospheric rivers in the future may prove to be more variable, volatile, and potentially more severe. These extremes are most likely to occur during storm events, leading to more severe damage from waves and floods, thus possibly leading to more dam failure events.

Vulnerability to Dam Failure

The vulnerability of the City to dam failure flooding would vary depending on which dam fails and the nature and extent of the dam failure and associated flooding. The primary danger associated with dam failure is the high velocity flooding of those properties downstream of the dam. A dam failure can range from a small, uncontrolled release to a catastrophic failure. Vulnerability to dam failures is generally confined to the areas subject to inundation downstream of the facility. Secondary losses would include loss of the multi-use functions of the facility and associated revenues that accompany those functions. Dam failure flooding would vary by community depending on which dam fails and the nature and extent of the dam failure and associated flooding.

An assessment of a community's vulnerability to dam failure begins with an understanding of local exposure to dam failure. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

General Concerns

The City's greatest concern is from Folsom Dam. Mass evacuation of the inundation area may be essential to save lives, as warning time permits. Extensive search and rescue operations may be required to assist trapped or injured persons. Emergency medical care, food, and temporary shelter would be required for injured or displaced persons. Identification and burial of many dead persons would pose difficult problems; public health would be a major concern. Many families would be separated, particularly if the failure should occur during working hours, and a personal inquiry or locator system would be essential. These and other emergency operations could be seriously hampered by the loss of communications, damage to transportation routes, and the disruption of public utilities and other essential services.

Assets at Risk

Assets at risk from dam failure include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All people and populations located in dam inundation areas are vulnerable to dam failure. Certain vulnerable populations may be at increased risk to dam failure, especially during a large event with minimal advance notice. These vulnerable populations may include: the unsheltered, those with limited mobility, and those that lack the resources to leave the area.

City residents that live in these dam inundation areas are often the most vulnerable. Not only are the residents at risk, but their homes and contents are all at risk, compounding the impacts associated with significant hazard events. To further evaluate the impact to the City of Folsom's residential populations located in these hazard areas, a separate analysis was performed to determine residential populations in the dam inundation areas. The DSOD dam inundation areas were overlayed on the parcel layer. Those residential parcel that intersect the dam inundation areas were counted and multiplied by the Census Bureau average household factors for the City of Folsom – 3.38. This is shown in Table C-20. While not currently mapped, this includes those populations impacted by a future Folsom dam incident.

Table C-20 City of Folsom – Improved Residential Parcels and Population by Dam Inundation Area

Dam Name	Improved Residential Parcels	Population at Risk
Extremely High Hazard (Outside the County) Dam Inundation		
Union Valley	36	95
High Hazard Dam (Inside County) Inundation		
Willow Hill Reservoir	1	3
High Hazard Dam (Outside County) Inundation		
Hinkle	94	248
L.L. Anderson	0	0
Lower Hell Hole	0	0

Source: DSOD, Sacramento County 2025 Parcel/Assessor Data, 2023 US Census Bureau American Community Survey Average Household Size –City of Folsom (2.64).

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that are used to serve (portions) of these populations.

Structures

Most structures in the City have some measure of risk to dam failure. Dam failure flooding can affect the built environment of the City. Structures in dam inundation areas are at risk and depending on flood depths, can range from slight damage to totally inundated. Analysis by Extremely High Hazard and High Hazard dam follows.

A GIS based analysis was used to determine the possible impacts of dam inundation flooding on parcels and structures within the City of Folsom. The methodology described in Section 4.3.8 of the Base Plan was followed in determining City parcels and structures at risk to dam failure. Parcel counts, land and

improved values (i.e., those with a structure improvement on the parcel), estimated content replacement values, and total values that fall within dam inundation areas in the City are presented below by hazard classification and by dam. Extremely High Hazard results are presented in Table C-21. High Hazard (Inside the County) dam results are presented in Table C-22. High Hazard (Outside the County) dam results are presented in Table C-23. While not currently mapped, this includes those structures impacted by a future Folsom dam incident.

Table C-21 City of Folsom – Count and Value of Parcels and Structures in Extremely High Hazard Dam (Outside the County) Inundation Area by Property Use

Dam Inundation Area / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Union Valley						
Care / Health	1	1	\$2,986,678	\$1,399,267	\$4,385,945	\$1,399,267
Church / Welfare	4	2	\$2,952,724	\$6,152,915	\$9,105,639	\$9,229,373
Miscellaneous	50	0	\$18	\$0	\$18	\$0
Office	9	8	\$19,204,571	\$55,855,039	\$75,059,610	\$55,855,039
Public / Utilities	7	0	\$0	\$0	\$0	\$0
Residential	37	36	\$27,657,145	\$55,144,492	\$82,801,637	\$27,572,246
Retail / Commercial	15	12	\$28,579,465	\$56,425,655	\$85,005,120	\$56,425,655
Vacant	22	0	\$3,511,835	\$0	\$3,511,835	\$0
Willow Hill Reservoir Total	145	59	\$84,892,436	\$174,977,368	\$259,869,804	\$150,481,580

Source: DSOD, Sacramento County 2025 Parcel/Assessor Data

Table C-22 City of Folsom – Count and Value of Parcels and Structures in High Hazard Dam (Inside the County) Inundation Area by Property Use

Dam Inundation Area / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Willow Hill Reservoir						
Care / Health	2	2	\$3,835,764	\$47,929,935	\$47,929,935	\$99,695,634
Church / Welfare	6	2	\$743,090	\$5,410,219	\$5,410,219	\$11,563,528
Miscellaneous	8	0	\$23	\$0	\$0	\$23
Office	7	6	\$16,140,109	\$335,595,794	\$335,595,794	\$687,331,697
Public / Utilities	2	0	\$9	\$0	\$0	\$9

Dam Inundation Area / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Residential	1	1	\$8,286,582	\$65,108,873	\$32,554,437	\$105,949,892
Retail / Commercial	8	7	\$15,232,480	\$36,132,677	\$36,132,677	\$87,497,834
Vacant	1	0	\$2,692,616	\$0	\$0	\$2,692,616
Willow Hill Reservoir Total	35	18	\$46,930,673	\$490,177,498	\$457,623,062	\$994,731,233

Source: DSOD, Sacramento County 2025 Parcel/Assessor Data

Table C-23 City of Folsom – Count and Value of Parcels and Structures in High Hazard Dam (Outside the County) Inundation Area by Property Use

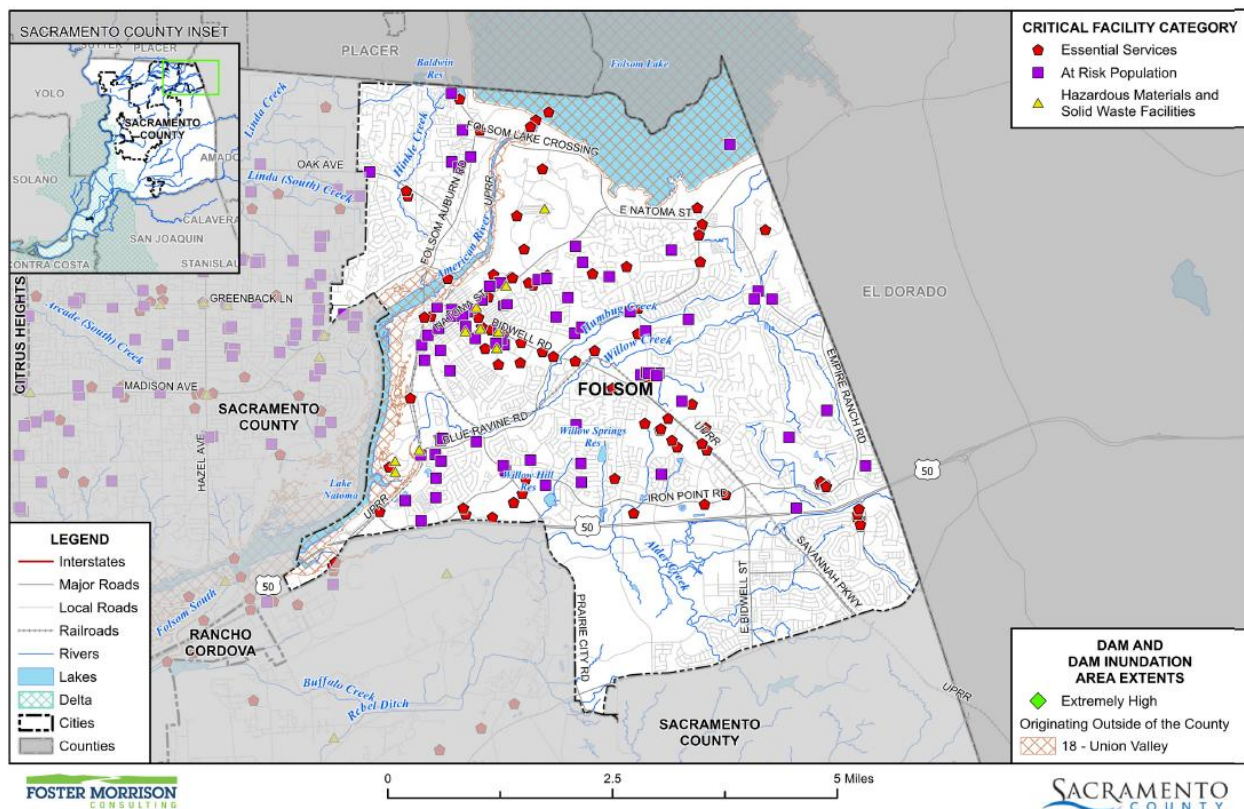
Dam Inundation Area / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Hinkle						
Industrial	1	0	\$0	\$0	\$0	\$0
Miscellaneous	13	0	\$422	\$0	\$0	\$422
Residential	96	94	\$43,390,404	\$84,826,701	\$42,413,351	\$170,630,456
Retail / Commercial	5	4	\$5,265,365	\$11,000,380	\$11,000,380	\$27,266,125
Vacant	8	1	\$1,296,082	\$98,647	\$0	\$1,394,729
Hinkle Total	123	99	\$49,952,273	\$95,925,728	\$53,413,731	\$199,291,732
L. L. Anderson						
Miscellaneous	1	0	\$0	\$0	\$0	\$0
Public / Utilities	4	0	\$0	\$0	\$0	\$0
L. L. Anderson Total	5	0	\$0	\$0	\$0	\$0
Lower Hell Hole						
Miscellaneous	1	0	\$0	\$0	\$0	\$0
Public / Utilities	4	0	\$0	\$0	\$0	\$0
Lower Hell Hole Total	5	0	\$0	\$0	\$0	\$0

Source: DSOD, Sacramento County 2025 Parcel/Assessor Data

Critical Facilities and Infrastructure

Dam failure flooding presents a threat to critical facilities and infrastructure. The following analysis was performed on the critical facility inventory in the City to determine which critical facilities fall into each dam inundation area. This was done separately for both Extremely High Hazard and High Hazard dam inundation areas. Using GIS, the Extremely High and High Hazard dam inundation areas were overlaid on the critical facility GIS layer. This is shown on Figure C-16 for the Extremely High Hazard (Outside the County) dam inundation areas, and detailed in Table C-24. This is shown on Figure C-17 for the High Hazard (Inside the County) dam inundation areas, and detailed in Table C-24. This is shown on Figure C-18 for the High Hazard (Outside the County) dam inundation areas, and detailed in Table C-24. While not currently mapped, this includes those critical facilities and infrastructure impacted by a future Folsom dam incident.

Figure C-16 City of Folsom – Critical Facilities in Extremely High Hazard Dam (Outside the County) Inundation Areas



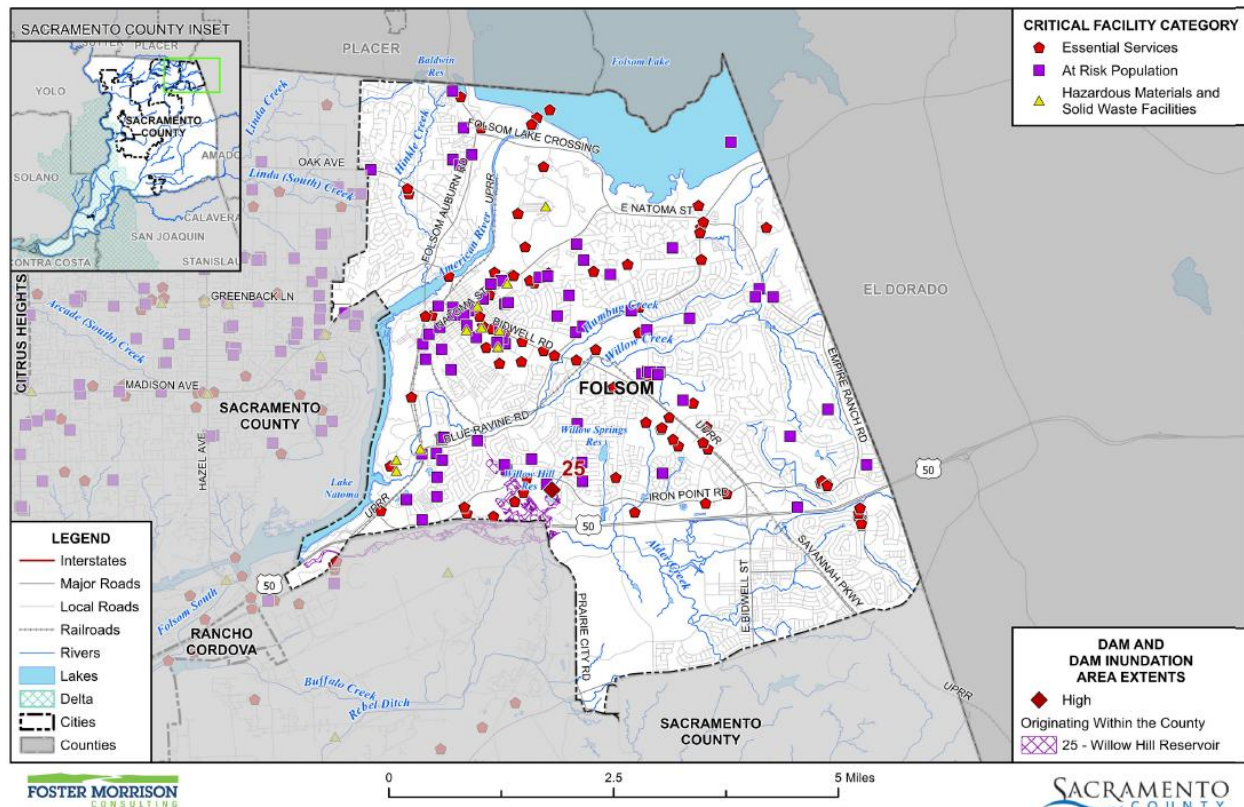
Data Source: DWR DSOD dam inundations (updated 7/2025; data downloaded 10/2025),
NID dam inventory and inundation data (updated 11/6/2025; data downloaded 11/6/2025),
Sacramento County, Cal-Atlas; Map Date: 4/17/2026.

Table C-24 City of Folsom – Critical Facilities in Extremely High Hazard Dam (Outside the County) Inundation Areas by Category and Type

Extremely High Hazard Dam Inundation Area	Critical Facility Category / Type	Facility Count
Extremely High	Essential Services Facilities	
	Bridge	1
	Water Well	4
	Essential Services Facilities Total	5
	At Risk Population Facilities	
	School	1
	At Risk Population Facilities Total	1
	Total	6
Folsom Total		6

Source: DSOD, Sacramento County OES

Figure C-17 City of Folsom – Critical Facilities in High Hazard Dam (Inside the County) Inundation Areas



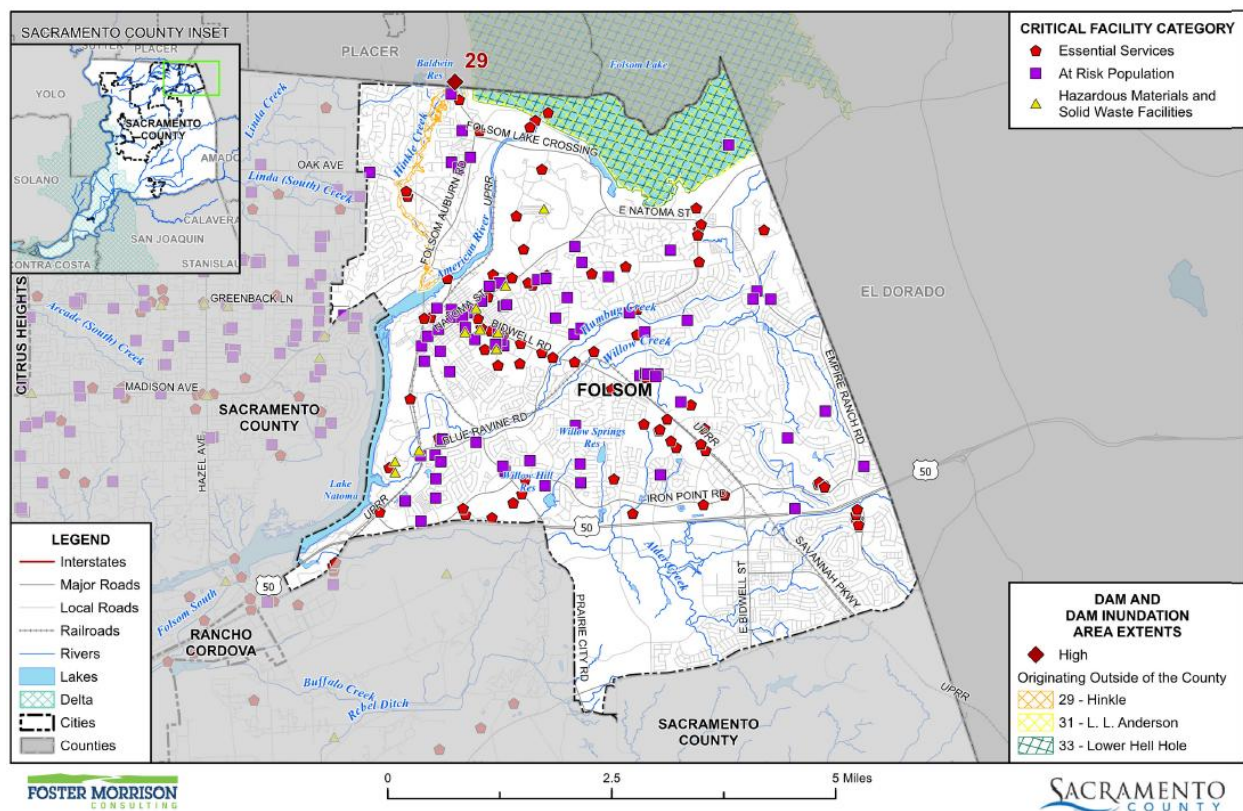
Data Source: DWR DSOD dam inundations (updated 7/2025; data downloaded 10/2025),
 NID dam inventory and inundation data (updated 11/6/2025; data downloaded 11/6/2025),
 CalOES CIP dam inundation data (3/2017),
 Sacramento County, Cal-Atlas; Map Date: 4/17/2026.

Table C-25 City of Folsom – Critical Facilities in High Hazard Dam (Inside the County) Inundation Areas by Category and Type

High Hazard Dam Inundation Area	Critical Facility Category / Type	Facility Count
High (Inside the County)	Essential Services Facilities	
	FDIC Insured Banks	2
	Essential Services Facilities Total	2
	At Risk Population Facilities	
	Places of Worship	1
	At Risk Population Facilities Total	1
	Total	3
Folsom Total		3

Source: DSOD, Sacramento County OES

Figure C-18 City of Folsom – Critical Facilities in High Hazard Dam (Outside the County) Inundation Areas



Data Source: DWR DSOD dam inundations (updated 7/2025; data downloaded 10/2025),
NID dam inventory and inundation data (updated 11/6/2025; data downloaded 11/6/2025),
Sacramento County, Cal-Atlas; Map Date: 4/20/2026.

Table C-26 City of Folsom – Critical Facilities in High Hazard Dam (Outside the County) Inundation Areas by Category and Type

High Hazard Dam Inundation Area	Critical Facility Category / Type	Facility Count
High (Outside the County)	<i>Essential Services Facilities</i>	
	Water Well	4
	<i>Essential Services Facilities Total</i>	4
	<i>At Risk Population Facilities</i>	
	Mobile Home Parks	1
	School	1
	<i>At Risk Population Facilities Total</i>	2
	Total	6
Folsom Total		6

Source: DSOD, Sacramento County OES

Natural, Historic, and Cultural Resources

A major dam failure event and associated flooding could have a devastating impact on the City. Large flood events can affect all natural, historic, and cultural resources that lie in the dam inundation areas. There are a number of ways floodwaters associated with a dam failure event can impact natural resources and the environment: Wildlife habitats can be destroyed by floodwaters. Contaminated floodwater can pollute rivers and habitats. Silt and sediment can destroy natural areas. Riverbanks and natural levées can be eliminated as rivers reach bankfull capacity. Rivers can be widened, and deposition can increase downstream. Trees can be uprooted by high-velocity water flow. Plants that survive the initial flood may die due to being inundated with water. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to these structures within the inundated areas, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged, and lost during extreme dam failure flood events.

Impacts from Dam Failure

Impacts to the City from dam failure flooding could be extensive and widespread and include loss of life and injury, flooding and damage to property and structures, damage to critical facilities and infrastructure, loss of natural resources, and all other flood related impacts. Additionally, mass evacuations and associated economic losses can also be significant.

Other impacts associated with dam failure include landslides, bank erosion, and destruction of habitat. Dam failures can cause downstream flooding and can transport large volumes of sediment and debris and contaminants from the floodwaters. Other environmental impacts can include contamination from septic system failures and releases of contaminants from hazardous materials facilities, contamination of potable water supplies; changes in configurations of streams; loss of wildlife habitats; and degradation of wetlands. A large dam failure event could have significant and catastrophic impacts.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Climate Change and Dam Failure discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City include the following:

- Climate change is likely to exacerbate future rain and storm conditions and associated impacts and vulnerability of the City to dam failure. This was discussed in greater detail in the Climate Change and Dam Failure section of the Hazard Profile above.
- The City is expected to see slow and steady growth, and this additional growth within the dam inundation areas of the City would place additional populations at risk to dam failure. INSERT DEVELOPMENT DISCUSSION. Additional population growth would likely bring continued diversity to the City. Vulnerable population groups could face disproportionate effects from a dam failure and should be planned for. Changes in population and population patterns that will come from new development will place more people within the dam inundation areas and would likely increase the impacts and vulnerability of the City to this hazard.
- Land use planning should be proactive to address future hazard conditions. Locating new development, structures, and critical facilities and infrastructure within or near areas of dam failure risk will put additional development at risk. INSERT DEVELOPMENT DISCUSSION. City building codes are in effect to partially reduce this risk and should be updated as necessary to continue to address future dam failure conditions. Changes in land use and future development is likely to increase the impacts and associated vulnerabilities of the City to this hazard.

Future Development

Future dam failure events may occur in the City. Given the number of affected parcels and structures, future development in the City would likely be affected by dam failures and associated flooding. Siting of future development areas should take dam failure flooding into account. The City enforces its floodplain ordinance, which helps to reduce risk to flooding by requiring structures to be above the base flood elevation which, depending on location and inundation depths, may provide some relief.

Future development areas and their vulnerability to dam failure are discussed further in the below GIS analysis.

GIS Analysis

The City of Folsom provided X future development areas which were used as the basis for the inventory of future development for the City. These were mapped in GIS. Only High Hazard dams inundation areas affect the City; as such, only High Hazard dam inundation area analysis is presented. Figure C-19 shows the locations of the future development areas overlayed on the High Hazard dam inundation areas. Only one dam (Nimbus) intersects the future development areas. Future development affected by the Nimbus Dam is detailed in Table C-27. As shown, 25 of the 33 future development areas fall in the Nimbus Dam inundation area. UPDATE TITLES

Figure C-19 City of Folsom – Future Development Areas in High Hazard Dam Inundation Areas

Table C-27 City of Folsom – Future Development Areas in High Hazard Dam Inundation Areas by Map ID, Parcels, and Acres

Source: DSOD, City of Folsom

Drought & Water Shortage (w/Tree Mortality)

Likelihood of Future Occurrence–Likely

Vulnerability–High

Hazard Profile

Drought and water shortage are complex issues involving many factors—it occurs when a normal amount of precipitation is not available to satisfy an area’s usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water supply is the most significant issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. Drought has also affected tree mortality in the area in the past. As the population in the area continues to grow, so will the demand for water.

Tree Mortality and Drought

One of the specific impacts of drought in the City of Folsom and the Sacramento County Planning Area is the increased risk to trees from insects, pathogens and parasites, and other tree mortality and die back issues. Drought weakens trees and makes them more susceptible to insect infestation and other pathogens. Insects, such as bark beetles and others, frequently attack trees weakened by drought, disease, injuries, or other factors that may stress the tree. These insects and other pathogens can contribute to the decline and eventual death of trees throughout the City. The tree mortality and dieback problems are a high priority because of the issue of hazardous trees and an increased wildfire hazard. In addition to an increase in wildfire fuels, hazardous trees can fall onto structures causing damage and result in a reduction on the tree canopy within the City that provides relief during extreme heat days.

Location and Extent

Drought and water shortage are regional phenomenon. The whole of the City and County is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- D0 – Abnormally dry
- D1 – Moderate Drought
- D2 – Severe Drought
- D3 – Extreme Drought
- D4 – Exceptional Drought

The Sacramento County Planning Area, including the City of Folsom, has been in and out of drought since 2014. Over the last seven years since the 2021 LHMP, drought conditions have ranged from none to exceptional. Drought conditions are expected to continue to be cyclical in nature depending on the year.” Current drought conditions in the City are shown in Section 4.3.9 of the Base Plan.

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time (which does not usually affect water shortages) or for longer periods (which may challenge water supplies). Should a drought last for a long period of time, water shortage becomes a larger issue. Surface water is the dominant source due to the number of rivers in the region, but ground water supplements agriculture, which consumes the majority of water in the surrounding County.

Past Occurrences

Disaster Declaration History

There have been 3 state and 1 federal disaster declarations for Sacramento County. This can be seen in Table C-28. Additionally, there have been 26 USDA Secretarial Disaster Declarations from drought in the County, as shown in Past Occurrences in Section 4.3.9 of the Base Plan. These events also likely affected the City to some degree.

Table C-28 Sacramento County –State and Federal Drought Disaster Declarations 1950-2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Drought	4	2008, 2014, 2015	1	1977

Source: Cal OES, FEMA

NCDC Events

There have been 83 NCDC drought events in Sacramento County since 1993. These most likely had some impact on the City.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMPs and then those occurring prior to the 2021 LHMP.

Events since 2021 LHMP

Based on historical information, the occurrence of drought in California, including the City of Folsom, is cyclical, driven by weather patterns. Section 4.3.9 of the Base Plan notes that five droughts have occurred in the past 86 years, which impacted the City and Sacramento County Planning Area.

The City Planning Team noted that the City has experienced multiple, consecutive years of drought. Specific events include:

- On **6/8/2023** – the Stage 3 water restriction ended; and the City returned to stage 1.
- On **8/16/21** – Stage 3 water restrictions were announced (per Folsom Municipal Code) in the City due to ongoing drought conditions.

Events prior to 2021

From **2012 to 2015**, the City of Folsom experienced a drought, which affected water supply. During that period, water agencies implemented conservation efforts and Folsom Lake reached record low water levels.

Climate Change and Drought and Water Shortage

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with drought and water shortage. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Climate scientists studying California find that drought conditions are likely to become more frequent and persistent over the 21st century due to climate change. The experiences of California during recent years underscore the need to examine more closely the state’s water storage, distribution, management, conservation, and use policies. The 2024 Climate Adaptation Study (CAS) stresses the need for public policy development addressing long term climate change impacts on water supplies. The CAS notes that climate change is likely to significantly diminish California’s future water supply, stating that: California must change its water management and uses because climate change will likely create greater competition for limited water supplies needed by the environment, agriculture, and cities.

Cal Adapt scenarios for modeled future drought scenarios were shown in Section 4.3.9 of the Base Plan.

The 2024 Sacramento County CAP noted that California, including Sacramento County, has a highly variable climate that is susceptible to prolonged periods of drought, and recent research suggests that extended drought occurrences (or “mega-droughts”) could become more pervasive in future decades, which may result in major impacts on local water supplies and other secondary impacts. The County is not located in an area where snow accumulates, however, major water districts and utilities in the County receive and depend on a substantial amount of water from watersheds that rely upon spring and early-summer snowmelt in the Sierra Nevada mountain range. The Sierra Nevada snowpack, which serves as a natural water supply

reservoir for California during the dry months, is predicted to decline in area covered and water volume stored as temperatures rise and precipitation falls more frequently as rain instead of snow at mountain elevations. Further, increased temperatures will affect the timing of historical snowmelt such that the snowpack will typically melt earlier in the year, causing more rapid early spring flows in the Sacramento, American, Cosumnes, and Mokelumne Rivers and reduced late spring and summer flows. Approximately 50 percent of the County is served by groundwater supplies. Changes in surface water flow will have a direct impact on groundwater recharge, including decreased periods of recharge when late spring and summer stream flows diminish. Further, groundwater usage is higher in periods of drought, therefore, groundwater supplies may be reduced during and after periods of limited surface water flows.

The 2026 American, Bear, and Cosumnes Watersheds Resilience Plan noted that a key driver of climate vulnerability, adaptive capacity, and implementation readiness in the watershed group is drought. An equity analysis was performed as part of this Plan. An Equity Analysis Technical Appendix demonstrates how social vulnerability aligns with the physical hazard environment across the watershed. It noted that drought vulnerability intensifies in the upper watersheds, where cumulative annual flow deficits are projected to increase by up to 25%, contributing to downstream water-supply and affordability pressures that disproportionately affect low-income households.

Vulnerability to Drought and Water Shortage

Based on historical information, the occurrence of drought and water shortage in California, including the City, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users. The vulnerability of the City of Folsom to drought may vary and include reduction in water supply, turf losses, impacts to natural resources, and an increase in dry fuels and tree dieback.

The whole of the City is at some measure of vulnerability to drought and water shortage. An assessment of a community's vulnerability to drought and water shortage begins with an understanding of local exposure to drought. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The City draws its water supply from Folsom Lake. The Lake is traditionally capable of delivering adequate quantities of water. There have been times in the recent past where Lake levels have fallen greatly. There can be intake and supply operations issues when lake level is low. The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservations measures during extended droughts. During these times, the costs of water can

also increase. The increased dry fuels and fuel loads associated with drought conditions can also result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts.

The City of Folsom has seen quite a few mature redwoods (a very thirsty species) decline in recent years due to drought stress. It was also noted that a handful of trees die as a result of landscape conversion projects where lawn gets replaced with little to no plant material and the associated reduction/cut-off of irrigation causes existing trees to die.

Assets at Risk

Assets at risk from drought and water shortage include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

The people and populations of the City are not directly affected by drought; although, their turfed areas, trees, and other water dependent resources can all be affected. In extreme drought conditions, however, residents and other populations within the City may be vulnerable to drought and water shortage issues. Water quality can be impacted causing health problems, especially to vulnerable populations. Drought and water shortage can lead to an increase in wildfires threatening City residents. Water shortages can have an effect on all of the population in the City, but often have a greater effect on the unhoused and other vulnerable populations that may be unable to access clean drinking water during shortages. During periods of drought, as the costs of water usage may increase, especially during mandated conservation times, those who are economically disadvantaged may be unable to afford the increased costs of potable water.

Structures

Structures have a limited vulnerability to drought and water shortage. It is the secondary hazard of drought (wildfire) which causes risks to structures. Drought can also stress trees, causing die off. These trees may fall on structures adjacent to them.

Critical Facilities and Infrastructure

Most critical facilities and infrastructure have a limited vulnerability to drought and water shortage. Should drought conditions be severe enough to cause water shortage reliability issues, some facilities and infrastructure may be affected. Water and wastewater systems may be impacted during times of reduced water supply and need to employ contingencies to remain functional and fully operational. Other water-dependent systems may also be adversely affected. Further, the secondary hazard of drought (increased potential for spread of urban fires and wildfire) can pose a significant risk to critical facilities and infrastructure. Sufficient water supply for firefighting can also be an issue. Drought can also stress trees, causing die off. These trees may fall on critical infrastructure adjacent to them and impact power lines and other utilities.

Natural, Historic, and Cultural Resources

Drought and water shortage can have a significant impact on natural resources. Water levels in reservoirs and lakes may be reduced, and a loss of wetlands and coastal marsh areas may occur. Severe drought conditions can contribute to an increase in erosion of soils and lead to poor soil and water quality. Further, all of the trees in the City are at risk to drought impacts and a reduction in water supply. These trees provide a wealth of social and environmental benefits to City residents and visitors, from shade and beauty to air quality, carbon reduction and stormwater management. Drought can devastate crops and dry out pastures, dry out forests and critical habitat areas, and reduce food and water available for wildlife and livestock, the latter detailed above as a specific concern to the City. Additionally, drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding. It is unlikely that drought and water shortage would have a significant impact on historic and cultural resources in the City.

Impacts from Drought and Water Shortage

The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservation measures during extended droughts. During these times, the costs of water can also increase. Also of concern, the increased dry fuels, fuel loads, and tree mortality events associated with drought conditions can result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts. Drought can also lead to turf losses and cause tree die off within the City.

Other qualitative impacts associated with drought in the City are those related to water intensive activities such as municipal usage, commerce, tourism, and recreation use. With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Folsom include the following:

- Climate change is likely to exacerbate future drought conditions and associated impacts and vulnerability of the City to drought and water shortage. This was discussed in greater detail in the Climate Change and Drought and Water Shortage section of the Hazard Profile above.
- Future population growth should be considered as having more or less people in a community affects the overall hazard vulnerability to the City. Water shortages in the future may be worsened by drought. The City is expected to see slow and steady growth, and any future population growth (like that shown in the 33 future development areas) in the City will add additional pressure to water companies during periods of drought and water shortage. Water companies will need to continue to plan for and add infrastructure capacity for population growth. As the population grows, the nature and makeup of populations will shift and change along with it. Vulnerable and underserved populations, such as those with low incomes and the unhoused that might not always have access to clean water, will need to be considered as future development continues, since they may experience a disproportionate impact from drought and water shortage. Potential population growth will be a challenge not only with regard to the, but statewide with regard to food production. Should the City see a growth in population over time, it will likely increase the vulnerability and impacts to the City from this hazard.
- Land use planning should be proactive to address future hazard conditions. However, more development will also require an increase in water supply and associated infrastructure. With the amount of growth planning in the City, changes in land use and development will likely increase the impacts and associated vulnerabilities of the City to this hazard, depending on where and how this future growth occurs.

Future Development

The City of Folsom has the capacity in their water rights appropriations to supply water to the Folsom Plan Area. There is no immediate risk to the City's drinking water supply, as the City has sufficient water rights to supply water into the future, but Folsom's leaders are being proactive by starting long-term water planning efforts now. Conservation efforts were put in place to account for the projected increase in water demand due to the development. As the population in the area continues to grow, so will the demand for water. Ongoing planning will be needed by the City and water agencies to account for population growth and increased future water demands.

Earthquake (w/Subhazards)

Likelihood of Future Occurrence—Unlikely (major)

Vulnerability—Low

Note: though a low significance hazard in the City, due to its importance in the State of California and its ability to trigger secondary hazard events, such as dam or levee failure, this hazard is only profiled here.

No vulnerability assessment is conducted. Further, it is not considered a City priority for mitigation planning purposes.

Hazard Profile

An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Earthquakes cause ground shaking, possible liquefaction, landslide, settlement, and can cause fires that follow the earthquake. Earthquakes can cause structural damage, injury, and loss of life, as well as damage to infrastructure networks, such as water, wastewater, power, gas, communication, and transportation. Earthquakes may also cause collateral emergencies including dam and levee failures, seiches, hazmat incidents, fires, avalanches, and landslides. The degree of damage depends on many interrelated factors. Among these are: the magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surface deposits or bedrock, degree of consolidation of surface deposits, presence of high groundwater, topography, and the design, type, and quality of building construction.

Liquefaction Potential

Liquefaction can be defined as the loss of soil strength or stiffness due to a buildup of pore-water pressure during a seismic event and is associated primarily with relatively loose, saturated fine- to medium-grained unconsolidated soils. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. If this layer is at the surface, its effect is much like that of quicksand for any structure located on it. If the liquefied layer is in the subsurface, the material above it may slide laterally depending on the confinement of the unstable mass. Liquefaction is caused by a sudden temporary increase in pore-water pressure due to seismic densification or other displacement of submerged granular soils. Liquefiable soil conditions are not uncommon in alluvial deposits in moderate to large canyons and could also be present in other areas of alluvial soils where the groundwater level is shallow (i.e., 50 feet below the surface). Bedrock units, due to their dense nature, are unlikely to present a liquefaction hazard.

Location and Extent

Since earthquakes are regional events, the whole of the City is at risk to earthquake. The City of Folsom, Sacramento County, and surrounding areas have some level of risk from seismic and geologic hazards. Regional faults were shown in Section 4.3.10 of the Base Plan. Geological literature indicates that no major active faults transect the County; however, there are several subsurface, likely inactive, faults in the Delta, such as the Midland fault. A second, presumably inactive, fault is in the vicinity of Citrus Heights near Antelope Road. To the east, the Bear Mountain fault zone trends northwest-southeast through Sacramento and El Dorado Counties. As noted in the Base Plan, there have been historically active faults outside the County. These include: San Andreas, Vaca, Concord, Greenville, Hayward, Calaveras, Foothill Fault System, Las Positas, Midland, and West Napa. A significant seismic event on any of these major faults could cause damage in the City of Folsom.

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales, as discussed in Section 4.3.11 of the Base Plan.

Another measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. Seismic shaking is typically the greatest cause of losses to structures during earthquakes. The City is located in an area where earthquakes of some magnitude occur, so both magnitude and intensity of earthquakes are expected to remain low to moderate. Seismic shaking maps for the area in Section 4.3.10 of the Base Plan show Sacramento County and the City fall within a low to moderate shake risk.

Though the City falls into earthquake shake risk areas, it does not consider earthquake a priority hazard for mitigation planning purposes. This includes subhazards associated with the earthquake hazard, including liquefaction and others as discussed in the Base Plan. With respect to liquefaction, in Sacramento County, liquefaction zones were mapped by CGS for the first time in 2025. Based on the new 2025 liquefaction mapping, only the unincorporated County and City of Sacramento have areas falling within a liquefaction zone. No mapped liquefaction zones are found in the City of Folsom.

Significance and priority of a hazard was determined based on frequency, extent, and resulting damage, including deaths/injuries and property, natural and cultural resources, and economic damage. The ability of a jurisdiction to reduce losses through implementation of existing and new mitigation measures was also considered as to the significance and priority of a hazard. This assessment was used by the City to prioritize those hazards of greatest significance, enabling the City to focus resources where they are most needed. As such, no additional analysis is presented for this hazard, due to its low significance in the City. Further, as a non-priority hazard, it will not be carried forward into the mitigation strategy for the City.

Flood: 1%/0.5%/0.2% Annual Chance

Likelihood of Future Occurrence—Occasional (1%)/Unlikely (0.5/0.2%)

Vulnerability—High

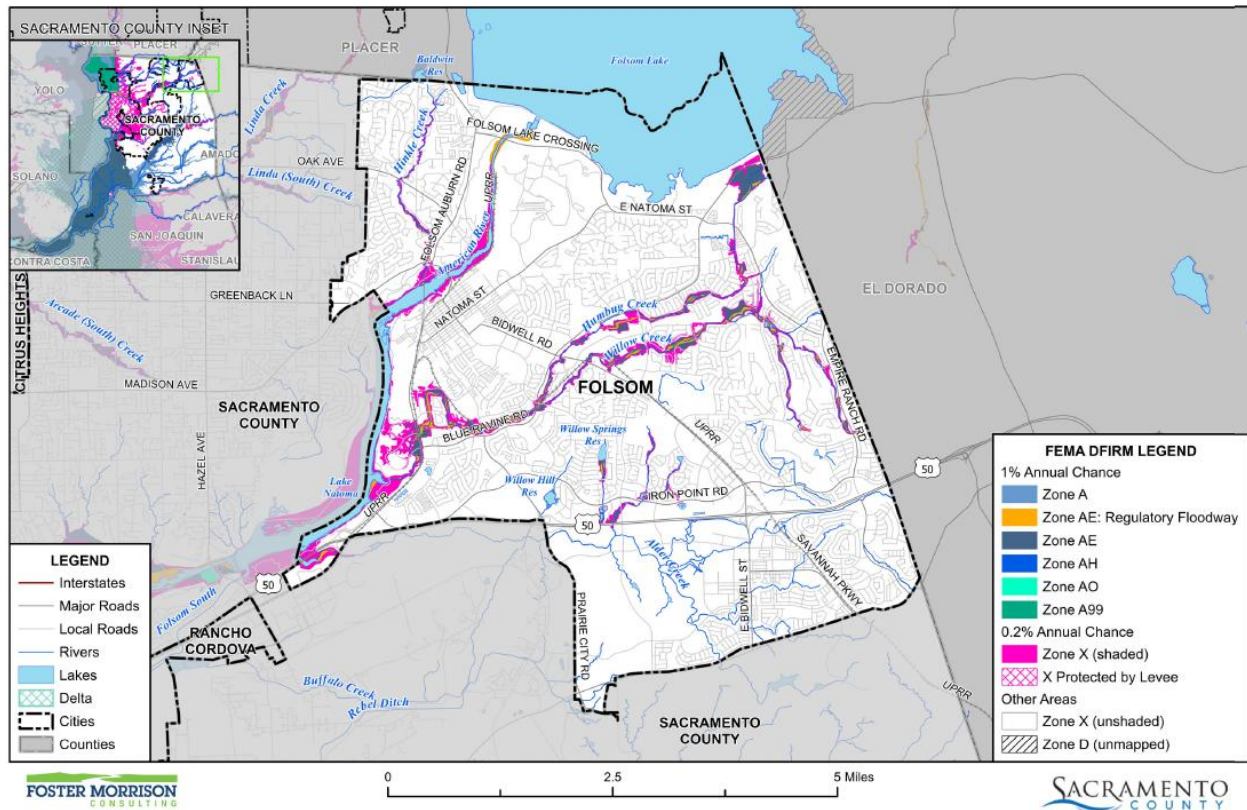
Hazard Profile

This hazard discusses the FEMA DFIRM 1%, 0.5%, and 0.2% annual chance floods. These tend to be the larger floods that can occur in the City and have caused damage in the past. Flooding can be a significant problem in the City. Historically, the City has been at risk to flooding primarily during the winter and spring months when river systems in the City swell with heavy rainfall and snowmelt runoff. The City has also been at risk during atmospheric river flood events. Rain on snow events occurring in upper elevations during the spring months can also be significant and contribute to greater downstream runoff and flooding during large storm events. Normally, storm floodwaters are kept within defined limits by a variety of storm drainage and flood control measures located throughout the Sacramento County Planning Area and the City of Folsom. Occasionally, extended heavy rains result in floodwaters that exceed normal high-water boundaries and cause damage. Flooding has occurred both within the 1% and 0.2% annual chance floodplains and in other localized areas in the City.

Location and Extent

The City of Folsom has areas located in the 1% and 0.2% annual chance flood zones. This is seen in Figure C-20.

Figure C-20 City of Folsom – FEMA DFIRM Flood Zones



Data Source: FEMA Effective DFIRM 02/22/2024 (NFHL 10/13/2025 database), Sacramento County, Cal-Atlas; Map Date: 1/29/2026.

Table C-29 details the DFIRM mapped flood zones located within the City.

Table C-29 City of Folsom– DFIRM Flood Hazard Zones

Flood Zone	Description	Present in City of Folsom
A	1% annual chance flooding: No base flood elevations provided	X
AE Regulatory Floodway	1% annual chance flood: Regulatory floodway; Base flood elevations provided	X
AE	1% annual chance flooding: Base flood elevations provided	X
AH	1% annual chance flood areas of shallow flooding between one to three feet deep. Regulatory floodway; Base flood elevations provided	

Flood Zone	Description	Present in City of Folsom
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone.	
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system.. No Base Flood Elevations (BFEs) or depths are shown.	
X (shaded)	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood	X
X Protected by Levee	Areas protected by levees from 1% annual chance flood event. Levee protection places these areas in the 0.2% annual chance flood zone. Flood insurance is not mandatory but is available.	
X (unshaded)	Area of minimal flood hazard.	X
D	Unmapped areas.	

Source: FEMA DFIRM 02/22/2024

Additionally, flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the City vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the City tends to have a shorter speed of onset, due to the amount of water that flows through the City.

Geographical flood extents for the City from the FEMA DFIRMs are shown in Table C-30.

Table C-30 City of Folsom – Geographical DFIRM Flood Zone Extents

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance Flood Hazard	563	4%	57	1%	506	6%
0.2% Annual Chance Flood Hazard	326	2%	78	1%	248	3%
Other Areas	14,645	94%	6,997	98%	7,647	91%
Total	15,534	100%	7,132	100%	8,402	100%

Source: FEMA DFIRM 02/22/2024

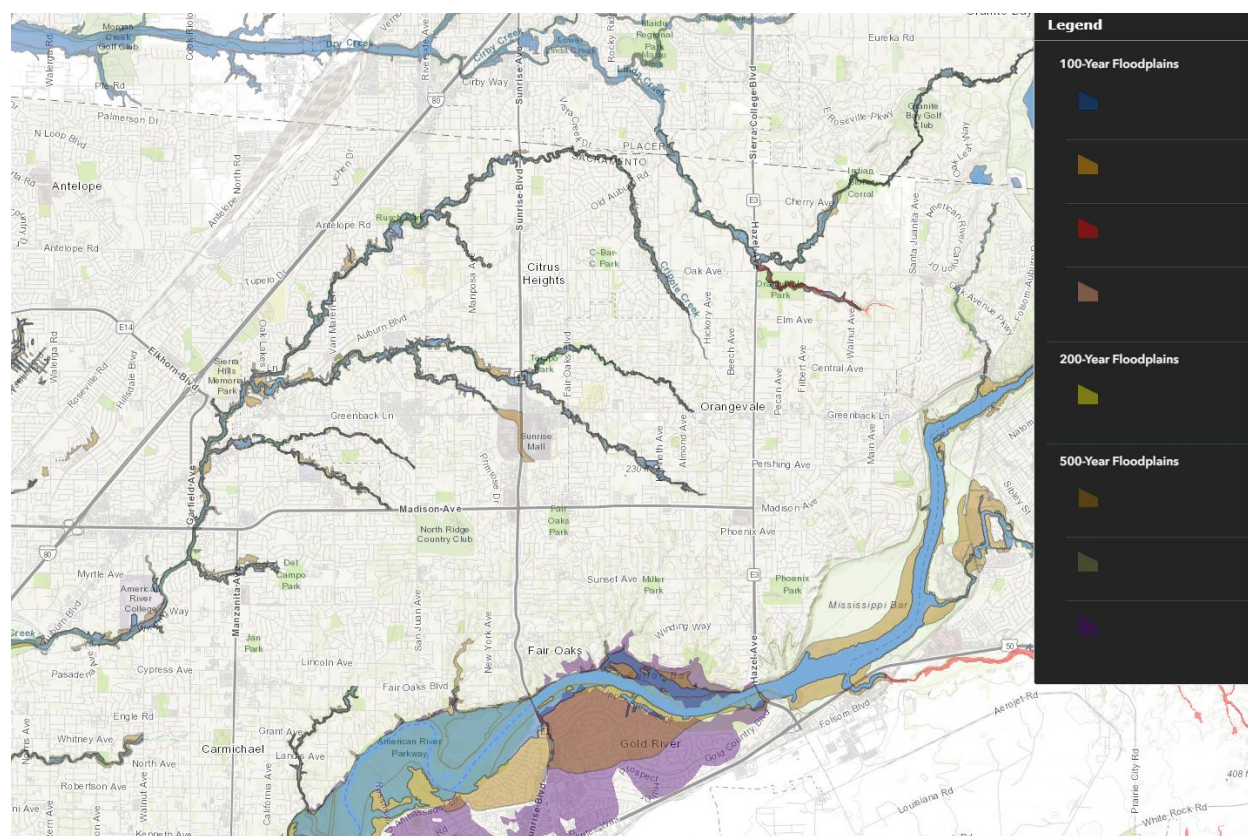
California Department of Water Resources Best Available Maps (BAM)

The FEMA regulatory maps provide just one perspective on flood risks in the City. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed.

This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements. The value in the BAMs is that they provide a bigger picture view of potential flood risk to the City than that provided in the FEMA DFIRMs. The BAM map for the City is shown in Figure C-21.

Figure C-21 City of Folsom – Best Available Map



Source: California DWR. Retrieved 12/1/2025.

Legend explanation: **Blue** - FEMA 100-Year, **Orange** – Local 100-Year (developed from local agencies), **Red** – DWR 100-year (Awareness floodplains identify the 100-year flood hazard areas using approximate assessment procedures.), **Pink** – USACE 100-Year (2002 Sac and San Joaquin River Basins Comp Study), **Yellow** – USACE 200-Year (2002 Sac and San Joaquin River Basins Comp Study), **Tan** – FEMA 500-Year, **Grey** – Local 500-Year (developed from local agencies), **Purple** – USACE 500-Year (2002 Sac and San Joaquin River Basins Comp Study).

Past Occurrences

Disaster Declaration History

A list of state and federal disaster declarations for Sacramento County from flooding is shown on Table C-31. These events also likely affected the City to some degree.

Table C-31 Sacramento County – State and Federal Disaster Declarations from Flood 1950-2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Flood (including heavy rains and storms)	26	1950, 1955, 1958 (twice), 1963, 1969, 1982 (twice), 1983, 1986, 1995 (twice), 1996, 1997, 1998, 2008, 2017 (three times), 2022*, 2023 (three), 2024 (twice)	18	1955, 1958, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 1998, 2006, 2017 (three times), 2023 (three times)*, 2024*

Source: Cal OES, FEMA

*included a landslide component.

NCDC Events

The NCDC tracks flooding events for the County. Events have been tracked for flooding since 1993. Sacramento County has seen 174 events. These events most likely had some impact on the City.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMPs and then those occurring prior to the 2021 LHMP.

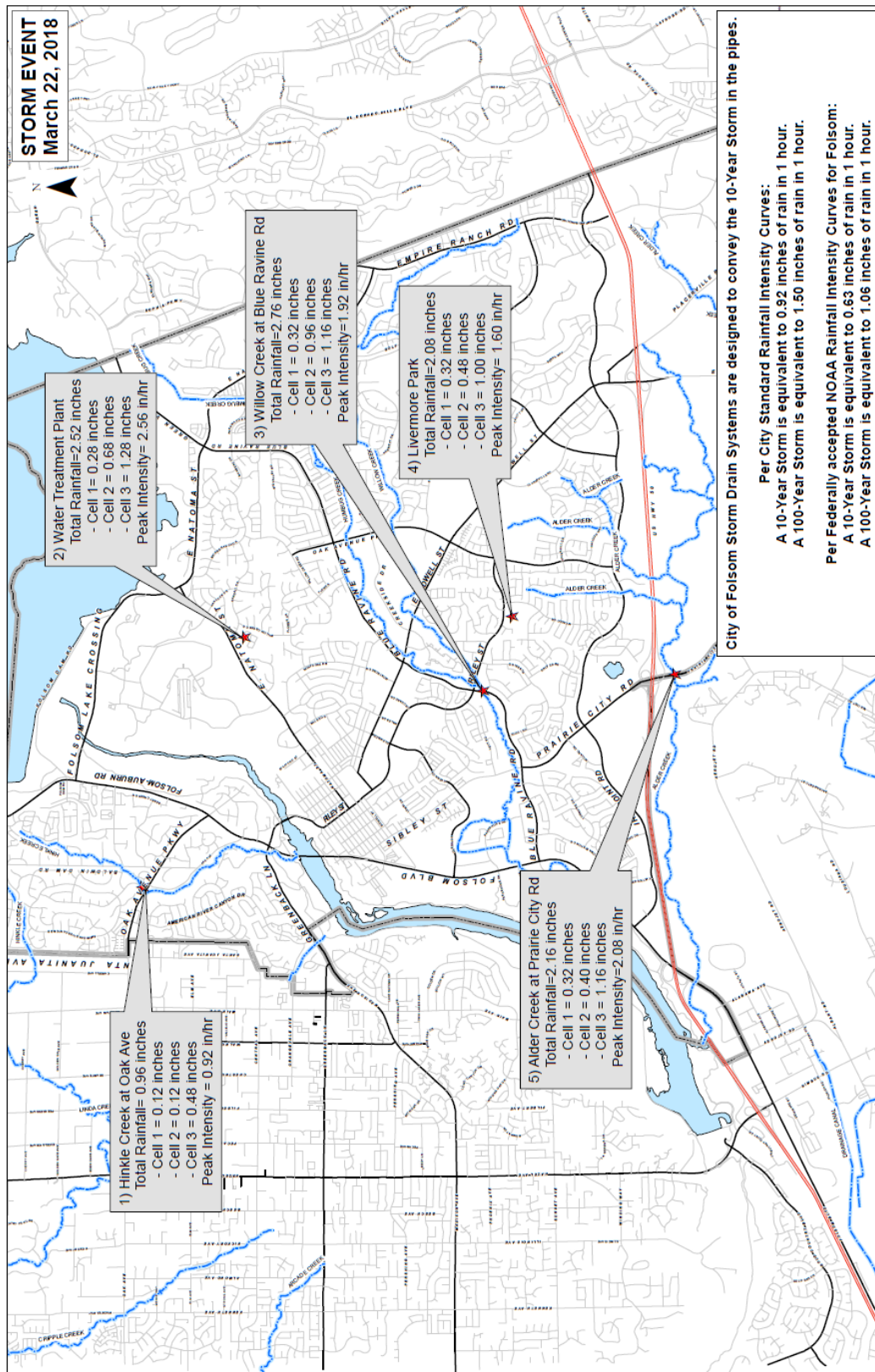
Events since 2021 LHMP

The City noted that no significant flooding has occurred since the 2021 LHMP.

Events prior to 2021

March 22, 2018 – Roads up and down Folsom, El Dorado Hills and other portions of Sacramento County and the surrounding region were flooded as the rain pounded Northern California. Storm intensities ranged from 0.92 inches per hour to 2.56 inches per hour. Storm drains in the City were overwhelmed. City storm drains were built and designed to handle a 10-year flood event. The March 2018 flooding was a 100-year or larger event. A rainfall summary is included in Figure C-22. Pictures of flooding can be seen in Figure C-23 through Figure C-25.

Figure C-22 City of Folsom March 2018 Rainfall Summary



Source: City of Folsom Public Works

Figure C-23 2018 Flooding Along Cerrito Drive in Folsom



Source: City of Folsom Public Works

Figure C-24 2018 Flooding – Iron Point East of Cavitt



Source: City of Folsom Public Works

Figure C-25 2018 Storms – Intersection of Hancock and Sombrero



Source: City of Folsom Public Works

Climate Change and Flood

It is likely that climate change will increase the chance of future occurrence as well as future impacts associated with flood. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

According to the 2024 CAS, climate change may affect flooding in California, the Sacramento County Planning Area, and the City of Folsom. While average annual rainfall may increase or decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century. It is possible that average soil moisture and runoff could decline, however, due to increasing temperature, evapotranspiration rates, and spacing between rainfall events. Reduced snowpack and increased number of intense rainfall events are likely to put additional pressure on water infrastructure which could increase the chance of flooding associated with breaches or failures of flood control structures such as levees and dams. Cal Adapt future precipitation projections were shown in Section 4.3.4.

The 2024 Sacramento County CAP noted that climate change is likely to lead to changes in the frequency, intensity, and duration of extreme weather events, such as sustained periods of heavy precipitation, increased rainfall intensity during precipitation events, and increased risk of rain-on-snow events. Further, more winter-time precipitation that falls as rain instead of snow, and higher temperatures that will cause earlier snowmelt, which could produce substantial surface water flows over a short period of time and may potentially affect dams and spillways and overwhelm levee systems designed for historical precipitation patterns. Historically, the County experienced an average of four extreme precipitation events per year (as shown in Section 4.3.4 of the Base Plan). Under the medium and high emissions scenarios, the County is expected to experience five to six extreme precipitation events per year by mid-century and six to seven extreme precipitation events per year by the late century.

The 2026 American, Bear, and Cosumnes Watersheds Resilience Plan noted that a key driver of climate vulnerability, adaptive capacity, and implementation readiness in the watershed group is flooding. An equity analysis was performed as part of this Plan. An Equity Analysis Technical Appendix demonstrates how social vulnerability aligns with the physical hazard environment across the watershed. It noted that flooding impacts are most severe downstream, where rising flows increasingly stress Sacramento's levee system; a modeled levee-breach scenario affects 12.5% of the watershed population, and 59% of those affected fall into the highest flood-sensitivity category.

Future flooding exacerbated by climate change will result in a range of potential impacts across the County and the City. For populations, there is an array of social vulnerability factors that exacerbate flood-related risks, and those residing in floodplains are especially vulnerable to the direct impacts of flooding. Floodwaters can interact with sources of pollution and distribute hazardous pollutants locally and regionally, which may result in water contamination and a range of human health impacts. Additionally, flooding can disrupt transportation networks, cause economic losses through business and government facility closures, disrupt communications, disrupt the provision of utilities, and cause significant damage to buildings and critical infrastructure. Further, flooding may also threaten ecosystems and agricultural resources; unlike natural flooding regimes that deposit useful sediment resulting in increased soil fertility as well as groundwater recharge, catastrophic flooding from levee overtopping could lead to soil erosion

and loss of viable cropland. It could also release sewage and hazardous materials into the environment if wastewater treatment plants are inundated, storage tanks are damaged, and pipelines are severed.

Vulnerability to Flood: 1%, 0.5%, and 0.2% Annual Chance

Floods have been a part of the City's historical past and will continue to be so in the future. During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damage. Predominantly, the effects of 1% and 0.2% annual chance flooding are generally confined to areas near the waterways of the City. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat.

The whole of the City is at some measure of vulnerability to floods. An assessment of a community's vulnerability to flood begins with an understanding of local exposure to flood. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The City noted that its main concerns would be the safety concern from inundated roads and bridges/culverts not allowing emergency vehicular traffic, including concerns of large scale evacuation of skilled nursing facilities, residential care facilities, and hospitals.

Assets at Risk

Assets at risk from flood include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All people and populations located in the 1% and 0.2% annual chance floodplains are at some risk to flooding. Certain vulnerable populations located within areas prone to flooding may be at increased risk to this hazard, especially during a large event with minimal advance notice. These vulnerable populations include: the unsheltered, those with limited mobility, and those that lack the resources to leave the area.

City residents that live in the 1% and 0.2% annual chance floodplains are often the most vulnerable. Not only are the residents at risk, but their homes and contents are all at risk, compounding the impacts associated with significant hazard events. To further evaluate the impact to the City of Folsom's residential population residing within these hazard areas, the DFIRM flood zones were overlayed on the parcel layer. Those residential parcels that intersect the flood zones were counted and multiplied by the 2023 Census Bureau average household factors for the City of Folsom – 2.64. According to this analysis, there is a total population of 517 and 512 residents of the City at risk to flooding in the 1% and 0.2% annual chance floodplains, respectively. This is shown in Table C-32.

Table C-32 City of Folsom – Improved Residential Parcels and Population by Summary FEMA DFIRM Flood Zone

Jurisdiction	1% Annual Chance		0.2% Annual Chance*	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Folsom	196	517	194	512

Source: FEMA DFIRM 02/2024, 2025 Sacramento County Parcel/Assessor Data, 2020 US Census Bureau Average Household Size – City of Folsom (2.64)

*This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that area used to serve (portions) of this population.

Structures

Large flood events can affect the built environment of the City. Certain structures in the City are at risk of DFIRM flooding and primarily include those structures located within the 1% and 0.2% annual chance floodplains. The vulnerability of structures depends on flood depths and can range from slight damage to totally inundated in extreme events.

GIS was used to determine the possible impacts of flooding on parcels and structures within the City of Folsom. The methodology described in Section 4.3.11 of the Base Plan was followed in determining structures and values at risk to the 1% and 0.2% annual chance flood event. Table C-33 is a summary table for the City of Folsom. Parcel counts, land and improved values (i.e., those with a structure improvement on the parcel), estimated content replacement values, and total values in the City are shown for the 1% and 0.2% annual chance flood zones, as well as for those properties that fall within other areas of the FEMA DFIRM flood zones. Table C-34 breaks down Table C-33 and shows the same analysis further broken out by detailed FEMA flood zone and property use.

Table C-33 City of Folsom – Count and Value of Parcels and Structures in Summary DFIRM Flood Zones

Flood Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard	437	253	\$867,312,137	\$602,629,510	\$1,469,941,647	\$293,988,329
0.2% Annual Chance Flood Hazard	286	237	\$358,536,829	\$338,471,996	\$697,008,825	\$139,401,765
Other Areas	29,391	26,632	\$14,642,274,199	\$8,516,733,399	\$23,159,007,598	\$4,631,801,520
Folsom Total	30,114	27,122	\$15,868,123,165	\$9,457,834,905	\$25,325,958,070	\$5,065,191,614

Source: FEMA DFIRM 02/2024, 2025 Sacramento County Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table C-34 City of Folsom – Count and Values of Parcels and Structures by Detailed DFIRM Flood Zone and Property Use

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard						
Zone A						
Agricultural	0	0	\$0	\$0	\$0	\$0
Care / Health	0	0	\$0	\$0	\$0	\$0
Church / Welfare	2	0	\$0	\$0	\$0	\$0
Industrial	1	0	\$0	\$0	\$0	\$0
Miscellaneous	3	0	\$20	\$0	\$0	\$20
Office	0	0	\$0	\$0	\$0	\$0
Public / Utilities	2	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	0	0	\$0	\$0	\$0	\$0
Retail / Commercial	1	1	\$55,409	\$1,402,246	\$1,402,246	\$2,859,901
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	0	0	\$0	\$0	\$0	\$0
Zone A Total	9	1	\$55,429	\$1,402,246	\$1,402,246	\$2,859,921
Zone AE						
Agricultural	0	0	\$0	\$0	\$0	\$0
Care / Health	1	1	\$2,459,847	\$12,572,603	\$12,572,603	\$27,605,053
Church / Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	2	2	\$2,599,596	\$8,952,963	\$13,429,445	\$24,982,004
Miscellaneous	39	0	\$8,673	\$0	\$0	\$8,673
Office	20	16	\$26,999,538	\$84,858,888	\$84,858,888	\$196,717,314
Public / Utilities	1	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	138	134	\$53,979,892	\$285,277,678	\$142,638,839	\$481,896,409
Retail / Commercial	14	14	\$18,818,106	\$33,558,489	\$33,558,489	\$85,935,084

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Unknown	1	0	\$0	\$0	\$0	\$0
Vacant	10	0	\$1,648,703	\$0	\$0	\$1,648,703
Zone AE Total	226	167	\$106,514,355	\$425,220,621	\$287,058,264	\$818,793,240
Zone AE: Regulatory Floodway						
Agricultural	1	0	\$714,223	\$0	\$0	\$714,223
Care / Health	3	3	\$12,868,716	\$125,164,927	\$125,164,927	\$263,198,570
Church / Welfare	1	1	\$1,466,964	\$78,030	\$78,030	\$1,623,024
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	92	1	\$1,027	\$41,429	\$41,429	\$83,885
Office	9	7	\$10,223,925	\$31,211,553	\$31,211,553	\$72,647,031
Public / Utilities	9	0	\$0	\$0	\$0	\$0
Recreational	1	1	\$4,100,000	\$1,400,000	\$1,400,000	\$6,900,000
Residential	66	62	\$85,729,378	\$252,811,409	\$126,405,705	\$464,946,492
Retail / Commercial	10	8	\$15,044,868	\$29,867,357	\$29,867,357	\$74,779,582
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	10	2	\$2,636,893	\$114,565	\$0	\$2,751,458
Zone AE: Regulatory Floodway Total	202	85	\$132,785,994	\$440,689,270	\$314,169,001	\$887,644,265
1% Annual Chance Flood Hazard Total	437	253	\$239,355,778	\$867,312,137	\$602,629,510	\$1,709,297,425
0.2% Annual Chance Flood Hazard						
Zone X (shaded)						
Agricultural	0	0	\$0	\$0	\$0	\$0
Care / Health	1	1	\$2,493,838	\$10,718,021	\$10,718,021	\$23,929,880
Church / Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	6	6	\$16,681,942	\$82,027,804	\$123,041,706	\$221,751,452
Miscellaneous	28	0	\$274	\$0	\$0	\$274
Office	32	30	\$34,794,412	\$124,889,263	\$124,889,263	\$284,572,938
Public / Utilities	1	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Residential	198	194	\$39,867,450	\$122,157,470	\$61,078,735	\$223,103,655
Retail / Commercial	7	6	\$11,981,305	\$18,744,271	\$18,744,271	\$49,469,847
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	13	0	\$7,662,894	\$0	\$0	\$7,662,894
0.2% Annual Chance Flood Hazard Total	286	237	\$113,482,115	\$358,536,829	\$338,471,996	\$810,490,940
Other Areas						
Zone X (unshaded)						
Agricultural	9	0	\$64,193,371	\$0	\$0	\$64,193,371
Care / Health	32	27	\$37,130,205	\$169,157,122	\$169,157,122	\$375,444,449
Church / Welfare	45	31	\$12,716,499	\$73,562,147	\$73,562,147	\$159,840,793
Industrial	40	27	\$28,931,858	\$81,634,393	\$122,451,590	\$233,017,841
Miscellaneous	1,318	4	\$1,734,062	\$2,083,050	\$2,083,050	\$5,900,162
Office	249	231	\$148,624,076	\$938,457,840	\$938,457,840	\$2,025,539,756
Public / Utilities	50	0	\$27	\$0	\$0	\$27
Recreational	20	15	\$26,255,509	\$84,347,981	\$84,347,981	\$194,951,471
Residential	26,250	25,933	\$4,550,277,925	\$12,291,856,707	\$6,145,928,354	\$22,988,062,986
Retail / Commercial	355	336	\$366,613,472	\$980,745,316	\$980,745,316	\$2,328,104,104
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	1,023	28	\$360,188,087	\$20,429,643	\$0	\$380,617,730
Other Areas Total	29,391	26,632	\$5,596,665,091	\$14,642,274,199	\$8,516,733,399	\$28,755,672,689
Folsom Total	30,114	27,122	\$5,949,502,984	\$15,868,123,165	\$9,457,834,905	\$31,275,461,054

Source: FEMA DFIRM 02/2024, 2025 Sacramento County Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table C-35 summarizes Table C-34 and shows City of Folsom loss estimates and improved values at risk by FEMA 1% and 0.2% annual chance flood zones. According to Table C-34 and Table C-35, the City of Folsom has 253 parcels and \$1.47 billion of structure and contents values or values in the 1% annual chance flood zone, and 237 improved parcels and \$697.0 million of structure and contents values in the 0.2% annual chance flood zone. These values can be refined a step further. Applying the 20 percent damage

factor as previously described in Section 4.3.11 of the Base Plan, there is a 1% chance in any given year of a flood event causing \$294.0 million in damage and a 0.2% chance in any given year of a flood event causing \$139.4 million in damage in the City of Folsom. The loss ratio of 1.2% indicates that flood losses for 1% annual chance flooding would be minor and the City would be able to readily recover. The loss ratio of 0.6% indicates that flood losses for 0.2% annual chance flooding would be relatively minor and the City should be able to recover relatively quickly.

Table C-35 City of Folsom – Flood Loss Estimates

Flood Zone	Total Parcel Count	Imp. Parcel Count	Improved Structure Value	Estimated Contents Value	Total Value	Loss Estimate	Loss Ratio
1% Annual Chance Flood Hazard	437	253	\$867,312,137	\$602,629,510	\$1,469,941,647	\$293,988,329	1.2%
0.2% Annual Chance Flood Hazard**	286	237	\$358,536,829	\$338,471,996	\$697,008,825	\$139,401,765	0.6%
Total	723	490	\$1,225,848,966	\$941,097,506	\$2,166,950,472	\$433,390,094	1.8%

Source: FEMA DFIRM 02/2024, 2025 Sacramento County Parcel/Assessor Data

*With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

**This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Insurance Coverage, Claims Paid, and Repetitive Losses

Standard property insurance does not include flood coverage because of the relatively high risk. The National Flood Insurance Program (NFIP) provides flood insurance to residents in those communities that participate in the NFIP. Federal financial assistance requires the purchase of flood insurance for structures located within a 100-year floodplain – a requirement that affects nearly all mortgages financed through commercial lending institutions. Flood insurance is also recommended for all structures protected by levees, even if not mapped within a floodplain.

The City of Folsom joined the National Flood Insurance Program (NFIP) on January 6, 1982. The City does not participate in CRS program. NFIP, provided by CA DWR using FEMA's (CIS database), data indicates that as of February 2, 2026, there were 82 flood insurance policies in force in the City with \$27,357,000 of coverage. There have been 26 historical claims for flood losses totaling \$501,081.90. Of these, 5 were in an A zone and 21 were in B, C, or X zones. 20 of the claims were for pre-FIRM structures, while 6 were for post-FIRM structures in the B, C, or X zone. Additionally, there have been 2 substantial damage claims since 1978. NFIP data further indicates that there are 7 repetitive loss claims and 0 severe repetitive loss buildings in the City. Additional information about these claims can be seen on Table C-36. This RL data provided by FEMA's PIVOT database also includes information on the residential property type.

Table C-36 City of Folsom – Repetitive Loss Structures

County	Community	Residential Type	Insured	Mitigated	FMA Repetitive Loss	FMA Severe Repetitive Loss	NFIP Repetitive Loss	NFIP Severe Repetitive Loss	Number of Losses
Sacramento County (06067)	Folsom, City Of (060263)	Other Residential	No	No	No	No	Yes	No	3
Sacramento County (06067)	Folsom, City Of (060263)	Single Family	No	No	No	No	Yes	No	2
Sacramento County (06067)	Folsom, City Of (060263)	2-4 Family	No	No	No	No	Yes	No	2
Total									7

Source: FEMA Region IX PIVOT Database

Based on this analysis of insurance coverage, the City has values at risk to the 1% annual chance and greater floods. Of the 253 improved parcels within the 1% annual chance flood zone, 5 (or 2%) of those parcels maintain flood insurance. This can be seen on Table C-37.

Table C-37 City of Folsom – Percentage of Policy Holders to Improved Parcels in the 1% Annual Chance Floodplain

Jurisdiction	Improved Parcels in SFHA (1% Annual Chance) Floodplain*	Insurance Policies in the SFHA (1% Annual Chance) Floodplain	Percentage of 1% Annual Chance Floodplain Parcels Currently Insured
Folsom	253	5	2.0%

Source: FEMA DFIRM 02/2024, FEMA CIS 2025, 2025 Sacramento County Parcel/Assessor's Data

Critical Facilities and Infrastructure

1% and 0.2% annual chance flooding presents a threat to critical facilities and infrastructure. Damage to any one of these systems can threaten public safety, wreak havoc on daily life, impact properties far from flood zones, and result in economic impacts to the City.

The following analysis was performed on the critical facility inventory in the City to determine which critical facilities fall into each FEMA DFIRM flood zone. Using GIS, the FEMA DFIRM flood zones were overlayed on the critical facility GIS layer. This is shown on Figure C-26 for the FEMA DFIRM flood zones. Table C-50 details which critical facilities fall in which FEMA DFIRM flood zones.

Figure C-26 City of Folsom – Critical Facilities in FEMA DFIRM Flood Zones

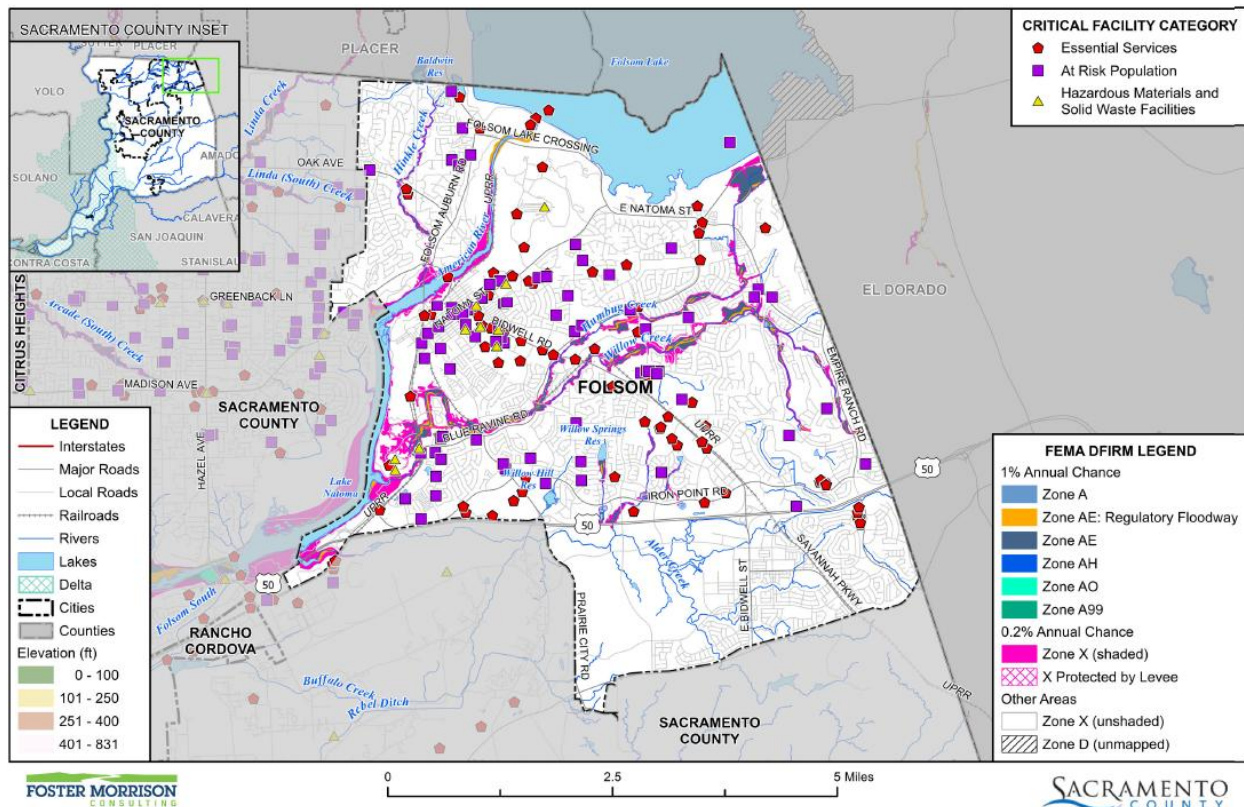


Table C-38 City of Folsom – Critical Facilities in FEMA DFIRM Flood Zones by Category and Type

Flood Zone	Critical Facility Category / Critical Facility Type	Facility Count
1% Annual Chance Flood Hazard		
Zone A	Essential Services Facilities	
	Water Well	4
	Essential Services Facilities Total	4
	At Risk Population Facilities	
	School	1
	At Risk Population Facilities Total	1
	Total	5
Zone AE: Regulatory Floodway	Essential Services Facilities	
	Bridge	1
	Essential Services Facilities Total	1
	Total	1
Zone AE	Essential Services Facilities	
	FDIC Insured Banks	1

Flood Zone	Critical Facility Category / Critical Facility Type	Facility Count
	<i>Essential Services Facilities Total</i>	<i>1</i>
	<i>At Risk Population Facilities</i>	
	Places of Worship	1
	At Risk Population Facilities Total	1
	<i>Hazardous Materials and Solid Waste Facilities</i>	
	Leaky Underground Storage Tank	1
	<i>Hazardous Materials and Solid Waste Facilities Total</i>	<i>1</i>
	Total	3
1% Annual Chance Flood Hazard Total		9
0.2% Annual Chance Flood Hazard		
Zone X (shaded)	<i>At Risk Population Facilities</i>	
	Places of Worship	2
	<i>At Risk Population Facilities Total</i>	<i>2</i>
	Total	2
0.2% Annual Chance Flood Hazard Total		2
Other Areas		
Zone X (unshaded)	<i>Essential Services Facilities</i>	
	Cellular Tower	7
	Emergency Evacuation Center	4
	FDIC Insured Banks	18
	Fire Station	5
	Hospital or Urgent Care	4
	Law Enforcement	4
	Microwave Service Towers	86
	Power Plants	5
	Public Transit Stations	3
	Water Well	10
	<i>Essential Services Facilities Total</i>	<i>146</i>
	<i>At Risk Population Facilities</i>	
	Colleges, Universities, and Professional Schools	1
	Community Center	1
	Day Care Center	13
	Mobile Home Parks	6
	Places of Worship	37
	School	27
	<i>At Risk Population Facilities Total</i>	<i>85</i>
	<i>Hazardous Materials and Solid Waste Facilities</i>	

Flood Zone	Critical Facility Category / Critical Facility Type	Facility Count
	EPA ER TRI Facility	2
	Leaky Underground Storage Tank	7
	<i>Hazardous Materials and Solid Waste Facilities Total</i>	9
	Total	240
Folsom Total		251

Source: FEMA DFIRM 02/2024, City of Folsom

Natural, Historic, and Cultural Resources

Large flood events can affect natural, historic, and cultural resources. There are a number of ways floodwaters can impact natural resources and the environment. Wildlife habitats can be destroyed by floodwaters. Contaminated floodwater can pollute rivers and habitats. Silt and sediment can destroy natural areas. Riverbanks and natural levees can be eliminated as rivers reach bankfull capacity. Rivers can be widened, and deposition can increase downstream. Trees can be uprooted by high-velocity water flow. Plants that survived the initial flood may die due to being inundated with water. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to structures within the flooded areas, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged and lost during extreme flood events. Any of these that fall in the flood zones shown on Figure C-20 would be vulnerable.

Impacts from Flood: 1%, 0.5%, and 0.2% Annual Chance

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Large flood events, including those associated with 1% and 0.2% annual chance floods, can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. People may be swept away in floodwaters, causing injuries or deaths. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Structures can be damaged directly from floodwaters and can also be damaged from trees falling as a result of water-saturated soils. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services causing power outages. The interruption of power causes major problems and can result in the closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues.

Standing water can cause damage to crops, roads, foundations, and electrical circuits. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts.

Impacts that are not quantified, but can be anticipated in large future events, include:

- Injury and loss of life;
- Commercial and residential structural and property damage;
- Disruption of and damage to public infrastructure, utilities, and services;
- Damage to roads/bridges resulting in loss of mobility;
- Significant economic impact (jobs, sales, tax revenue) to the community; and
- Negative impact on commercial and residential property values

Health Hazards from Flooding

Certain health hazards are also common to flood events. While such problems are often not reported, three general types of health hazards accompany floods. The first comes from the water itself. Floodwaters carry anything that was on the ground that the upstream runoff picked up, including dirt, oil, animal waste, and lawn, farm and industrial chemicals. Pastures and areas where cattle and hogs are kept or their wastes are stored can contribute polluted waters to the receiving streams.

Floodwaters also saturate the ground, which leads to infiltration into sanitary sewer lines. When wastewater treatment plants are flooded, there is nowhere for the sewage to flow. Infiltration and lack of treatment can lead to overloaded sewer lines that can back up into low-lying areas and homes. Even when it is diluted by flood waters, raw sewage can be a breeding ground for bacteria such as e. coli and other disease-causing agents.

The second type of health problems arise after most of the water has gone. Stagnant pools can become breeding grounds for mosquitoes, and wet areas of a building that have not been properly cleaned breed mold and mildew. A building that is not thoroughly cleaned becomes a health hazard, especially for small children and the elderly.

Another health hazard occurs when heating ducts in a forced air system are not properly cleaned after inundation. When the furnace or air conditioner is turned on, the sediments left in the ducts are circulated throughout the building and breathed in by the occupants. If a city or county water system loses pressure, a boil order may be issued to protect people and animals from contaminated water.

The third problem is the long-term psychological impact of having been through a flood and seeing one's home damaged and irreplaceable keepsakes destroyed. The cost and labor needed to repair a flood-damaged home puts a severe strain on people, especially the unprepared and uninsured. There is also a long-term problem for those who know that their homes can be flooded again. The resulting stress on floodplain residents takes its toll in the form of aggravated physical and mental health problems.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed further below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Folsom include the following:

- Climate change is likely to exacerbate future flood conditions and associated impacts and vulnerability of the City to 1% and 0.2% annual chance flooding. This was discussed in greater detail in the Climate Change and Flood section of the Hazard Profile above.
- Future population growth should be considered, as having more or less people in a community affects the overall hazard vulnerability to the City. INSERT GROWTH DISCUSSION. These active developments, would place additional population in the 1% and 0.2% annual chance flood zones. Additional population growth would likely bring continued diversity to the County. Vulnerable population groups could face disproportionate effects from flooding and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the location of future flood events.
- Land use planning should be proactive to address future hazard conditions. INSERT GROWTH DISCUSSION. However, City building codes and the City's floodplain management ordinance are in effect to reduce this risk and should be updated as necessary to continue to address future flood conditions. As such, changes in land use and future development may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the location of future flood events.

Future Development

This section provides an analysis of the flood hazard and proposed future development within the City based on FEMA floodplains and also discusses considerations in evaluating future flooding conditions.

Future Development: General Considerations

Communities that participate in the NFIP adopt regulations and codes that govern development in special flood hazard areas (SFHAs) and enforce those requirements through their local floodplain management ordinances through the issuance of permits. The City's floodplain management ordinance provides standards for development, subdivision of land, construction of buildings, and improvements and repairs to buildings that meet or exceed the minimum requirements of the NFIP.

The International Residential Code (IRC) and International Building Code (IBC), by reference to ASCE 24, include requirements that govern the design and construction of buildings and structures in flood hazard areas. FEMA has determined that the flood provisions of the I-Codes are consistent with the requirements of the NFIP (the I-Code requirements either meet or exceed NFIP requirements). ASCE 7 and ASCE 24, design standards developed by the American Society of Civil Engineers, expands on the minimum NFIP requirements with more specificity, additional requirements, and some limitations. Adoption of latest edition of the California Building Standards Code (CBSC), the 2025 triennial edition is based on the 2024 IBC and 2024 IRC, with and effective dated of January 1, 2026. The previous edition was the 2022 triennial edition, based on the 2021 IBC and 2021 IRC and was effective from 1/1/2023 until 12/31/2025. CA DWR

has also developed a California State Model Flood Damage Prevention Ordinance to work with the flood provisions of the CBSC (CCR Title 24) for buildings and structures in special flood hazard areas. CA DWR has also prepared sample language to modify local floodplain management regulations.

With the adoption of the CBSC and the International Codes, communities are moving towards a more stringent approach to regulatory floodplain management, beyond the minimum requirements of the NFIP. The adoption and enforcement of disaster-resistant building codes is a core community action to promote effective mitigation. When communities ensure that new buildings and infrastructure are designed and constructed in accordance with national building codes and construction standards, they significantly increase local resilience now and in the future. With continued advancements in building codes, local ordinances should be reviewed and updated to meet and exceed standards as practicable to protect new development from future flood events and to further promote disaster resiliency.

One of the most effective ways to reduce vulnerability to potential flood damage is through careful land use planning that fully considers applicable flood management information and practices. Master planning will also be necessary to assure that open channel flood flow conveyances serving the smaller internal streams and drainage areas are adequately prepared to accommodate the flows. Preservation and maintenance of natural and riparian areas should also be an ongoing priority to realize the flood control benefits of the natural and beneficial functions of these areas.

The potential for flooding may increase as floodwaters are channeled due to land development. Such changes can exacerbate flooding problems inside and outside of natural floodplains by altering or confining natural drainage channels. Floodplain modeling and master planning should be based on built out property use to ensure that all new development remains safe from future flooding. While local floodplain management, stormwater management, and water quality regulations and policies address these changes on a site-by-site basis, their cumulative effects can have a negative impact on the overall floodplain.

The City enforces its floodplain management ordinance. If any development is to occur in the floodplain, it would have to conform to the elevation and other standards of the floodplain ordinance. More detail on the specifics of the floodplain ordinance can be found in the Capability section below.

Alder Creek is located in the Folsom Plan Area development. The City of Folsom is currently developing the 100-year floodplain for this portion of Alder Creek. Structures within the new development will not encroach within the floodplain. Development that affects the floodplain boundaries will provide Conditional Letter of Map Revision (CLOMR) and/or Letter of Map Revision (LOMR) reports.

The City noted that it completed updated floodplain modeling and mapping for portions Hinkle Creek, Willow Creek, Humbug Creek, and Alder Creek. The updated mapping became effective in February 2024.

Future development areas and their vulnerability to 1% and 0.2% annual chance flood are discussed further in the below GIS analysis.

GIS Analysis

The City provided X future development areas which were used as the basis for the inventory of future development for the City. These areas were mapped in GIS. Utilizing the future development area spatial

layer, the parcel polygon data was intersected to determine the future development areas within each DFIRM flood zone. Figure C-27 shows the locations of the future development area overlayed on the DFIRM flood zones. Some of these future development areas fall within the mapped flood areas as shown on Table C-39. As shown in the map and table, three of these future development areas sit in the 1% annual chance flood zone, while three more sit in the 0.2% annual chance flood zone.

Figure C-27 City of Folsom – Future Development Areas in FEMA DFIRM Flood Zones

Table C-39 City of Folsom – Future Development Area Acres and Parcels in FEMA DFIRM Flood Zones

Source: FEMA DFIRM 02/2024, City of Folsom

Flood: Localized Stormwater Flooding

Likelihood of Future Occurrence–Highly Likely

Vulnerability–Medium

Hazard Profile

Flooding occurs in areas other than the FEMA mapped 1%, 0.5%, and 0.2% annual chance floodplains. Flooding may be from drainages not studied by FEMA, lack of or inadequate drainage infrastructure, or inadequate maintenance. Localized, stormwater flooding occurs throughout the City, during the rainy season from November through April. Prolonged heavy rainfall (including that from atmospheric river events) contributes to a large volume of runoff resulting in high peak flows of moderate duration. Rain on snow events occurring in the upper elevations can also be significant and contribute to greater downstream runoff and flooding during large storm events.

Location and Extent

The City of Folsom is subject to localized flooding throughout the City. Areas prone to localized flooding are included in Table C-40 below. Flood extents are usually measured in areas affected, velocity of flooding, and depths of flooding. Expected flood depths in the City vary by location. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Localized flooding in the City tends to have a shorter speed of onset, especially when antecedent rainfall has soaked the ground and reduced its capacity to absorb additional moisture.

Past Occurrences

Disaster Declaration History

There have been no state or federal disaster declarations from localized floods. There would most likely have been localized flood events during the disaster declarations from flood as shown in the previous 1%/0.5%/0.2% annual chance flood section. Some of these events may have affected the City.

NCDC Events

The NCDC occurrences of localized flooding are included in the 1%, 0.5%, and 0.2% annual chance flood hazard profile above where past flood events were noted.

City of Folsom Events

The City noted that the times of flooding and localized flooding have coincided. These were discussed in the Past Occurrences Section of the Flood: 1%, 0.5%, and 0.2% annual chance flood section above. There are areas of localized flooding within the City. Most have been addressed with capital improvement projects and adjustments in maintenance activities. There have been limited past occurrences of note since 2021.

Climate Change and Localized Flood

It is likely that climate change will increase the chance of future occurrence as well as future impacts from localized flood. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Even if average annual rainfall may decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century, increasing the likelihood of overwhelming stormwater systems built to historical rainfall averages. This makes localized flooding more likely.

Vulnerability to Localized Flood

Flood vulnerability and their impacts vary by location and severity of any given flood event and will likely only affect certain areas of the City during specific times. Based on the risk assessment, it is evident that floods will continue to have potentially significant impacts to certain areas of the City. However, while flooding can cause significant impacts, depending on the duration and volume of precipitation and the drainage in any given area, many of the floods in the City are minor, localized flood events that are more of a nuisance than a disaster.

Many areas of the City are at some measure of vulnerability to localized flooding. An assessment of a community's vulnerability to localized flooding begins with an understanding of local exposure to localized flooding. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

Historically, the City has been affected by flooding of streams and creeks occurring during heavy rain and storm (including atmospheric river) events. Additional development in the City and in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater

runoff and contributes to localized flooding occurring in areas throughout the City. The root cause of many localized flooding instances is undersized storm drain infrastructure to convey the high intensity rainfall. This is especially true in older areas of the City where existing storm drainage infrastructure does not meet current City design standards.

The City tracks localized flooding areas. Affected localized flood areas identified by the City of Folsom are summarized in Table C-40.

Table C-40 City of Folsom – List of Localized Flooding Problem Areas

Road Name	Flooding	High Water/Creek Crossing	Flooded by Runoff from Neighboring Property	Damaged/ Insufficient Storm Drain System
Blue Ravine/Folsom Blvd.	X			X
Humbug Creek Drive		X		
Orchard Terrace Court			X	
Bayline Circle			X	
Ballard Court		X		
Berma Road	X	X		
Thompson Circle	X			X
Baurer Circle				X
Briggs Ranch Drive	X		X	
Rebecca Way	X	X		
Redevelopment Area				
Duchow Way	X			X
Sibley Street	X			X
Wool Street	X			X
Morman Street	X			X

Source: City of Folsom

OTHER VULNERABILITIES/CONCERNS/ISSUES/PROBLEM AREAS SPECIFIC TO THE CITY? CAN THE CITY PROVIDE DETAILS ON THE ROOT CAUSE/PROBLEM STATEMENTS OF LOCALIZED FLOOD ISSUES THAT WILL SUPPORT MITIGATION ACTION DEVELOPMENT?

Assets at Risk

Assets at risk from localized flood include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

People and populations (including vulnerable populations) are traditionally not highly vulnerable to localized flooding, but their structures and contents can be at risk. Localized flooding may also cause

transportation issues as roads and lanes are impacted or closed and affect the ability for people to travel throughout the City.

Structures

Structures in areas with localized flooding can be affected if floodwaters intrude into the structure. Structures in low lying areas, or those with basements can be at greater risk. Buildings with older foundations that are prone to water intrusion are also at greater risk. Once water finds its way into a structure, it tends to continue to do so until the path that brings water into a structure is mitigated. Structures can also be damaged by trees that have become uprooted and fall during rain and storm events. Large trees falling onto structures can cause significant damage.

Critical Facilities and Infrastructure

Localized flooding, while often more of a nuisance, can cause damage to critical facilities and infrastructure during a heavy rain and storm event. Any facility that experiences localized flooding can be impacted. Utilities and other critical infrastructure can all be affected, causing interruptions in service until repairs can be made. For example, water and wastewater systems can be vulnerable to heavy rains and flood events. Rainfall creates a high water table, surging streams and creeks, and saturates soil. Infiltration of stormwater into water and wastewater systems may occur and presents a threat to public health and safety, when the infrastructure is no longer able to meet operational needs and local demands. Other critical facilities such as roads, bridges and other transportation facilities can also experience localized flooding causing road closures and other impacts until storm waters recede. This can result in extended road closures requiring alternate routes.

Natural, Historic, and Cultural Resources

Natural resource assets may have some vulnerabilities to localized flood during major storm events, but can benefit from floodwaters, often by design. Many parks and green spaces are designed to take overflow water and release it into the underlying soils and natural areas. Wetland areas in the City actually help reduce the risk of flooding, as they can absorb excess rainfall that would have to be drained away from impervious surfaces. Flooding can provide many benefits to the natural environment, including recharging wetlands and groundwater, increasing fish production, creating wildlife habitat, and rejuvenating soil fertility. These smaller localized flooding events often provide more benefits to the environment in comparison to negative impacts associated with large flood events. Historic and cultural resources may be at some measure of vulnerability if they are located in areas subject to repeated localized flooding.

Impacts from Localized Flood

Primary concerns associated with stormwater flooding include impacts to infrastructure that provide a means of ingress and egress throughout the community. Ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Objects can also be buried or destroyed through sediment deposition. Floodwaters can break utility lines and interrupt services. Standing water can cause damage to crops, roads, and foundations. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

Life safety issues from localized flooding would be more limited. The amount and type of damage or flooding that occurs varies from year to year and from storm to storm, depending on the quantity of precipitation and runoff.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Folsom include the following:

- Climate change is likely to exacerbate future heavy rain conditions and associated impacts and vulnerability of the City to localized flood. This was discussed in greater detail in the Climate Change and Localized Flood section of the Hazard Profile above.
- The City is expected to see slow and steady growth. INSERT GROWTH DISCUSSION. Additional population growth would likely bring continued diversity to the City. This can also impact the vulnerable populations, like low-income individuals and households living in areas that are typically more hazardous. Vulnerable population groups such as low-income individuals and households living in flood prone areas could face disproportionate effects from localized flood and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the location of future flood events.
- Land use planning should be proactive to address future hazard conditions. INSERT GROWTH DISCUSSION. Development in more urban areas causes an increase in peak flow and stormwater runoff. Such growth will consume previously undeveloped acres, and the impacts may overwhelm existing drainage and flood control facilities. Locating new development, structures and critical facilities and infrastructure within or near areas of localized flooding risk may put additional development at risk. However, City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future localized flood conditions. Depending on the location of new development and adherence to protective building codes, changes in land use and development may or may not increase the impacts and associated vulnerabilities of the City to this hazard.

Future Development

The City will need to be proactive to ensure that increased development has proper siting and drainage for stormwaters. The risk of localized flooding to future development can also be minimized by accurate

recordkeeping of repetitive localized storm activity. Mitigating the root causes of the localized stormwater flooding will reduce future risks of losses.

Severe Weather: Extreme Cold and Freeze

Likelihood of Future Occurrence–Highly Likely

Vulnerability–Medium

Hazard Profile

According to the National Weather Service (NWS) and the Western Regional Climate Center (WRCC), extreme cold often accompanies a winter storm or is left in its wake. Prolonged exposure to cold can cause frostbite or hypothermia and can be life-threatening. Infants and the elderly are most susceptible. Pipes may freeze and burst in homes or buildings that are poorly insulated or without heat. Freezing temperatures can cause significant damage to agricultural industry.

Location and Extent

Extreme cold and freeze events occur on a regional basis. Extreme cold can occur in any location of the City. All portions of the City are at risk to extreme cold. While there is no scale (i.e. Richter, Enhanced Fujita) to measure the effects of freeze, temperature data for the County from the WRCC indicates that there are 8.3 days that fall below 32°F. Freeze has a slow onset and can generally be predicted in advance for the City. Freeze events can last for hours (in a cold overnight), or for days to weeks at a time. Extreme cold can occur in any location of the City. All portions of the City and County are at risk to extreme cold and freeze.

Past Occurrences

Disaster Declaration History

The County has had no past federal or state disaster declarations for extreme cold and freeze. There have been USDA Secretarial Disaster declarations. As shown in Table 4 6, there have been 3 freeze declarations in Sacramento County since 2012. All 3 freeze declarations have occurred since 2021, as discussed in Section 4.3.2 of the Base Plan. Some of these events may have affected the City.

NCDC Events

The NCDC data shows 16 extreme cold and freeze incidents for Sacramento County since 1993, some of which likely affected the City.

City of Folsom Events

There has been no federal or state disaster declarations in the County for extreme cold and freeze. The City noted that cold and freeze is a regional phenomenon; events that affected the County also affected the City. Those past occurrences were shown in the Base Plan in Section 4.3.3.

Climate Change and Extreme Cold and Freeze

According to the 2024 CAS, freezing spells are likely to become less frequent in California as climate temperatures increase; if emissions increase, freezing events could occur only once per decade in large portion of the State by the second half of the 21st century. According to a California Natural Resources Report in 2014, it was determined that while fewer freezing spells would decrease cold related health effects, too few freezes could lead to increased incidence of disease as vectors and pathogens do not die off.

According to the 2024 CAP, which utilized Cal Adapt to model potential climate change impacts to Sacramento County, annual average low temperatures in Sacramento County of 48.4°F (from 1961-1990) would increase under the medium admissions scenario by 3.8°F to 52.2°F in the mid-century, and by 5.0°F to 53.4°F in the late century. Under the high emissions scenario, the average annual low temperature is projected to increase by 4.8°F to 53.2°F in the mid-century, and by 8.4°F to 56.8°F in the late century. This can be seen in Section 4.3.2 of the Base Plan.

Vulnerability to Extreme Cold and Freeze

Extreme cold and freeze events happen in the City each year. Cold and freeze can impact both structures and populations in the City. The whole of the City and County Planning Area has some measure of vulnerability to extreme cold and freeze.

An assessment of a community's vulnerability to this hazard begins with an understanding of local exposure to City. This is included in the Local Concerns section below. After that, vulnerability is discussed in multiple sections that detail how this hazard can affect the City. These sections include assets at risk, impacts, and how future development and future conditions can be affected by this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The City noted that populations are at greatest risk to cold. Vulnerable populations in the City include the unhoused and the elderly or residents on a fixed income.

Assets at Risk

Assets at risk from extreme cold and freeze include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All populations within the City are vulnerable to extreme cold and freeze, but this hazard generally affects vulnerable populations and those spending large amounts of time outside. Prolonged exposure to cold can

cause frostbite or hypothermia and can be life-threatening. Vulnerable populations to cold and freeze include the unhoused; individuals who exercise or train outdoors; outdoor workers; individuals that lack the resources to afford heat; and the young, old, or medically fragile individuals that are more susceptible to cold related impacts. In addition to vulnerable populations, pets and livestock are at risk to freeze and cold.

Structures

Structures in the City have some measure of risk from extreme cold and freeze. Buildings can be affected directly by freeze, pipes that feed buildings can be damaged during periods of extreme cold and cause water damage and other related impacts to a structure. Structures can also be damaged by downed trees during freeze and winter storm events.

Critical Facilities and Infrastructure

Extreme cold and freeze, occasionally accompanied by high winds, can cause downed trees and power lines, power outages, accidents, and road closures. Transportation networks, communications, and utilities infrastructure are the most vulnerable physical assets in the City. Depending on the facility type and function, critical facilities and infrastructure may be affected directly by freeze. Damage to pipes that feed buildings can be damaged during periods of extreme cold. Other equipment may also be affected. Infrastructure such as roads, highways, and bridges can become slippery, causing accidents and road closures.

Natural, Historic, and Cultural Resources

Depending on how low the temperatures go and the duration of an extreme cold and freeze event, natural resources in the City may be affected. During periods of freeze, trees in the City may be damaged. This is especially true if a freeze occurs during a winter storm with winds and precipitation. Other natural resources like wildlife may be at risk during a period of freeze. While it is rare for historic buildings to be affected directly by freeze, damages to pipes that feed historic buildings can be damaged during periods of extreme cold and cause additional impacts to the structures.

Impacts from Severe Weather: Extreme Cold and Freeze

Extreme cold and freeze can affect critical facilities and infrastructure, down trees, break pipes, and can be a life safety issue. Transportation networks, communications, and utilities infrastructure are often the most vulnerable physical assets in the City. Infrastructure such as roads and utilities are at risk to freezing temperatures causing failures and hazardous road conditions. When extreme cold is coupled with high winds and freezing storms, power lines may be downed, resulting in power outages and an interruption of utilities and critical services. During periods of extremely low or prolonged cold temperatures, other impacts to the City can include interruption in business and school activities.

The elderly, the young, and those experiencing medical issues are often more vulnerable to temperature extremes, but anyone can be affected. Exposure to cold temperatures can cause hypothermia and frostbite. Those exercising or recreating outdoors, outdoor workers, and the unhoused may be at a higher risk.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the Likelihood of Future Occurrence discussion above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on these factors for the City include the following:

- Climate change is unlikely to exacerbate extreme cold and freeze and their associated impacts to the City. This was discussed in greater detail in the Climate Change and Extreme Cold and Freeze section of the Hazard Profile above.
- The City is expected to see slow and steady growth. Additionally, the City has 33 areas planned for development in the next five years. Future population growth should be considered, as having more or less people in a community affects the overall hazard vulnerability to the City. Changes in populations patterns should also be considered. Especially vulnerable individuals to this hazard include older adults, children, , those below the poverty line and the unhouse, and those that work or recreate outdoors. During hazard events, existing inequities can get worse, and these groups are the most likely to be affected and may require extra assistance. Planning for population changes will help to decrease the City's overall vulnerability to this hazard. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of population growth and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. 33 developments are expected to be built in the next five years. City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future freeze and extreme cold conditions. Due to adherence to protective building codes, changes in land use and development will likely not increase the impacts and associated vulnerabilities of the City to this hazard.

Future Development

Future development built to code should be able to withstand extreme cold and freeze. Current building codes provide such provisions for new construction. New and existing critical facilities and infrastructure should also consider adding backup power systems to limit impacts associated with power outages. Older buildings and infrastructure should be evaluated to ensure that extreme cold and freeze will not cause negative impacts. Future development considerations should be ongoing and proactive. Ensuring that comprehensive land use planning is conducted, regulatory requirements such as building codes are followed, and varying needs for different demographic groups that reside within the City are considered can help make for a more resilient community.

Severe Weather: Extreme Heat

Likelihood of Future Occurrence–Highly Likely

Vulnerability–Medium

Hazard Profile

According to FEMA, extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and lasts for several weeks. Heat kills by taxing the human body beyond its abilities. In extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature.” Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, those who are sick or overweight, and those that work or recreate outdoors are more likely to experience heat exhaustion or succumb to extreme heat.

In addition to the risks faced by populations in the City, there are risks to the built environment from extreme heat. While extreme heat on its own does not usually affect structures, extreme heat during times of drought can cause wildfire risk to heighten. Extreme heat can lead to interruptions in power, power outages, and when combined with high winds, to Public Safety Power Shutdown (PSPS) events (though rare in Sacramento County and the City), creating significant issues in the City.

Urban Heat Island

Large, urbanized areas can experience higher temperatures, greater pollution and more negative health impacts during hot summer months when compared to more rural communities. This phenomenon is known as an urban heat island. Heat islands are created by a combination of heat-absorptive surfaces (such as dark pavement and roofing), heat-generating activities (such as engines and generators) and the absence of vegetation (which provides evaporative cooling). According to the Sacramento County Air Quality Management District (SCAQMD) and the U.S. Environmental Protection Agency, daytime temperatures in urban areas are on average 1-6°F higher than in rural areas, while nighttime temperatures can be as much as 22°F higher as the heat is gradually released from buildings and pavement. The Urban Heat Island Index, developed by the California Environmental Protection Agency and adapted by SCAQMD), quantifies the extent and severity of urban heat islands for individual cities, including urban heat island interactive maps that show the urban heat island effect for each census tract in and around most urban areas throughout the State. This was shown in Section 4.3.3 of the Base Plan.

Location and Extent

Heat is a regional phenomenon and affects the whole of the City. Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. Heat waves do not strike victims immediately, but rather their cumulative effects slowly affect general and vulnerable populations and communities. Heat waves do not generally cause damage or elicit the immediate response of floods, fires, earthquakes, or other more “typical” disaster scenarios. The City experiences temperatures in excess of 100°F during the summer and fall months. The temperature moves to 105-110°F in rather extreme situations.

The NWS has in place a system to initiate alert procedures (advisories or warnings) when extreme heat is expected to have a significant impact on public safety. The expected severity of the heat determines whether advisories or warnings are issued. The NWS HeatRisk forecast provides a quick view of heat risk potential over the upcoming seven days. The heat risk is portrayed in a numeric (0-4) and color (green/yellow/orange/red/magenta) scale which is similar in approach to the Air Quality Index (AQI) or the UV Index. This can be seen in Section 4.3.3 of the Base Plan.

Past Occurrences

Disaster Declaration History

There have been no federal or state disaster declarations from extreme heat.

NCDC Events

The NCDC data shows 68 extreme heat incidents for Sacramento County since 1993, some of which likely affected the City.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMPs and then those occurring prior to the 2021 LHMP.

Events since 2021 LHMP

Since the adoption of the 2021 Local Hazard Mitigation Plan, the City has experienced several significant heat waves requiring activation of cooling centers. While these events did not result in documented physical damages to City infrastructure, they did require operational adjustments and emergency support to ensure resident safety.

The City opened its cooling center at the Folsom Public Library multiple times due to prolonged periods of high temperatures:

- July 2023 – The Library meeting room operated as a cooling center from July 15–17 during a multi day heat wave.
- September 2022 – The cooling center at the Library was reopened and extended through September 9
- June 2022 – The Library meeting room at 411 Stafford Street was activated as a cooling center.

These activations demonstrate the City’s ongoing vulnerability to extreme heat and that operational impacts accompany these events.

Events prior to 2021

The City noted that no events could be recalled prior to 2021 where damages, deaths, or injuries occurred.

Climate Change and Extreme Heat

The 2024 CAS, citing a California Energy Commission study, states that “over the past 15 years, heat waves have claimed more lives in California than all other declared disaster events combined.” This study shows that California is getting warmer, leading to an increased frequency, magnitude, and duration of heat waves. These factors may lead to increased mortality from excessive heat.

As temperatures increase, California and Sacramento County will face increased risk of death from dehydration, heat stroke, heat exhaustion, heart attack, stroke and respiratory distress caused by extreme heat. According to the 2024 CAS, report and the 2023 State of California Hazard Mitigation Plan, by 2100, hotter temperatures are expected throughout the state, with projected increases of 3-5.5°F (under a lower emissions scenario) to 8-10.5°F (under a higher emissions scenario). These changes could lead to an increase in deaths related to extreme heat in Sacramento County and the City.

According to the 2024 CAP, the County has experienced, and is projected to continue experiencing, increases in average annual temperature and extreme heat, which could lead to an array of potential impacts. According to Cal-Adapt, the average annual maximum and minimum temperature across Sacramento County are both projected to rise between 5 and 9 degrees Fahrenheit (°F) from their respective historic averages by the end of the century as a result of climate change.

Vulnerability to Severe Weather: Extreme Heat

Extreme heat is becoming more frequent, intense, longer lasting and geographically widespread. Extreme heat occurs on an annual basis in the County and the City. In recent years, compounded by climate change conditions, summer months continue to get a bit hotter. The whole of the City is at some measure of vulnerability to extreme heat. An assessment of a community’s vulnerability to extreme heat begins with an understanding of local exposure to extreme heat. This is included in the Local Concerns section below followed by a discussion of the City’s Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The elderly and individuals below the poverty level are the most vulnerable to extreme temperatures. Nursing homes and elder care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning is not available. In addition, individuals below the poverty level may be at increased risk to extreme heat if use of air conditioning is not affordable. This is especially true of homeless people and the transient population.

Opening and staffing “Cooling Centers” for multiple days during heat warnings issued by the National Weather Service occur in the City. Concerns are greatest for the elderly who are medically vulnerable during these events and the possibility of evacuation or movement from facilities that may become inoperable due to power loss.

Assets at Risk

Assets at risk from extreme heat include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All populations within the City are vulnerable to extreme heat, but it generally affects people spending large amounts of time outside or without means of cooling indoor structures and other vulnerable populations. During extended periods of high temperatures, extreme heat may overload the demands for electricity to run air conditioners and can present health concerns to individuals. When interruptions in power occur during extreme heat, the risk of heat related illnesses and deaths increases. Extreme heat is a significant concern to vulnerable populations. The unhoused; individuals who exercise or train outdoors; outdoor workers; individuals that lack the resources to afford air conditioning; and the young, old, or medically fragile individuals are generally more susceptible to heat related impacts. In addition to vulnerable populations, pets and livestock are at risk to extreme heat conditions.

Structures

Extreme heat normally does not generally impact structures, but individuals working in structures may be affected during periods of extended heat, especially in structures that might not be equipped with air conditioning or other means of cooling. The City noted that extreme heat has caused interruptions to power in the past. Also depending on the structure, sensitive contents such as IT equipment can be impacted, especially if a power outage occurs.

Critical Facilities and Infrastructure

Depending on their type and function, critical facilities and infrastructure can also be affected by extreme heat. Extreme heat conditions can cause interruptions in power and other operational issues that can lead to system failures. Schools without air conditioning may have to close or operate on a reduced schedule.

Natural, Historic, and Cultural Resources

Natural resource assets, including those located in City parks and open space areas, may be vulnerable during periods of extreme heat. These include turf areas; landscapes, City trees, wildlife and habitat areas, and wetlands and marsh lands. **Recently, trees were lost in areas of the City that were weakened by drought and extreme heat. TRUE IN THE CITY?** Extreme heat may also cause drought-like conditions, contributing to other issues. For example, several weeks of extreme heat increases evapotranspiration and reduces moisture content in vegetation, leading to higher wildfire vulnerability in the region for that time period, even if the rest of the season is relatively moist. Historic and cultural resources are not expected to be affected by extreme heat.

Impacts from Severe Weather: Extreme Heat

The City experiences temperatures in excess of 100°F during the summer and fall months. The temperature moves to 105-110°F in rather extreme situations. During these times, drought conditions may worsen, and

the City may see an increase in dry fuels and tree dieback. Power outage events may occur during these times as well. Health issues are a primary concern with this hazard, especially to vulnerable populations, although economic impacts can also occur.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile section above), changes in population patterns, and changes in land use and development. The influencing effects of these factors on this hazard are discussed further in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for City include the following:

- Climate change is likely to exacerbate future extreme heat conditions and associated impacts and vulnerability of the City. This was discussed in greater detail in the Climate Change and Extreme Heat section of the Hazard Profile above.
- Future population growth should be considered, as having more or less people in a community affects the overall hazard vulnerability to the City. INSERT GROWTH DISCUSSION. Any additional growth in the City would place additional populations at risk to extreme heat. As such, the vulnerability to this hazard is expected to decrease. However, any future low income and the unhoused population are at risk to extreme heat which can put strain on emergency services and shelters. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the nature and intensity of future extreme heat events.
- Land use planning should be proactive to address future hazard conditions. INSERT GROWTH DISCUSSION. City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future extreme heat conditions. Due to adherence to protective building codes, changes in land use and development will likely not increase the impacts and associated vulnerabilities of the City to this hazard.

Future Development

Future development of new buildings in the City will likely not be affected by extreme heat. Extreme heat is more likely to affect vulnerable populations. Vulnerability to extreme heat will increase as the average age of the population shifts. It is encouraged that nursing homes and elder care facilities have emergency plans or backup power to address power failure during times of extreme heat. Low-income residents and unhoused populations are also more vulnerable and should be considered in future growth plans for the City. Cooling centers for these populations should be utilized when necessary. New and existing critical

facilities and infrastructure should also consider adding backup power systems to limit impacts associated with power outages.

Severe Weather: Heavy Rains and Storms

Likelihood of Future Occurrence–Highly Likely

Vulnerability–Medium

Hazard Profile

Storms in the City occur annually and are generally characterized by heavy rain often accompanied by strong winds and sometimes lightning and hail. Approximately 10 percent of the thunderstorms that occur each year in the United States are classified as severe. A thunderstorm is classified as severe when it contains one or more of the following phenomena: hail that is three-quarters of an inch or greater, winds in excess of 50 knots (57.5 mph), or a tornado. Heavy precipitation in the City falls mainly in the fall, winter, and spring months. Wind often accompanies these storms; hail and lightning are rare in the City. In recent years, heavy rain and storms have been compounded by more frequent and higher intensity atmospheric river events. Rain on snow events occurring in the upper elevations can also be significant and contribute to greater downstream runoff and flooding during large storm events.

Location and Extent

Heavy rain events occur on a regional basis. Rains and storms can occur in any location of the City. All portions of the City are at risk to heavy rains and storms. Most of the severe rains occur during the fall, winter, and spring months in the City as discussed below (with problem flooding areas associated with heavy rains and storms shown in Table C-40 in the Flood: Localized Stormwater section). There is no scale by which heavy rains and severe storms are measured. Magnitude of storms is measured often in rainfall and damages. The speed of onset of heavy rains can be short, but accurate weather prediction mechanisms often let the public know of upcoming events. Hail and lightning are rarer in the City and Sacramento County. Duration of severe storms in the City can range from minutes to hours to days. According to the WRCC, average annual precipitation in the County is 18.15 inches per year. Information on precipitation extremes can be found in Section 4.3.4 of the Base Plan.

Past Occurrences

Disaster Declaration History

According to historical hazard data, severe weather, including heavy rains and storms, is an annual occurrence in the City. This contributes to many of the federal disaster declarations related to flooding. Disaster declarations from flooding are shown on Table C-41, many of which likely affected the City.

Table C-41 Sacramento County – State and Federal Disaster Declarations from Flood (Heavy Rain and Storms) 1950-2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Flood (including heavy rains and storms)	26	1950, 1955, 1958 (twice), 1963, 1969, 1982 (twice), 1983, 1986, 1995 (twice), 1996, 1997, 1998, 2008, 2017 (three times), 2022*, 2023 (three), 2024 (twice)	18	1955, 1958, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 1998, 2006, 2017 (three times), 2023 (three times)*, 2024*

Source: Cal OES, FEMA

NCDC Events

The NCDC data recorded 9 hail, 29 heavy rain, 1 lightning, and 2 winter storm weather incidents for Sacramento County since 1950 which likely affected the City. Winter weather events tend to be rain in the County and the City.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMPs and then those occurring prior to the 2021 LHMP.

Events since 2021 LHMP

The City noted that heavy rains and storms are an annual occurrence. Other events causing issues are listed in the Past Occurrences section of the Flood: 1%/0.2% Annual Chance and Flood: Localized Stormwater Flooding discussions above.

Events prior to 2021

The storms in **February 1986** caused the Folsom dam to exceed its design capacity. Heavy rains affected Sacramento County and the other areas of the American River drainage basin. Rainfalls of up to 29" fell between February 11 and 20. The Folsom Dam did not fail, but Folsom Lake was 1.56 ft into surcharge storage, holding 18,200 acre-feet more than design capability. Dam improvements since 1986 have increased the capacity of the dam.

Climate Change and Heavy Rains and Storms

It is likely that climate change will increase the chance of future occurrence as well as future impacts from heavy rains and storms. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

According to the 2024 CAS, while average annual rainfall may increase or decrease slightly, the intensity of individual rainfall events is likely to increase during the 21st century. It is unlikely that hail will become more common in Sacramento County and the City of Folsom. The amount of lightning is not projected to change.

Cal-Adapt noted that, on average, the projections show little change in total annual precipitation in California. Furthermore, among several models, precipitation projections do not show a consistent trend during the next century. Cal-Adapt modeled scenarios are shown in Section 4.3.4 of the Base Plan.

According to the 2024 CAP, the County is projected to experience a steady increase in average annual precipitation through the end of the century, with much of that precipitation likely to occur during extreme precipitation events, which can lead to flood impacts. According to Cal-Adapt, the historic average annual precipitation in Sacramento County is 18.3 inches, and the historic average annual number of extreme precipitation events is four. As shown in Section 4.3.4 of the Base Plan, the average annual precipitation across the County may rise upwards of 22 inches, with the number of extreme precipitation events potentially exceeding 7 per year by the end of the century, depending on the level of current and future GHG emissions.

Vulnerability to Heavy Rain and Storms

Heavy rain and severe storms are the most frequent type of severe weather occurrences in the City. These events can cause both significant and localized flooding. Flooding can be worse during times where the ground is already saturated. Wind often accompanies these storms and has caused damage in the past. Hail and lightning are rare in the City, but also can cause damage, with lightning occasionally igniting wildfires.

The whole of the City is at some measure of vulnerability to heavy rain and storms. An assessment of a community's vulnerability to heavy rains and storms begins with an understanding of local exposure to heavy rain and storms. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The City noted that a primary concern with heavy rains and storms is the localized flooding they cause in the City. The problem areas are shown on Table C-40 above.

Problems associated with the primary effects of severe weather include flooding, pavement deterioration, washouts, high water crossings, landslide/mudslides, debris flows, and downed trees. Most of the localized flooding in the City is generally limited to flooding within the street ROW and only has limited impact to private property. It is anticipated that a 100-year rainfall event would impact private facilities to varying degrees in various parts of the City.

Assets at Risk

Assets at risk from heavy rain and storms include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All populations (including vulnerable populations) in the City have some measure of risk to heavy rains and storms. Those populations that work or recreate outside and unhoused individuals are more vulnerable to impacts from heavy storm events. Heavy rains and storms occur every year and do not generally cause significant adverse impacts to individuals; it is the secondary hazard, flooding, which poses the biggest impact to people. Populations at risk to flooding resulting from heavy rains and storm events include those who live in floodplains (discussed in further detail in the Flood: 1%/0.2% Annual Chance section above) and those who live in and near localized flooding areas (discussed in further detail in the Flood: Localized Stormwater Flooding section above).

Structures

Structures in the City have some risk to heavy rains and storms. Structures built to modern building codes are built to withstand heavy rains and storms (including high winds and lightning). During a heavy storm, localized flooding may cause water intrusion into buildings from the outside. Trees can be downed causing impacts to structures. Older homes and buildings may be at increased risk to heavy rains and storms. Power outages during severe storm events can occur, impacting the use of structures until the power is back online.

Critical Facilities and Infrastructure

Heavy rain and storms can affect critical facilities and infrastructure during large events. Power outages may occur taking facilities offline. High winds can down power lines and trees impacting facilities. Water intrusion into facilities and infrastructure, such as water and wastewater facilities, can impact operations. City roads, streets, and bridges can be impacted resulting in closures restricting traffic flow in the City. In certain areas, large storms can cause erosion and localized landslides which can impact facilities. Many critical facilities are built to modern design standards that take heavy rains and storms into account when siting and building these structures, and others may need to be retrofitted to better withstand these events.

Natural, Historic, and Cultural Resources

Large rain and storm events and associated flooding can affect natural, historic, and cultural resources. Silt and sediment can damage natural areas. Trees can be uprooted and downed by high winds. Extended periods of rainfall can erode natural banks along waterways and degrade soil stability for terrestrial species. While some natural systems can be adversely impacted during these large storms, heavy rain events can also provide benefits. Groundwater and wetland areas can be recharged and water supplies replenished. Historic and cultural resources may also be affected. Generally, the impacts are associated with damage to structures affected by large storm events, but other cultural resources such as those associated with Native Americans and old tribal areas can also be disturbed, damaged, and lost during extreme rain and storm and events.

Impacts from Heavy Rain and Storms

Impacts from heavy rains and storms include damage to property, critical facilities and infrastructure, and the natural landscape. This includes: erosion; downed trees; damaged utility structures and infrastructure; power outages; road damage and blockages; and even lightning strikes to critical infrastructure and people.

Lightning can also cause wildfires and urban fires to occur. Landsliding and erosion occur when the soil on slopes becomes oversaturated and fails. Climate change may cause these impacts to worsen.

Actual damage associated with the primary effects of severe storms and heavy rains has been somewhat limited. It is the secondary hazards caused by these severe weather events, such as floods, landslides, and erosion that would likely have the greatest impact.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile section above), changes in population patterns, and changes in land use and development. The influencing effects of these factors on this hazard are discussed further in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City include the following:

- Climate change is likely to exacerbate future heavy rain and storm conditions and associated impacts and vulnerability of the City to flooding. This was discussed in greater detail in the Climate Change and Heavy Rains and Storms section of the Hazard Profile above.
- The City is expected to see slow and steady growth. The City has X areas where growth is expected over the next five years. Certain vulnerable populations, such as the those who work or spend extended periods outdoors, could experience disproportional effects from this hazard. and should be addressed as the City continues to grow. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the nature and intensity of future storm events.
- Land use planning should be proactive to address future hazard conditions. The City has X areas where growth is expected over the next five years. Changes in land use in these and other future areas may also amplify the impacts of heavy rains and storms, as additional impervious surfaces can cause additional runoff and localized flooding throughout the City. However, changes in land use and future development may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the nature and intensity of future storm events.

Future Development

Building codes in the City ensure that new development is built to current building standards, which should reduce the risk to future development in the City from heavy rains and storms. New critical facilities such should be built to withstand heavy rains, hail damage, lightning, and thunderstorm winds. New and existing critical facilities and infrastructure should also consider adding backup power systems to limit impacts

associated with power outages. With adherence to development standards, future losses to new development should be minimized. Changes in land use may also amplify the impacts of heavy rains and storms, as additional impervious surfaces can cause additional runoff and localized flooding throughout the City.

Severe Weather: High Winds and Tornado

Likelihood of Future Occurrence–Likely
Vulnerability–Medium

Hazard Profile

High winds, as defined by the NWS glossary, are sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration. High winds can cause significant property damage, threaten public safety, and have adverse economic impacts from business closures and power loss. High winds, when combined with high temperatures and low humidity can also lead to PSPS events (though rare in Sacramento County and the City). Winds can also drive fires in and near the City.

Tornadoes are rotating columns of air marked by a funnel-shaped downward extension of a cumulonimbus cloud whirling at destructive speeds of up to 300 mph, usually accompanying a thunderstorm. Tornadoes form when cool, dry air sits on top of warm, moist air. Tornadoes are the most powerful storms that exist. Tornadoes, though rare, can affect areas of the City, primarily during the rainy season in the late fall, winter, and early spring.

Location and Extent

The entire City is subject to significant, non-tornadic (straight-line), winds. Each area of the City is at risk to high winds. Magnitude of winds is measured often in speed and damages. These events are often part of a heavy rain and storm event but can occur outside of storms. The speed of onset of winds can be short, but accurate weather prediction mechanisms often let the public know of upcoming events. Duration of winds in California is often short, ranging from minutes to hours. The Beaufort scale is an empirical 12 category scale that relates wind speed to observed conditions at sea or on land. Its full name is the Beaufort Wind Force Scale. The Beaufort Scale was shown in Section 4.3.5 of the Base Plan.

Tornadoes, while rare, can occur at any location in the City. Prior to February 1, 2007, tornado intensity was measured by the Fujita (F) scale. This scale was revised and is now the Enhanced Fujita scale. Both scales are sets of wind estimates (not measurements) based on damage. The new scale (EF) provides more damage indicators (28) and associated degrees of damage, allowing for more detailed analysis and better correlation between damage and wind speed. It is also more precise because it considers the materials affected and the construction of structures damaged by a tornado. The F Scale and EF Scale are shown in Section 4.3.5 of the Base Plan.

Past Occurrences

Disaster Declarations

There have been no federal or state disaster declarations in the County for winds and tornadoes.

NCDC Events

The NCDC data recorded 109 high wind, 7 funnel clouds, and 15 tornado incidents for Sacramento County since 1950. Many of these wind events likely affected the City.

City of Folsom Past Occurrences

There has been no federal or state disaster declarations in the County for winds and tornadoes. The City noted that high winds is a regional phenomenon and affects the City on an annual basis. Those past occurrences were shown in the Base Plan in Section 4.3.5.

Climate Change and High Winds and Tornado

According to the 2024 CAS, while average annual rainfall may increase or decrease slightly, the intensity of individual thunderstorm events is likely to increase during the 21st century. This may bring stronger thunderstorm winds. The CAS does not discuss non-thunderstorm winds or tornadoes.

Vulnerability to Severe Weather: High Wind and Tornadoes

The City is subject to potentially destructive high winds and tornadoes. High winds are common throughout the area and can happen during most times of the entire year and outside of a severe storm event. Tornadoes are rare. High winds and tornadoes can be a significant public safety and economic concern. The whole of the City is at some measure of vulnerability to wind and tornadoes.

An assessment of a community's vulnerability to high winds begins with an understanding of local exposure to wind and tornadoes. This is included in the Local Concerns section below followed by a discussion of the City's Assets at Risk to this hazard.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

The City's greatest concern is from downed trees, impacts to overhead power lines, and loss of power to residents. The City is also concerned with downed trees on transportation routes, as well as critical facilities.

Assets at Risk

Assets at risk from winds and tornadoes include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All populations are at some vulnerability to high winds and tornadoes. Certain vulnerable populations are at the greatest risk to the effects of high winds and tornadoes. These include:

- The unsheltered.
- Citizens who reside in mobile homes.
- Citizens in buildings with no tornado shelter or below ground floors.
- The medically fragile experiencing power outages as a result of wind events.
- Those working or caught outdoors during a wind or tornado event.

Structures

All structures in the City have some measure of risk from high wind and tornadoes. Though rare, a tornado could cause damage to virtually all facilities in the tornado touchdown path. This would affect homes, businesses, commercial property, as well as government and critical facilities. During a wind or tornado event, power lines in the City can be damaged by falling trees caused by wind. Power outages can occur during high wind events. High winds can contribute to PSPS events being declared. High winds and tornadoes could cause sparks from electric wires and other sources, which could lead to wildfire ignition. Once ignited, high winds can also cause wildfires to rapidly spread and become out of control. High wind conditions can cause wildfires to move into more urban areas destroying structures and whole subdivisions, as seen in recent wildfire events in the West.

Critical Facilities and Infrastructure

Though most critical facilities are built to withstand winds, high wind speeds can still cause damage to critical facilities and infrastructure in the City. Though rare, a tornado could cause damage to virtually all facilities in the tornado touchdown path. Winds can cause power outages affecting system operations. Winds can also lead to out of control wildfires, which can damage critical facilities and impact their abilities to perform their critical roles in the community.

Natural, Historic, and Cultural Resources

Natural resources, such as trees, are vulnerable to winds. Increased levee and streambank erosion can occur during periods of high water and high winds. High wave action during significant wind events can impact marsh lands and habitat areas. Soil erosion can also occur during high winds. Most all natural, historic, or cultural resources are at risk to tornadoes. Tornadoes can tear apart habitats, causing fragmentation across ecosystems and can damage and destroy historic structures and cultural resources.

Impacts from Severe Weather: High Wind and Tornado

Wind and tornadoes can cause damage to property and loss of life. While most tornado damage is caused by violent winds, the majority of injuries and deaths generally result from flying debris. Property damage can include damage to buildings, fallen trees, and power lines. Local industries may also be damaged or destroyed. Access roads and streets may be blocked by debris, delaying necessary emergency response. Winds can push automobiles off roads, damage roofs and structures, cause power outages, and cause secondary damage due to flying debris and hazardous trees. High winds can also contribute to the spread and intensity of wildfires. High winds during periods of high water can cause impacts to levees and streambanks from accelerated erosion. Climate change may affect this hazard and cause winds to increase in velocity and more tornadoes to affect the City.

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile section above), changes in population patterns, and changes in land use and development. The influencing effects of these factors on this hazard are discussed further in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City include the following:

- Climate change is likely to exacerbate future wind conditions and associated impacts and vulnerability of the City. Climate change is not likely to affect future tornado conditions. This was discussed in greater detail in the Climate Change and Winds and Tornadoes section of the Hazard Profile above.
- Future population growth should be considered as having more or less people in a community affects the overall hazard vulnerability to the City. The City is expected to see slow and steady growth. INSERT GROWTH DISCUSSION. Vulnerable populations could experience disproportional effects from this hazard and should be planned for as development of the City continues. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth, the location, nature and extent of future high wind and tornado events, and continued planning for future hazard conditions.
- Land use planning should be proactive to address future hazard conditions. INSERT GROWTH DISCUSSION. Building codes in the City ensure that new development is built to current building standards to withstand high winds, which should reduce the risk to future development in the City from high winds and tornadoes. With adherence to development standards, future losses to new development should be minimal. Changes in land use and increased development may amplify the impacts of high winds and tornadoes, as additional structures in the City increase the number of buildings at risk to high winds and tornadoes; however, given the limited development planned in the next five years, any increase in vulnerability of the City should be limited.

Future Development

Future development considerations should be ongoing and proactive. Ensuring that comprehensive land use planning is conducted, regulatory requirements, such as building codes, are followed, and varying needs for different demographic groups with intersecting identities that reside within the City are considered can help make for a more resilient community. The City enforces the state building codes which includes standards for new development to minimize damage from windstorms. New and existing critical facilities and infrastructure should also consider adding backup power systems to limit impacts associated with power outages.

Wildfire (with smoke and air quality)

Likelihood of Future Occurrence—Likely

Vulnerability—High

Hazard Profile

Wildland fire and the risk of a conflagration is an ongoing concern for the City of Folsom. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of fire regimes. Wildland fires affect grass, forest, and brushlands, as well as structures. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern.

Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These weather conditions can result in red flag (e.g., fire weather) days, and while rare, may result in PSPS events in the City. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urbanized areas. There is also the concern of wildfires occurring in these more remote, forested areas that under certain weather conditions, can extend into areas not generally considered at a high risk to wildfire. Smoke and air quality also become an issue, both from fires occurring inside and outside of the Sacramento County Planning Area and the City.

Wildfire Smoke and Air Quality

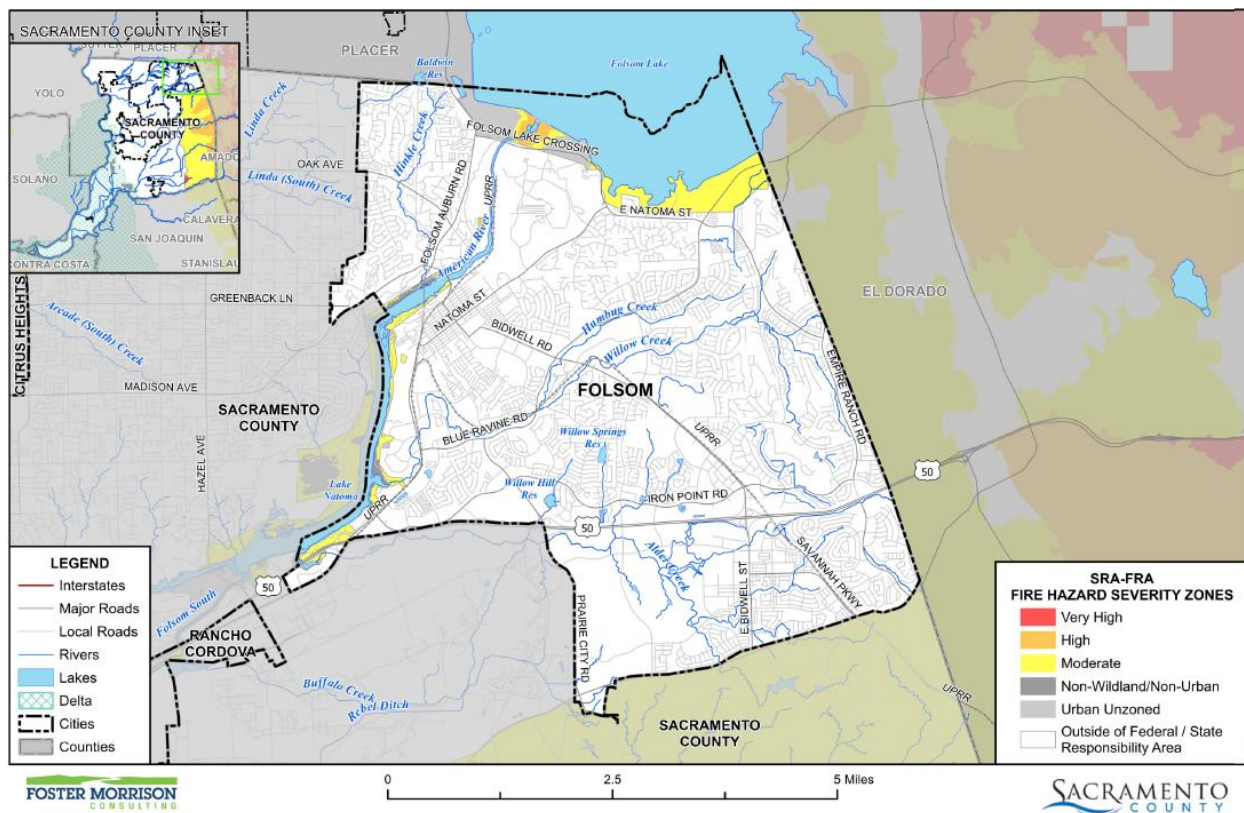
Smoke from wildfires is made up of gas and particulate matter, which can be easily observed in the air. Air quality standards have been established to protect human health with the pollutant referred to as PM_{2.5} which consists of particles 2.5 microns or less in diameter. These smaller sizes of particles are responsible for adverse health effects because of their ability to reach the lower regions of the respiratory tract.

Wildfire smoke can have negative effects to those who live in or near a fire burn area. Smoke and air pollution from wildfires can be a severe health hazard. Significant wildfires occurring in both Sacramento County and nearby northern California communities since the 2021 LHMP Update have created significant air pollution affecting area residents. These were discussed in Section 4.3.17 of the Base Plan.

Location and Extent

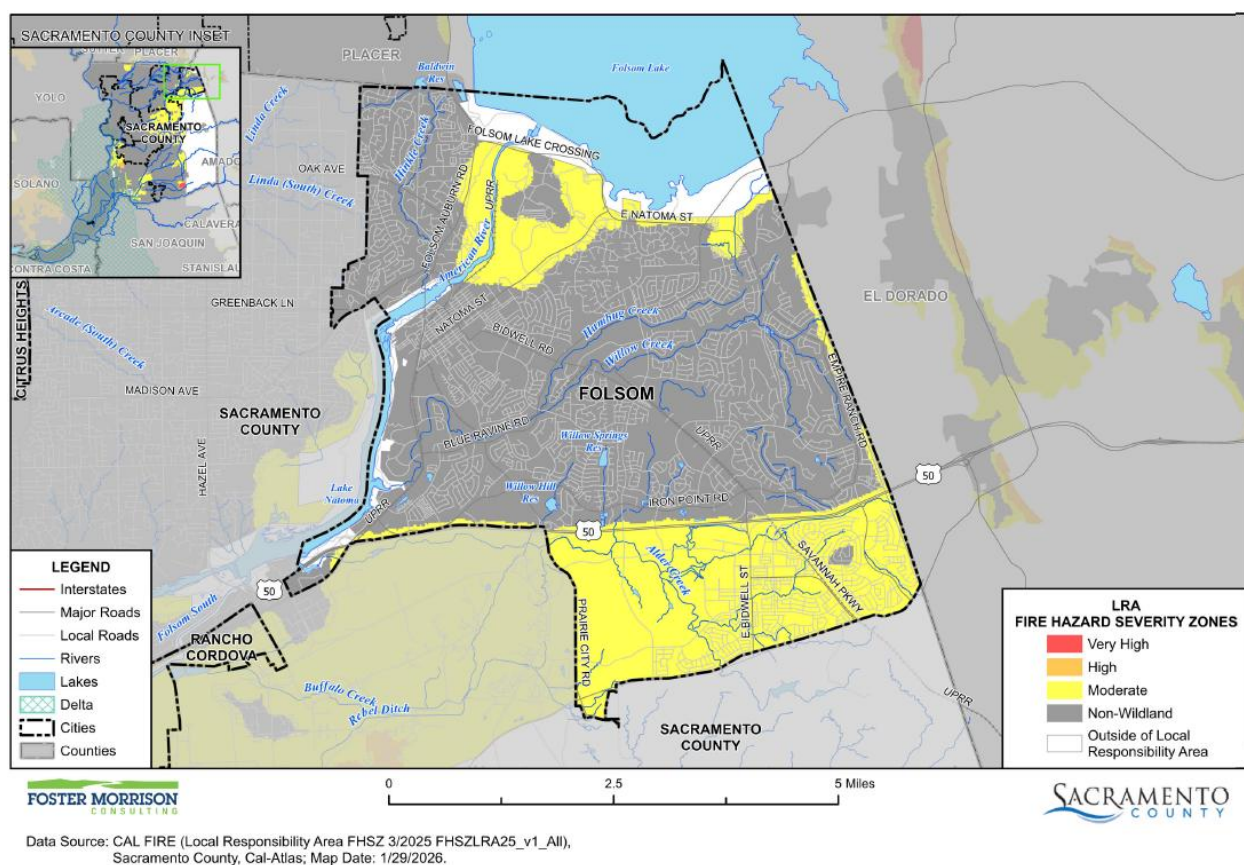
Wildfire can affect all areas of the City. CAL FIRE has estimated that the risk varies across the City and has created updated wildfire maps showing risk variance across the City and the Sacramento County Planning Area. Following the methodology described in Section 4.3.15 of the Base Plan, wildfire maps for the City of Folsom were created. Figure C-28 shows the CAL FIRE State Responsibility Areas (SRA) and Federal Responsibility Areas (FRA) and their associated Fire Hazard Severity Zones (FHSZ) in the City. Figure C-29 shows the CAL FIRE Local Responsibility Areas (LRA) and their associated Fire Hazard Severity Zones (FHSZ) in the City. As shown on the maps, FHSZs in the City vary from Non-Wildland to High.

Figure C-28 City of Folsom – CAL FIRE SRA/FRA Fire Hazard Severity Zones



Data Source: CAL FIRE (State Responsibility Area: FHSZSRA_23_3) April 2024,
CAL FIRE (Federal Responsibility Area: Draft c20fhszl06_1), September 2007,
Sacramento County, Cal-Atlas; Map Date: 1/29/2026.

Figure C-29 City of Folsom – CAL FIRE LRA Fire Hazard Severity Zones



Wildfires tend to be measured in structure damages, injuries, and loss of life as well as acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time or may have durations lasting for a week or more. Geographical FHSZ extents in the SRA/FRA are shown in Table C-42, while extents in the LRA are shown in Table C-43. As shown, the City sits partially inside of the SRA/FRA and mostly inside the LRA. FHSZs in the City vary from Non-Wildland to High.

Table C-42 City of Folsom – CAL FIRE SRA/FRA Fire Hazard Severity Zone Geographical Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	0	0%	0	0%	0	0%
High	71	0.5%	0	0%	71	1%
Moderate	535	3%	1	0.01%	534	6%
Non-Wildland/Non-Urban	97	1%	0	0%	97	1%
Urban Unzoned	207	1%	0.04	0%	207	2%

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Outside of Federal / State Responsibility Area	14,625	94%	7,131	100%	7,494	89%
Total	15,535	100%	7,132	100%	8,403	100%

Source: CAL FIRE

Table C-43 City of Folsom – CAL FIRE LRA Fire Hazard Severity Zone Geographical Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	0	0%	0	0%	0	0%
High	0	0%	0	0%	0	0%
Moderate	4,768	31%	946	13%	3,822	45%
Non-Wildland	9,857	63%	6,185	86%	3,672	43%
Outside of Local Responsibility Area	987	6%	26	0.4%	961	11%
Total	15,612	100%	7,157	100%	8,455	100%

Source: CAL FIRE

In addition to the CAL FIRE mapping, the City has many areas that are susceptible to small fires that could grow into some form and size of urban interface fire. These areas can be divided into four main areas: the American River/Lake Natoma corridor, the various parkways and easements, natural areas involving wetlands and dredger tailings, and open fields and rangelands.

American River/Lake Natoma Corridor

The American River flows from the base of Folsom Dam into the Lake Natoma Recreation area. The property adjacent to the river is owned by the State of California, maintained by the State of California Parks and Recreation Department. The area is mostly natural habitat accessed through limited roadways, a bicycle/horse trail and numerous footpaths. These means of ingress provide access to remote areas in which fires can begin and access for fire equipment is difficult.

The area upstream from the Rainbow Bridge is mostly rough and steep terrain with very limited access. This creates an opportunity for fires to grow at a rapid rate and gain momentum while continuing to burn towards the residential structures that are scattered about the edge of the beltway. The natural growth, type of construction, and roofing materials provide ample opportunity for fire to spread into residential areas. Negro Bar, Folsom Powerhouse, and Willow Creek Recreation areas are downstream of the bridge. At the west end of Negro Bar are bluffs that are 300 feet high in some locations.

Adjacent to the Negro Bar area is the bluff area on Greenback Lane and an area known as the Orangevale cut. Both of these locations have very steep terrain with dry, flashy, rapid burning fuels. They directly interface with residential and multi-family structures with wood shake roofs. These areas have occasional fires throughout the fire season and require continuous monitoring and aggressive fire suppression activities to prevent a catastrophic event from occurring.

Parkways & Easements

Throughout the City, there exist numerous un-maintained alleyways, easements, and rights-of-way. In many locations, these provide easy access to residential structures or other types of vegetation, which could increase the likelihood that a fire may rapidly spread beyond the capabilities of responding units. Areas of concern include the Hinkle Creek, Willow Creek, Humbug Creek and Blue Ravine Parkway beltways.

Natural Areas, Wetlands, and Dredger Tailings

Continuous development of the City has created many landlocked areas, mandatory wetland areas and the preservation of pre-existing dredger tailings. Areas of this nature tend to be surrounded by residential developments and are difficult to access. Their proximity to development provides an opportunity for ideal fire conditions to spread fire via flying brands and consumption of small stands of trees.

Open Fields and Rangelands

The east areas of Folsom provide the greatest opportunity for a large-scale fire to start and spread uncontrollably into developed areas or into the foothills of El Dorado Hills. This undeveloped area is considered a LRA because it is within the City limits. The land south of U.S. 50 is within the SRA and a fire in this area, pushed by a southerly or westerly wind, could severely impact the City of Folsom. This LRA is also classified as a Mutual Threat Zone by the California Department of Forestry and Fire Protection, thereby requiring their fire response due to the potential of a major fire. The hilly, rocky terrain with its numerous rock outcroppings around developed areas and along the Sacramento/El Dorado County line makes it very difficult to contain a fire before it rapidly grows and threatens structures. This portion of the City is also where numerous transmission towers and repeater antennas are located on the ridge tops. They can be both a source of ignition for a wildland fire and an exposure from a fire starting in lowlands.

Past Occurrences

Disaster Declaration History

There has been four state and three federal disaster declarations due to fire, as shown in Table C-44.

Table C-44 Sacramento County – State and Federal Wildfire Disaster Declarations 1950-2025

Disaster Type	State Declarations		Federal Declarations	
	Count	Years	Count	Years
Fire	4	1973, 2020 (twice), 2024	3	2020 (twice), 2025

Source: Cal OES, FEMA

NCDC Events

The NCDC has tracked 15 wildfire events in the County dating back to 1993.

City of Folsom Events

These sections first show historic hazard events occurring since the 2021 LHMPs and then those occurring prior to the 2021 LHMP.

Events since 2021 LHMP

There is no history of large wildfires near the City of Folsom (the closest occurrence being the 2014 King Fire in the City of Pollock Pines located in the neighboring El Dorado County). Although there have been many fires in the wildland areas of the City since 2021, they have all been relatively small (smaller than 20 acres.) This is largely due to our focus on providing a quick, aggressive fire attack, maintaining access points to known wildland areas, and an abundance of firefighting resources, both from the Folsom Fire Department and through automatic and mutual aid agreements with surrounding fire departments.

Events prior to 2021

Smoke from the Lightning Complex fires (August 2020) blanketed Folsom and the surrounding areas resulting in a very unhealthy to a hazardous air quality index. The Fire Department was able to distribute N95 masks to City workers who were performing required duties outside. Opened “clean air” centers for community members to take shelter at.

Climate Change and Wildfire

It is likely that climate change will increase the chance of future occurrence as well as future impacts from wildfire. More information on future impacts to the City can be found in the Future Conditions/Future Development section of the Vulnerability Assessment below.

Warmer temperatures can exacerbate drought conditions. Drought often kills plants and trees, which serve as fuel for wildfires. Warmer temperatures could increase the number of wildfires and pest outbreaks, such as the western pine beetle. Cal-Adapt’s wildfire tool predicts the potential increase in the amount of burned areas for the year 2090-2099, as compared to recent (2010) conditions. This is shown in Section 4.3.17 of the Base Plan. Based on this model, Cal-Adapt predicts that wildfire risk in Sacramento County will increase moderately at the end of the century. However, wildfire models can vary depending on the parameters used. Cal-Adapt does not take landscape and fuel sources into account in their model. In all likelihood, in the Sacramento County Planning Area, precipitation patterns, high levels of heat, topography, and fuel load will determine the frequency and intensity of future wildfires.

The 2024 CAP noted issues with climate change and wildfire. Historically, attention to wildfire in California has mostly focused on the Sierra Nevada region and Southern California, but recent large and destructive wildfires in other portions of the state have rapidly shifted attention to the ongoing risks statewide. Climate change is exacerbating many of the factors that contribute to wildfire risk. Increased variability in precipitation may lead to wetter winters and increased vegetative growth in the spring.

Potentially longer and hotter summer periods will lead to the drying of vegetative growth, which may ultimately result in a greater amount of fuel for wildfire ignition and spread.

The 2026 American, Bear, and Cosumnes Watersheds Resilience Plan noted that a key driver of climate vulnerability, adaptive capacity, and implementation readiness in the watershed group is wildfire. An equity analysis was performed as part of this Plan. An Equity Analysis Technical Appendix demonstrates how social vulnerability aligns with the physical hazard environment across the watershed. It noted that wildfire exposure grows sharply under mid-century climate conditions, with the population exposed to high burn probability increasing from 14% today to 34% in the future, and the number of people in the highest sensitivity category increasing five-fold.

Vulnerability to Wildfire

Risk and vulnerability to the City from wildfire, and the potential for a conflagration, is of significant concern. Wildfires in the City, can occur from a variety of both natural and manmade causes. The City can be affected both by fires that start on or near City lands as well as those that start elsewhere and move into the City. In addition to burning large areas of land, air quality can be affected in the City by smoke from fires occurring inside the City as well as those from many miles away. As growth continues and populations increase in the City, the potential for wildfires will also increase.

The whole of the City is at some measure of vulnerability to wildfire. An assessment of a community's vulnerability to wildfire begins with an understanding of local exposure to wildfire. This is included in the Local Concerns section below. After that section, assets at risk are discussed.

Local Concerns

The City has specific concerns and unique vulnerabilities regarding this hazard. These concerns form a portion of the basis for the mitigation strategy and mitigation actions that seek to reduce risk and vulnerability to this hazard.

With any wildland fire, the primary concerns are for life safety, property and infrastructure protection, and the long-term health of the environment and community. The City of Folsom has a significant amount of open area built into the community design. Areas within the city designated as greenbelt, natural preservation areas, wetlands, parks, bike trails, recreation areas etc. are all undeveloped land. These undeveloped areas provide a great balance of development, and open natural space, however, they present an opportunity for wildland fire ignitions that can grow rapidly near homes, businesses, and infrastructure. These areas also present opportunities for the unhoused to establish camps that are hidden from public view. These camps present more opportunities for ignition sources.

The City has many areas that are susceptible to small fires that could grow into some form and size of urban interface fire. These areas can be divided into four main areas: the American River/Lake Natoma corridor, the various parkways and easements, natural areas involving wetlands and dredger tailings, and open fields and rangelands. These were discussed above in the Location and Extent section.

Depending on atmospheric conditions, wildfires from southern and northern California, as well as those in our local foothills and mountains can negatively impact air quality in the City. The Sacramento Air Quality

Management District monitors impacts to air quality from wildfires. The District provides alerts when air quality reaches unhealthy levels and provides suggestions to stay safe. Some recommendations include staying inside/limiting outdoor activity when the air is unhealthy, wearing N95 masks to go outside during poor air quality conditions, and using CARB-certified air cleaners and/or MERV 13+ air filters in the home/workplace to keep indoor air quality safe. According to the EPA, Wildfire smoke exposure is a known source for various medical problems including eye irritation, reduced lung function, coughing, aggravation of certain chronic conditions, heart failure, stroke, wheezing, and difficulty breathing. Additionally, wildfire smoke exposure can cause increased health problems among those who are pregnant, children, the elderly, and those who have certain chronic conditions including but not limited to COPD, asthma, and heart disease.

As recently seen in other more urban areas of the West, the risk of conflagration is an increasing concern in the City, with structures adding to the fuel source feeding and spreading wildfires.

Assets at Risk

Assets at risk from wildfire include people and populations; structures; critical facilities and infrastructure; and natural, historic, and cultural resources. These are discussed in the following sections.

People and Populations

All populations are vulnerable to wildfire. Certain vulnerable populations are at greater risk to the effects of wildfire as well as smoke and air quality issues that wildfires bring. Vulnerable populations include:

- Unhoused
- Infants and children under age five and their caregivers
- Seniors (65 and older)
- Individuals with disabilities
- Individuals' dependent on medical equipment
- Individuals who exercise, recreate, or work outdoors
- Individuals with impaired mobility

To further evaluate the impact to the residential populations within the City, the CAL FIRE FHSZ dataset was overlaid on the parcel layer. Those residential parcels that intersect the FHSZs were counted and multiplied by the 2023 Census Bureau average household factors for the City of Folsom – 2.64. According to this analysis, there is a total population of 3 residents falling within the moderate or higher SRA/FRA FHSZ mapping and 14,560 residents of the City of Folsom falling within the moderate or higher LRA FHSZ. This is shown in Table C-45 and Table C-46, respectively.

Table C-45 City of Folsom – Improved Residential Parcels and Population by CAL FIRE SRA/FRA Fire Hazard Severity Zone

Jurisdiction	Very High		High		Moderate	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Folsom	0	0	0	0	1	3

Source: CAL FIRE, 2025 Sacramento County Parcel/Assessor Data, 2020 US Census Bureau Average Household Size – City of Folsom (2.64)

Table C-46 City of Folsom – Improved Residential Parcels and Population by CAL FIRE LRA Fire Hazard Severity Zone

Jurisdiction	Very High		High		Moderate	
	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Folsom	0	0	0	0	5,514	14,557

Source: CAL FIRE, 2025 Sacramento County Parcel/Assessor Data, 2020 US Census Bureau Average Household Size –City of Folsom (2.64)

The City noted that the Critical Facilities and Infrastructure section below includes the facilities used by At-Risk populations that are threatened by this hazard. While this is not specific to what special populations reside in the City, it does speak to facilities that are used to serve (portions) of this population.

Structures

All structures in the City have some risk to wildfire. GIS was used to determine the possible impacts of wildfire within the City of Folsom. The methodology described in Section 4.3.15 of the Base Plan was followed in determining structures and values at risk in both the CAL FIRE’s SRA/FRA and LRA Fire Hazard Severity Zone layers. Analysis results for the SRA/FRA in the City of Folsom are shown in Table C-47. Analysis results for the LRA in the City of Folsom are shown in Table C-48, which summarizes total parcel counts, improved parcel counts and their structure values by FHSZs.

Table C-47 City of Folsom – Count and Value of Parcels and Structures by CAL FIRE SRA/FRA Fire Hazard Severity Zone by Property Use

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
High	4	0	\$0	\$0	\$0	\$0
Moderate	24	1	\$318,391	\$732,233	\$366,117	\$1,416,741
Outside of Federal / State Responsibility Area	30,086	27,121	\$5,949,184,593	\$15,867,390,932	\$9,457,468,789	\$31,274,044,314
Folsom Total	30,114	27,122	\$5,949,502,984	\$15,868,123,165	\$9,457,834,905	\$31,275,461,054

Source: CAL FIRE, Sacramento County 2025 Parcel/Assessor Data

Table C-48 City of Folsom – Count and Value of Parcels and Structures by CAL FIRE LRA Fire Hazard Severity Zone by Property Use

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Structure Value	Estimated Contents Value	Total Value
Moderate	7,004	5,611	\$1,608,444,827	\$4,194,396,107	\$2,544,644,565	\$8,347,485,499
Non-Wildland	23,082	21,510	\$4,340,739,766	\$11,672,994,825	\$6,912,824,224	\$22,926,558,815
Outside of Local Responsibility Area	28	1	\$318,391	\$732,233	\$366,117	\$1,416,741
Folsom Total	30,114	27,122	\$5,949,502,984	\$15,868,123,165	\$9,457,834,905	\$31,275,461,054

Source: CAL FIRE, Sacramento County 2025 Parcel/Assessor Data

Critical Facilities and Infrastructure

Wildfire presents a threat to critical facilities and infrastructure. The following analysis discusses critical facilities and infrastructure. A separate analysis was performed on the critical facility inventory in the City to determine which critical facilities fall into each fire hazard severity zone. Using GIS, the SRA/FRA and LRA fire hazard severity zone layers were overlayed on the critical facility GIS layer. This is shown on Figure C-30 for the SRA/FRA fire hazard severity zones. Table C-49 details which critical facilities fall in which SRA/FRA fire hazard severity zone. This is shown on Figure C-31 for the LRA fire hazard severity zones. Table C-50 details which critical facilities fall in which LRA fire hazard severity zone. In the SRA/FRA, 3 critical facilities fall in the High FHSZ and 1 critical facility falls in the Moderate FHSZ. In the LRA, 29 critical facilities fall in the Moderate FHSZ.

Figure C-30 City of Folsom – Critical Facilities in SRA/FRA Fire Hazard Severity Zones

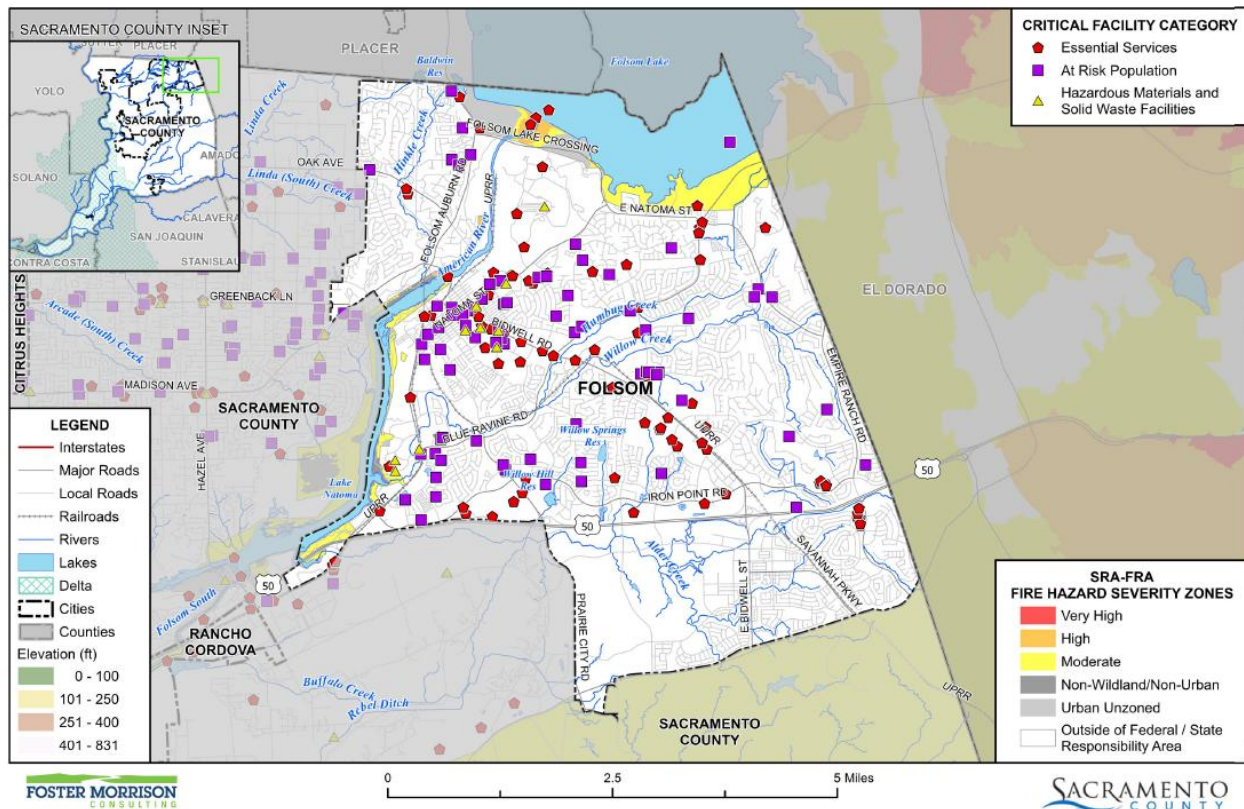


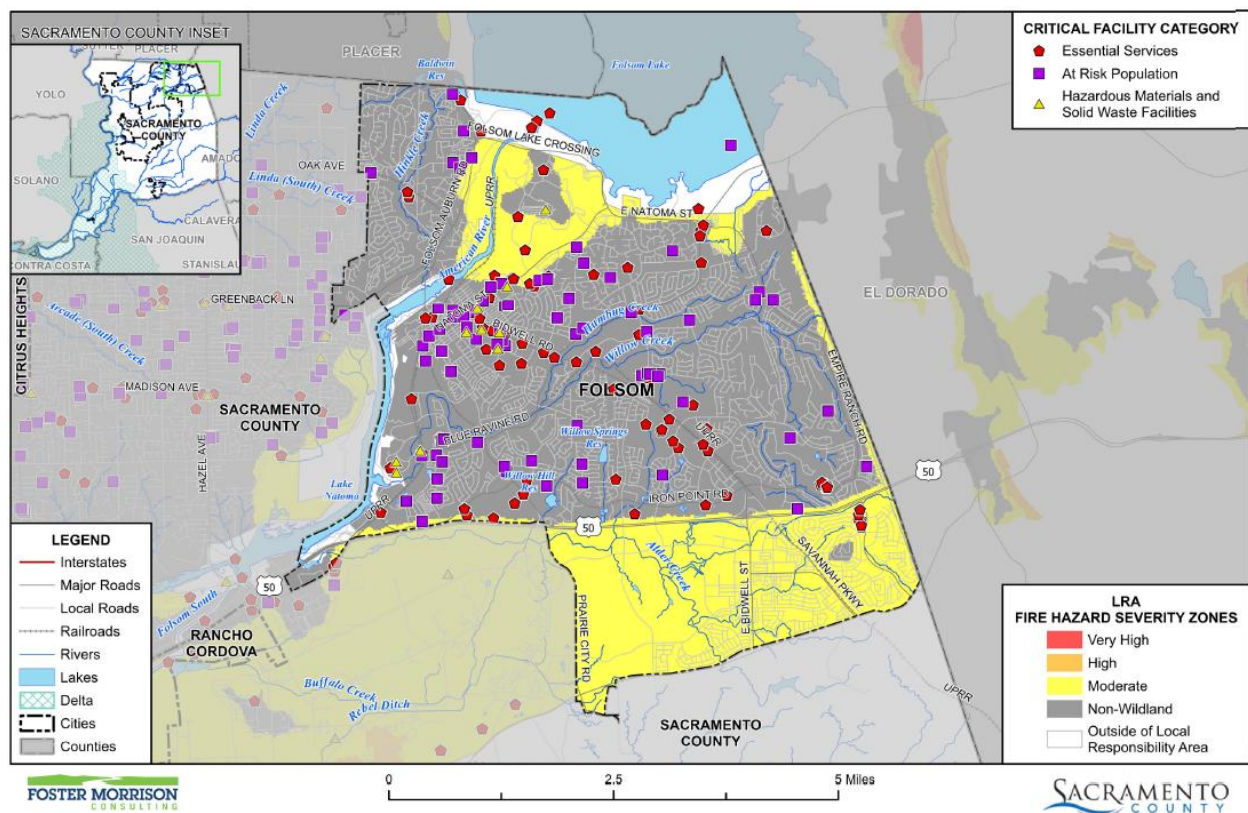
Table C-49 City of Folsom – Critical Facilities in SRA/FRA Fire Hazard Severity Zones by Category and Type

Fire Hazard Severity Zones	Critical Facility Category / Type		Facility Count
High	Essential Services Facilities		
	Microwave Service Towers		2
	Power Plants		1
	Essential Services Facilities Total		3
	Total		3
Moderate	Essential Services Facilities		
	Water Well		1
	Essential Services Facilities Total		1
	Total		1
Non-Wildland/Non-Urban	Essential Services Facilities		
	Water Well		4
	Essential Services Facilities Total		4
	At Risk Population Facilities		

Fire Hazard Severity Zones	Critical Facility Category / Type	Facility Count
Urban Unzoned	School	1
	<i>At Risk Population Facilities Total</i>	<i>1</i>
	Total	5
	<i>Essential Services Facilities</i>	
	Law Enforcement	1
Urban Unzoned	Microwave Service Towers	2
	<i>Essential Services Facilities Total</i>	<i>3</i>
	Total	3
Folsom Total		12

Source: CAL FIRE, Sacramento County GIS

Figure C-31 City of Folsom – Critical Facilities in LRA Fire Hazard Severity Zones



Data Source: CAL FIRE (Local Responsibility Area FHSZ 3/2025 FHSZLRA25_v1_All), Sacramento County, Cal-Atlas; Map Date: 4/17/2026.

Table C-50 City of Folsom – Critical Facilities in LRA Fire Hazard Severity Zones by Category and Type

Fire Hazard Severity Zones	Critical Facility Category / Type	Facility Count
Moderate	<i>Essential Services Facilities</i>	
	Cellular Tower	5

Fire Hazard Severity Zones	Critical Facility Category / Type	Facility Count
	Fire Station	1
	Hospital or Urgent Care	1
	Law Enforcement	2
	Microwave Service Towers	17
	Power Plants	1
	<i>Essential Services Facilities Total</i>	<i>27</i>
	<i>At Risk Population Facilities</i>	
	Mobile Home Parks	1
	Places of Worship	1
	<i>At Risk Population Facilities Total</i>	<i>2</i>
	Total	29
Non-Wildland	<i>Essential Services Facilities</i>	
	Bridge	1
	Cellular Tower	2
	Emergency Evacuation Center	4
	FDIC Insured Banks	19
	Fire Station	4
	Hospital or Urgent Care	3
	Law Enforcement	1
	Microwave Service Towers	65
	Power Plants	3
	Public Transit Stations	3
	Water Well	9
	<i>Essential Services Facilities Total</i>	<i>114</i>
	<i>At Risk Population Facilities</i>	
	Colleges, Universities, and Professional Schools	1
	Community Center	1
	Day Care Center	13
	Mobile Home Parks	5
	Places of Worship	39
	School	27
	<i>At Risk Population Facilities Total</i>	<i>86</i>
	<i>Hazardous Materials and Solid Waste Facilities</i>	
	EPA ER TRI Facility	2
	Leaky Underground Storage Tank	8
	<i>Hazardous Materials and Solid Waste Facilities Total</i>	<i>10</i>

Fire Hazard Severity Zones	Critical Facility Category / Type	Facility Count
	Total	210
Folsom Total		239

Source: CAL FIRE, Sacramento County GIS

Natural, Historic, and Cultural Resources

Natural, historic, and cultural resources located within areas at risk to wildfire would be vulnerable. Should a wildfire occur in the City, the impacts to natural, historic and cultural resources could be extensive and include air pollution, contamination from water runoff containing toxic products, and other environmental discharges or releases from burned materials affecting soils, habitat areas, wildlife, and aquatic resources. Historic and cultural resources can be damaged or destroyed and are often more vulnerable due to their older age, construction type, and lack of fire prevention infrastructure such as sprinklers.

Impacts from Wildfire

Potential impacts from wildfire include loss of life and injuries; damage to structures and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Out of control wildfires can have catastrophic impacts. Wildfires can cause short-term and long-term disruption to the City. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the City by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the City; smoke and air pollution from wildfires can be a severe health hazard. Smoke impacts may come from wildfires outside the City, as well as from within.

Although the physical damages and casualties arising from wildland-urban interface or conflagration fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

The impacts of a fire are felt long after the fire is extinguished. In addition to the loss of property in fires, the loss in vegetation and changes in surface soils alters the environment. When supporting vegetation is burned, hillsides become destabilized and prone to erosion. The burnt surface soils are harder and absorb less water. When winter rains come, this leads to increased runoff, erosion, and landslides in hilly areas.

Impacts that are not quantified, but can be anticipated in large future events, include:

- Injury and loss of life;
- Commercial and residential structural and property damage;
- Disruption of and damage to public infrastructure, utilities, and services;
- Damage to roads/bridges resulting in loss of mobility;
- Significant economic impact (jobs, sales, tax revenue) to the community; and
- Negative impact on commercial and residential property values

Impacts to identified assets at risk to this hazard and the overall vulnerability of the City may be affected in the future by climate change (which was discussed in the hazard profile above), changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. These are discussed in the Future Conditions/Future Development discussion below.

Future Conditions/Future Development

This section provides a discussion of how future conditions will influence or affect the hazard over time and also discusses future development relative to each hazard.

Future Conditions

Future conditions may be affected by climate change, changes in population patterns (migration, density, or the makeup of socially vulnerable populations), and changes in land use and development. Findings on this for the City of Folsom include the following:

- Climate change is likely to exacerbate future wildfire conditions and associated impacts and vulnerability of the City to wildfire. This was discussed in greater detail in the Climate Change and Wildfire section of the Hazard Profile above.
- The City is expected to see slow and steady growth. The City has X areas where growth is expected over the next five years. Additional population growth would likely bring continued diversity to the City. Vulnerable population groups could face disproportionate effects from wildfire and should be planned for. Changes in population and population patterns may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the location, magnitude, and severity of future wildfire events. However, wildfire smoke and air quality from regional events will likely continue to contribute to an increase in vulnerability to City populations.
- Land use planning should be proactive to address future hazard conditions. Locating new development, structures and critical facilities and infrastructure within or near areas of wildfire risk may put additional development at risk. The City has X areas where growth is expected over the next five years. These are located in the Non-Wildland FHSZ which reduces risk. Additionally, City building codes are in effect to reduce this risk and should be updated as necessary to continue to address future wildfire conditions. Specifically, with the release of the new 2025 LRA mapping for Sacramento County, wildfire building codes should be evaluated and updated as required to include enhanced measures to reduce wildfire impacts on new construction, and including the formal adoption of the new LRA maps. Changes in land use and future development may or may not increase the impacts and vulnerability of the City to this hazard depending on the location and nature of growth and continued planning for future hazard conditions and the location, magnitude, and severity of future wildfire events.

Future Development

Additional growth and development within moderate or higher fire hazard severity zones in the City would normally place additional values at risk to wildfire. However, none of those FHSZs exist in the City. City building codes are in effect and should continue to be updated as appropriate to reduce future impacts.

Future development areas and their vulnerability to wildfire are discussed further in the below GIS analysis.

GIS Analysis

The City provided X future development areas which were used as the basis for the inventory of future development for the City. These areas were mapped in GIS. Utilizing the future development area spatial layer, the parcel polygon data was intersected to determine the future development areas within each LRA fire hazard severity zone. No facilities fell in the SRA/FRA fire hazard severity zones; as such, no maps or tabular analysis is presented for the SRA/FRA. Figure C-32 shows the locations of the future development area overlayed on the LRA fire hazard severity zones. As shown in Table C-51, the future development areas fall within areas of Non-Wildland FHSZ.

Figure C-32 City of Folsom – Future Development Areas in LRA Fire Hazard Severity Zones

Table C-51 City of Folsom – Future Development Parcels and Acres in LRA Fire Hazard Severity Zones

Source: CAL FIRE, City of Folsom

C.5 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation education, outreach, and partnerships, and other mitigation efforts.

C.5.1. Regulatory Mitigation Capabilities

Table C-52 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Folsom.

Table C-52 City of Folsom’s Regulatory Mitigation Capabilities

Plans	In Place Y/N	Does the plan address hazards? Can the plan be used to carry out mitigation actions? When was it last updated??
Capital Improvements Plan	Y	The fiscal Operating Budget and Capital Improvement Plan is available on the City’s website.
Climate Change Adaptation Plan	Y	Updated in 2021
Community Wildfire Protection Plan	Y	Included within the current Emergency Operations Plan.
Comprehensive/Master Plan	Y	General Plan map is available on the City’s website. The General Plan document is available for viewing or purchase at the City’s Planning Department. Economic Development and Transportation is addressed in the General Plan. Updated 2018
Continuity of Operations Plan		
Economic Development Plan	Y	
Land Use Plan		Land use addressed in General Plan

Local Emergency Operations Plan	Y	The Emergency Operations Plan was updated in 2020. The plan addresses hazards and includes the Wildfire Protection Plan as a threat specific annex.
Stormwater Management Plan	Y	Stormwater Management is discussed in the City's Design Standards, and in section 8.70 of the Folsom Municipal Code.
Transportation Plan		
Other	Y	Open Space Mitigation Plan – Covers the Folsom Plan Area and include Oak Tree Mitigation Plan and Wildfire Protection Plan.
Land Use Planning and Ordinances		
	Y/N	Is the ordinance an effective way to reduce hazard impacts? Is the ordinance adequately administered and enforced?
Acquisition of land for open space and public recreation use	Y	
Building code	Y	Version/Year: 2025
Flood insurance rate maps	Y	
Floodplain ordinance	Y	The Floodplain Ordinance is within section 14.32 of the Folsom Municipal Code.
Natural hazard-specific ordinance (stormwater, steep slope, wildfire)	Y	Weed/Brush Hazard Abatement/Fuel Modification (FMC 8.36 and 8.37) Stormwater Management and Discharge Control Ordinance (FMC 8.70) Hillside Development Standards Ordinance (FMC 14.33)
Subdivision ordinance	Y	The Subdivision Ordinance is Title 16 of the Folsom Municipal Code.
Zoning ordinance	Y	The Zoning Ordinance is Title 17 of the Folsom Municipal Code.
Other		
How can these capabilities be expanded and improved to reduce risk?		
Continue to implement and enforce the existing programs and regulations, and to update regulations as warranted. The City will look for ways to mitigate with future programs.		

Source: City of Folsom

C.5.2. Administrative/Technical Mitigation Capabilities

Table C-53 identifies the City department(s) responsible for activities related to mitigation and loss prevention in the City of Folsom.

Table C-53 City of Folsom's Administrative and Technical Mitigation Capabilities

Administration	In Place Y/N	Describe capability Is coordination effective?
Staff Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?		
Chief Building Official	Y	Staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
Civil Engineer, including dam and levee safety	Y	Staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
Community Planner	Y	Staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
Emergency Manager	Y	Staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
Floodplain Administrator	Y	Staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
GIS Coordinator	Y	Consultant staff is adequate to enforce regulations. Staff is trained on hazards and mitigations. There is coordination between agencies and staff and it is effective.
Planning Commission	Y	
Other		
Technical Y/N Has capability been used to assess/mitigate risk in the past?		
Grant writing	Y	
Hazard data and information		
GIS analysis		
Mutual aid agreements	Y	
Other		
How can these capabilities be expanded and improved to reduce risk?		
The City will work to fill existing vacant positions to ensure overlap in knowledge and training. Training on mitigation of hazards will be sought on a position by position basis.		

Source: City of Folsom

C.5.3. Fiscal Mitigation Capabilities

Table C-54 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Table C-54 City of Folsom’s Fiscal Mitigation Capabilities

Funding Resource	In Place Y/N	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Y	There are funding resources that have been used in the past and can be used in the future.
Community Development Block Grant	Y	There are funding resources that have been used in the past and can be used in the future.
Federal funding programs (non-FEMA)	Y	FEMA, U.S. Army Corps of Engineers Rehabilitation Inspection PL84-99 Program
Fees for water, sewer, gas, or electric services	Y	There are funding resources that have been used in the past and can be used in the future.
Impact fees for new development	Y	There are funding resources that have been used in the past and can be used in the future.
State funding programs	Y	Cal OES
Stormwater utility fee	N	
Other		
How can these capabilities be expanded and improved to reduce risk?		
Developing a City-wide stormwater utility fee could allow the City to better address necessary ongoing storm water infrastructure maintenance and reduce flooding.		

Source: City of Folsom

C.5.4. Mitigation Education, Outreach, and Partnerships

Table C-55 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information.

Table C-55 City of Folsom’s Mitigation Education, Outreach, and Partnerships

Program/Organization	In Place Y/N	How widespread are each of these in your community?
Community newsletters	Y	The city distributes a weekly e-newsletter, and a bi-monthly printed newsletter
Hazard awareness campaigns (such as Firewise, Storm Ready, Severe Weather Awareness Week, school programs, public events)	Y	Ongoing public outreach material regarding water conservation, household hazardous waste pickup, emergency preparedness, fire safety,
Local news	Y	
Organizations that interact with underserved and vulnerable communities	Y	City of Folsom Community Emergency Response Team.
Social media	Y	

Program/Organization	In Place Y/N	How widespread are each of these in your community?
How can these capabilities be expanded and improved to reduce risk?		
Continue to train staff and implement programs like the CERT program. Training with regional partners will continue and seek to be expanded, especially after much of it had to be postponed due to Covid.		

Source: City of Folsom

C.5.5. Other Mitigation Efforts

Multi-Hazard

The City included a Climate Adaptation Plan dated 2021 as Appendix D in the City's General Plan.

The City has an Emergency Operations Plan that is updated every five years.

Drought and Water Shortage (and Climate Change)

Folsom Water Vision is a proactive initiative led by the City of Folsom to guide its water planning and management over the next 50 years. Investing in this planning process now will promote a more reliable, resilient, and sustainable water future for the Folsom community.

The City currently relies on Folsom Reservoir for 100 percent of its drinking water supply. Groundwater is not readily available because the City sits mostly on granite rock. While the Folsom reservoir and the city's historic water rights have provided a high degree of water reliability, warmer winters, more intense droughts, and evolving environmental regulations, amongst other factors, are driving the City to evaluate its water supplies and supply infrastructure.

- Resilience is the ability of the water system to handle catastrophic events and major infrastructure failures.
- Reliability is the ability of the water system to consistently provide water during droughts and changes to climate.

There is no immediate risk to the drinking water supply, as the City has sufficient water rights to supply water into the future, but Folsom's leaders are being proactive by starting this long-term planning effort now.

In addition:

- The City has a Water Shortage Contingency Plan
- Verdantas is working on the 2026 Water Master Plan
- West Yost just completed the City's Risk and Resilience Assessment (RRA) and Emergency Response Plane (ERP) for the City's water system (sensitive info so not a public document)
- West Yost is currently working on a Condition Assessment of the Water Treatment plant and Booster Pump Stations.

Flood and Localized Flood

Storm drain repair projects are in process, including the following streets and intersections:

- Natoma Street Drainage Phase 2 Project
- Glenn Drive and School Street Intersection Improvements
- Dean Way at Rumsey Way Storm Drain Repair Project

Wildfire

The City of Folsom maintains many annual programs to mitigate against natural hazards: Fuel modification program (fire management for open space) includes the following activities:

- Annual weed hazard abatement program
- Creek/outfall vegetation maintenance
- Public education/outreach for extreme weather
- Routine storm drain operations and maintenance
- Wildfire prevention outreach
- Wildfire Hazard Identification
- Detention Basin Maintenance and Operation
- Stream and Creek Routine Maintenance Agreement with California Department of Fish and Wildlife

Additionally:

- The City of Folsom website utilizes the Ready, Set, Go! Format to inform residents on steps they can take to increase their wildland fire safety.
- The website also published the 2025 fire hazard severity zones map.
- The City focuses on prevention and works with local vendors to maintain open areas through fuel reduction programs such as ladder fuel reduction, goat grazing programs, and maintenance of wildland access points.
- The Fire Department has highly trained fire professionals that focus on quick response and direct, aggressive containment of wildland fires.
- The Fire Department has Automatic Aid and Mutual aid agreements with surrounding Fire departments in the region that provide additional suppression resources to minimize the size and impact of wildland fires region-wide.

C.6 Mitigation Strategy

C.6.1. Mitigation Goals and Objectives

The City of Folsom adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

C.6.2. NFIP Mitigation Strategy

The City of Folsom joined the National Flood Insurance Program (NFIP) on January 6, 1982. As a participant of the NFIP, the City of Folsom has administered floodplain management regulations that meet

the minimum requirements of the NFIP. The NFIP program objective is to protect people and property within the City. The City of Folsom will continue to comply with the requirements of the NFIP in the future.

In addition, the City of Folsom actively participates with Sacramento County to address local NFIP issues through a regional approach. Many of the program activities are the same for the City of Folsom as for Sacramento County since participation at the County level includes all local jurisdictions.

The City of Folsom Community Development Department provides public outreach activities which include map information services, public awareness, public hazard disclosure, and flood protection information. This information is readily available to the public and consists of current and accurate flood mapping. Information about our stormwater management program and up-to-date information related to the maintenance of our drainage system may be found through the Public Works Department.

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS which are to reduce flood losses, facilitate accurate insurance rating, and promote the awareness of flood insurance. The City of Folsom is not a current participant in the CRS program.

More information about the floodplain administration in the City of Folsom can be found in Table C-56.

Table C-56 City of Folsom Compliance with NFIP

NFIP Topic	Comments
Staff Resources	
Who is responsible for floodplain management in your community? Provide Department/Title. Do they serve any roles other than Community Floodplain Administrator (FPA)?	Community Development Department – Community Development Director or designee
Is the Community FPA or NFIP Coordinator a Certified Floodplain Manager?	No
Is floodplain management an auxiliary function?	Auxiliary
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Permit review, GIS, education or outreach, inspections, engineering capability, Storm Drainage and Flood Control Management Program
What are the barriers to running an effective NFIP program in the community, if any?	None
Insurance Summary	
How many NFIP policies are in the community? What is the total premium and coverage?	82 policies \$58,415 in premiums paid \$27,357,000 in coverage
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	26 paid losses \$501,082 in losses paid 2 substantial damage

NFIP Topic	Comments
How many structures (residential and non-residential) are exposed to flood risk within the community?	253 in 1% annual chance 237 in 0.2% annual chance
Are there Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL) structures in the community?	7 RL claims on 3 different buildings (on single family and two multi-family) 0 SRL buildings
Describe any areas of flood risk with limited NFIP policy coverage	Based on FEMA's CIS data, there are 253 improved parcels located in the SFHA. Only 5 of these or 2% carry flood insurance which leaves those without flood insurance extremely vulnerable in this high risk flood zone.
How does the community teach property owners or other stakeholders about the importance of flood insurance?	City website and information in city newsletter such as when updated flood mapping was developed
What digital sources (like the FEMA Map Service Center, National Flood Hazard Layer) or non-regulatory tools does the community use?	FEMA Map Service Center
Compliance History	
Is the community in good standing with the NFIP?	Y
Are there any outstanding compliance issues (i.e., current violations)?	N
Who is responsible (Department, Title) for making substantial damage/improvement determinations? How does the community identify substantially damaged/improved structures? What is the process to make sure these structures are brought into compliance?	Community Development building inspectors. After damage, inspectors review property damage to determine substantial damage. Permitting requirements may then be applied to any structure to bring it into compliance.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	6/11/2019
Is a CAV or CAC scheduled or needed?	N
Regulation	
When did the community enter the NFIP?	1/6/1982
Are the FIRMs digital or paper?	Digital
Has the community adopted the NFIP minimum floodplain management criteria via local regulation? Date of current local regulation?	Ordinance 14.32, January 2026
Has the community adopted the latest effective FIRM? Date adopted?	January 2026
How does the community enforce local floodplain regulations and monitor compliance?	Code Enforcement
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Yes, General Plan and Floodplain Policy strongly discourages building in the floodplain, unless it can be mitigated
How are Letters of Map Change (LOMCs) tracked and compiled?	Community Development Engineering Division tracks and submits to FEMA
Provide an explanation of the permitting process.	Plans are reviewed to determine flood zone information

NFIP Topic	Comments
Community Rating System	
Does the community participate in CRS? If so, what is the community's CRS Class Ranking?	No
What categories and activities provide CRS points and how can the class be improved?	N/A
Does the plan include CRS planning requirements?	N/A

Source: City of Folsom, FEMA CIS, FEMA PIVOT

C.6.3. Mitigation Actions

The Planning Team for the City of Folsom identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

- Aquatic Nuisance Species (plant/animal)
- Climate Change
- Dam Failure
- Drought & Water Shortage (w/tree mortality)
- Flood: 1%/0.5%/0.2% annual chance
- Flood: Localized Stormwater
- Severe Weather: Extreme Cold and Freeze
- Severe Weather: Extreme Heat
- Severe Weather: Heavy Rains and Storms (Hail, Lightning, Wind)
- Severe Weather: High Winds and Tornadoes
- Wildfire (w/ smoke and air quality)

Low priority hazards for mitigation planning include:

- Earthquake (w/subhazards)
- Landslide, Mudslide, Debris Flow
- Levee Failure
- Sea Level Rise
- Subsidence

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards and jurisdictions regardless of hazard priority. Collectively, this LHMP's multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that each jurisdiction has focused on identifying those mitigation actions and projects to address their priority hazards, which are both realistic and reasonable for them to implement for this 5-year planning process,

and would like to preserve their right to modify hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement. The participating jurisdictions are not obligated by this document to implement any or all of these projects. Rather this mitigation strategy represents the desires of the jurisdictions to mitigate the risks and vulnerabilities from identified hazards. The actual selection, prioritization, and implementation of these actions will also be further evaluated in accordance with the mitigation categories and criteria contained in Appendix C.

Mitigation Actions

The City has put forward the actions as shown in Table C-57. Details of the actions can be found below the table.

NEED MITIGATION ACTIONS FOR THE FOLLOWING PRIORITY HAZARDS: COLD AND FREEZE.

Table C-57 City of Folsom Mitigation Actions

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Previous Action	X	X		Prevention
Action 2. Comprehensive Public Education, Outreach, and Awareness Program Enhancements for Natural Hazards and Public Understanding of Disaster Preparedness	Previous Action	X	X	X	Prevention Public Information
Action 3. Aquatic Nuisance Management Program	New Action	X	X		Prevention Property Protection Natural Resource Protection
Action 4. Phase 1 Water Vision Implementation	New Action	X	X		Prevention Property Protection
Action 5. Redevelopment Area Drainage Improvements	Previous Action	X	X	X	Prevention Property Protection Structural Projects Natural Resource Protection
Action 6. Stormwater Basin Maintenance and Operation Project	Previous Action	X	X	X	Prevention Property Protection Natural Resource Protection
Action 7. Stormwater Utility Fee	Previous Action	X	X	X	Prevention Property Protection
Action 8. Fuel Reduction and Modification	Previous Action	X	X		Prevention Property Protection Natural Resource Protection

Action Title	New Action/ Previous Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 9. Weed Abatement Program	Previous Action	X	X		Prevention Property Protection Natural Resource Protection

Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

Hazards Addressed: Multi-hazard (Aquatic Nuisance Species, Climate Change, Dam Failure, Drought & Water Shortage (w/tree mortality), Flood: 1%/0.5%/0.2% annual chance, Flood: Localized Stormwater, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms (Hail, Lightning, Wind), Severe Weather: High Winds and Tornadoes, Wildfire (with smoke and air quality))

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (Assembly Bill (AB) 2140). For eligible Public Assistance projects, the typical local (non-federal) cost share is 25% of the total project cost. The California Disaster Assistance Act (CDAA) can allow the state to pay up to 18.75% of the non-federal share that would otherwise fall to the county or city. Upon approval of the legislature, counties and cities that are AB 2140 compliant are also eligible to be considered for the remaining 6.25% local share to be funded by the state, essentially covering the entire local-share cost for eligible Public Assistance projects.

Project Description: AB 2140 compliance requires that each applicable jurisdiction (counties and cities) adopt the 2026 Sacramento County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) as part of the Safety Element of its General Plan in accordance with the CDAA and Cal OES AB 2140 guidance. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation. The current approved LHMP must be easily accessible and available to the public viewing the Safety Element.

Other Alternatives: No action

Existing Planning Mechanisms through which Action will be Implemented: Safety Element of General Plan

Responsible Office/Partners: City Planning Department in coordination with the County.

Benefits (Losses Avoided): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help counties and cities maximize the cost recovery potential following a disaster.

Potential Funding (Local Budgets, Grant Funds, etc. by specific Type): Local budgets (General fund, staff time)

Timeline: In conjunction with and/or within 1 year of adoption of the 2026 Sacramento County Multi-Jurisdictional LHMP Update

Project Priority: High

Action 2. Comprehensive Public Education, Outreach, and Awareness Program Enhancements for Natural Hazards and Public Understanding of Disaster Preparedness

Hazards Addressed: Multi-hazard (Aquatic Invasive Species, Climate Change, Dam Failure, Drought & Water Shortage (w/tree mortality), Flood: 1%/0.5%/0.2% annual chance, Flood: Localized Stormwater, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms (Hail, Lightning, Wind), Severe Weather: High Winds and Tornadoes, Wildfire (with smoke and air quality))

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): Sacramento County, incorporated communities, and other local jurisdictions play a key role in public outreach and education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive, coordinated multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural hazard event or disaster. Effective public education can reduce hazard related losses and promote self reliance.

Project Description: A comprehensive multi-hazard education and outreach program will ascertain both broad and targeted educational needs throughout the community. The City will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to Sacramento County communities. This includes measures the public can take to be better prepared and to reduce loss of life, damages, and other impacts from a hazard event. The public education effort will utilize effective outreach and communication strategies to reach all populations, will leverage and build upon existing mechanisms, and will consider:

- Using a variety of information outlets, including websites, local radio stations, news media, schools, and other local public events;
- Creating and distributing (where applicable) brochures, leaflets, water bill inserts, websites, and public service announcements;
- Displaying public outreach information in County, City, and other local agency office buildings, libraries, and other public places and events;
- Developing public-private partnerships and incentives to support public education activities; and
- Implementing other program components and enhancements identified over the next 5 years.

Other Alternatives: No action

Existing Planning Mechanisms through which Action will be Implemented: Safety Element of General Plan

Responsible Office/Partners: City of Folsom Planning Department

Benefits (Losses Avoided): Increased public knowledge of potential hazards of concern; the risk and vulnerability of Sacramento communities to natural hazards; and possible activities that can be undertaken to mitigate hazards and to be better prepared, before, during and after a hazard event. Protect lives and reduce damages. Relatively low cost to implement. Improve public response in an emergency or disaster.

Potential Funding (Local Budgets, Grant Funds, etc.): Local budgets (City General Fund, special revenue funds, CIP funding, staff time), CA DWR grants, Cal OES/FEMA grants (PDM, HMGP, FMA), or other funding sources.

Timeline: To be initiated within 1-2 years; Ongoing/Annual public education, outreach, and awareness campaign

Project Priority (High, Medium, Low): High

Action 3. *Aquatic Nuisance Management Program*

Hazards Addressed: Aquatic Nuisance Species, Flood: 1%/0.5%/0.2% Annual Chance, Flood: Localized Flood

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): Aquatic nuisance species, such as the water hyacinth, South American sponge plant, and Uruguay water primrose are highly invasive floating plant species that have spread throughout the Sacramento–San Joaquin Delta and into the City of Folsom. These species grow rapidly, forming dense mats that impede water flow, block sunlight needed by native plants, reduce dissolved oxygen levels, and degrade habitat conditions for fish and wildlife. Thick vegetation mats can also obstruct recreational boating, limit shoreline access, and increase maintenance needs for stormwater infrastructure.

Project Description: The Aquatic Nuisance Management Program aims to monitor, control, and reduce invasive species infestations within waterways managed or influenced by the City of Folsom. The program will protect water quality, maintain recreational access, reduce infrastructure impacts, and preserve native aquatic habitat.

Other Alternatives: No Action

Existing Planning Mechanism(s) through which Action Will Be Implemented: City of Folsom Parks and Recreation

Responsible Office/Partners: City of Folsom Parks and Recreation

Project Benefits (Losses Avoided): Potential losses avoided including the destruction of native plants, decreased water flow, and limited recreational access.

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): General Fund, CIP

Timeline: Within 1 year and ongoing

Project Priority (High, Medium, Low): Medium

Action 4. Phase 1 Water Vision Implementation

Hazards Addressed: Drought and Water Shortage, Climate Change

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): The primary function of this program is to evaluate and recommend a long-term plan and roadmap for improving the reliability and redundancy of the City's water supply.

Project Description: Phase 1 of recommended implementation for the Folsom Water Vision Plan. Perform alternative analysis for new intake location at Folsom South Canal or Lake Natoma. Develop emergency response plan for critical pipe failures around WTP. Perform condition and redundancy assessment for critical WTP pipelines. Build partnerships with GSWC and/or SCWA for supply diversification. Identify non-potable supply options and create implementation plan.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: City of Folsom Utilities Department

Responsible Office/Partners: City of Folsom Utilities Department

Project Benefits (Losses Avoided): Benefits include making the City's water supply more reliable and resilient. Currently the City's only water source is Folsom Reservoir, and recent climate variability models indicate that future conditions in the American River Basin will likely result in lower water levels in the reservoir. This plan will create future water supply portfolios that address this vulnerability and improve the City's supply resilience during emergencies.

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): Local budgets (City General Fund, special revenue funds, CIP funding, staff time), CA DWR grants, Cal OES/FEMA grants (PDM, HMGP, FMA), or other funding sources.

Timeline: To be initiated within 1-5 years and continue through 2035

Project Priority (High, Medium, Low): Medium

Action 5. Redevelopment Area Drainage Improvements

Hazards Addressed: 1%/0.2% Annual Chance Flooding, Localized Flooding, Heavy Rains and Storms

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): In 2005 the City completed a Drainage Master Plan for its Redevelopment Area. The plan identifies nine drainage CIP's. The City has constructed one of the CIP's; funding is needed to construct the remaining eight drainage improvement projects.

Project Description: Capital Improvement Drainage Projects.

Other Alternatives: Establish an assessment district to obtain funding.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Public Works CIP Program.

Responsible Office/Partners: Folsom Public Works Department.

Project Benefits (Losses Avoided): Life Safety; Reduction of Property Loss

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): General Fund until establishment an assessment district or stormwater utility fee; CIP.

Timeline: Within 1 year and ongoing

Project Priority (High, Medium, Low): Medium

Action 6. Stormwater Basin Maintenance and Operation Project

Hazards Addressed: Aquatic Nuisance Species, Dam Failure, 1%/0.2% Annual Chance Flooding, Localized Flooding, Heavy Rains and Storms

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): The detention basins within the City have significant natural growth, causing the design capacities and overall basin effectiveness to decrease. A regular maintenance and operational schedule is necessary to ensure the field conditions of each detention basin is consistent with the design capacities. While a dam failure is not expected, high dam outflow scenarios are (partially) mitigated by additional detention basins.

Project Description: Ongoing rehabilitation of the existing City-maintained stormwater basins located throughout the City.

Other Alternatives: No action

Existing Planning Mechanism(s) through which Action Will Be Implemented: Public Works Department Capital Improvement Projects

Responsible Office/Partners: Folsom Public Works Department

Project Benefits (Losses Avoided): Potential losses avoided including residential, commercial, and public infrastructures.

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): Fund is provided by the General Fund until a stormwater utility fee is adopted; CIP

Timeline: Within 1 year and ongoing – funding constrained

Project Priority (High, Medium, Low): Medium

Action 7. Stormwater Utility Fee

Hazards Addressed: Aquatic Nuisance Species, 1%/0.2% Annual Chance Flooding, Localized Flooding, Heavy Rains and Storms

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): The City of Folsom does not have a dedicated stormwater utility to fund operation and maintenance of the storm drainage system or implementation of its Stormwater Quality Program. Funds are needed for maintenance of the drainage system including, pipes, structures, detention basins and creeks/streams and water quality protection. Due to current California Law a ballot measure is required to assess taxes for a stormwater utility. In 2006 the City completed a Funding Feasibility Study; next steps include an opinion research and survey, fee development, ballot measure development and fee implementation.

Project Description: Implementation of a dedicated stormwater utility to fund operation and maintenance of the storm drainage system.

Other Alternatives: Continue an underfunded program and/or reduce services.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Folsom Public Works Department Administration.

Responsible Office/Partners: Folsom Public Works/Utilities Department

Project Benefits (Losses Avoided): Improved maintenance, increase reliability, reduction of property loss.

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): City of Folsom budgets (General Fund, staff time, CIP), stormwater utility fund

Timeline: Within 1 year and ongoing

Project Priority (High, Medium, Low): High

Action 8. Fuel Reduction and Modification

Hazards Addressed: Wildfire, Severe Weather: Extreme Heat, Severe Weather: High Wind and Tornado

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): The expense of removing and/or modifying materials which create a wildfire hazard can often be cost prohibitive for both private and public property owners. High winds in the area can spread weed seeds. Encouraging joint efforts such as volunteer cleanup days and chipper programs can reduce the cost to anyone stakeholder and facilitate mitigation efforts

Project Description: Removal and/or modification of fuels to create horizontal and vertical fuel spacing, removal of ladder fuels (which dry out during extreme heat), tree limb clearances, and reduction of surface fuel loads created by litter and dead material accumulations. The desired modeling for this program would resemble those found in a shaded fuel break.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: Community Wildfire Protection Plan and Folsom Municipal Code.

Responsible Office/Partners: City of Folsom Fire Department, Friends of Folsom Parkways

Project Benefits (Losses Avoided): Life safety, reduction in potential losses avoided including residential, commercial, and public infrastructures

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): Fund raising, private donation, grant funding (FEMA HMGP), CAL FIRE Fire Prevention funding

Timeline: 3-5 years, to be initiated within 5 years and ongoing

Project Priority (High, Medium, Low): Medium

Action 9. Weed Abatement Program

Hazards Addressed: Wildfire, Wildfire, Severe Weather: Extreme Heat, Severe Weather: High Wind and Tornado

Goals Addressed: 1, 2, 3, 4, 5, 6, 7

Issue/Background (Problem Statement): The primary function of this program is to reduce the danger of fires within the City by proactively establishing defensible space and to reduce / remove combustible materials on vacant properties. High winds in the area can spread weed seeds.

Project Description: Defensible space program consistent with state and local requirements requires property owners to clear their property of all dry grass, weeds, dead trees, and noxious vegetation or rubbish that may constitute a fire hazard. The Fire Department is authorized to abate any potential fire hazard that has not been addressed on vacant lots only.

Other Alternatives: No action.

Existing Planning Mechanism(s) through which Action Will Be Implemented: City of Folsom Fire Department and Folsom Municipal Code

Responsible Office/Partners: City of Folsom Fire Department

Project Benefits (Losses Avoided): Potential losses avoided including residential, commercial, and public infrastructures

Potential Funding (Local Budgets, Grant Funds, etc. by specific type): Fund is provided by the General Fund with some sources from programming revenue, and State and Federal grants (FEMA HMGP) as well as potential assistance through Cal Fire or Correctional facilities.

Timeline: Within 1 year and ongoing

Project Priority (High, Medium, Low): Medium