

ANNEX D CITY OF LEMOORE

D.1 PURPOSE

This Annex summarizes the hazard mitigation elements specific to the City of Lemoore. This Annex supplements the Kings County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP); therefore, the Annex is not a stand-alone plan but intended to supplement the hazard information provided in the Base Plan document. All other sections of the Kings County MJHMP, or Base Plan, including the sections on the planning process, countywide risk assessment, and procedural requirements related to plan implementation and maintenance apply to the City of Lemoore. This Annex provides additional information specific to the City of Lemoore, including details on the City's profile, planning process, risk assessment, and mitigation strategy for the community.

D.2 COMMUNITY PROFILE

D.2.1 Mitigation Planning History and 2022-2023 Process

This Annex was created during the development of the 2023-2028 Kings County MJHMP update. The City of Lemoore participated in the Kings County's 2012 MJHMP process; however, the 2012 MJHMP did not include supplemental annexes for each of the participating jurisdictions. Instead, the 2012 MJHMP included a Community Profile that summarized the priority hazards for the City and included a vulnerability assessment. Information on the participating jurisdictions vulnerability to hazards and their specific mitigation actions were also included in the main plan.

During the current update process, the City of Lemoore followed the planning process detailed in Chapter 3 of the Base Plan. This planning process consisted of participation in the Hazard Mitigation Planning Committee (HMPC) and the formation of a smaller internal planning team referred to as the City's Local Planning Committee (LPT). The LPT was organized to support the broader planning process, coordinate with the City departmental staff, and develop customized mitigation actions and projects specific to the City of Lemoore. The City's LPT is also responsible for the update, implementation, and maintenance of the plan. LPT members are listed in Appendix A.

D.2.2 Geography and Climate

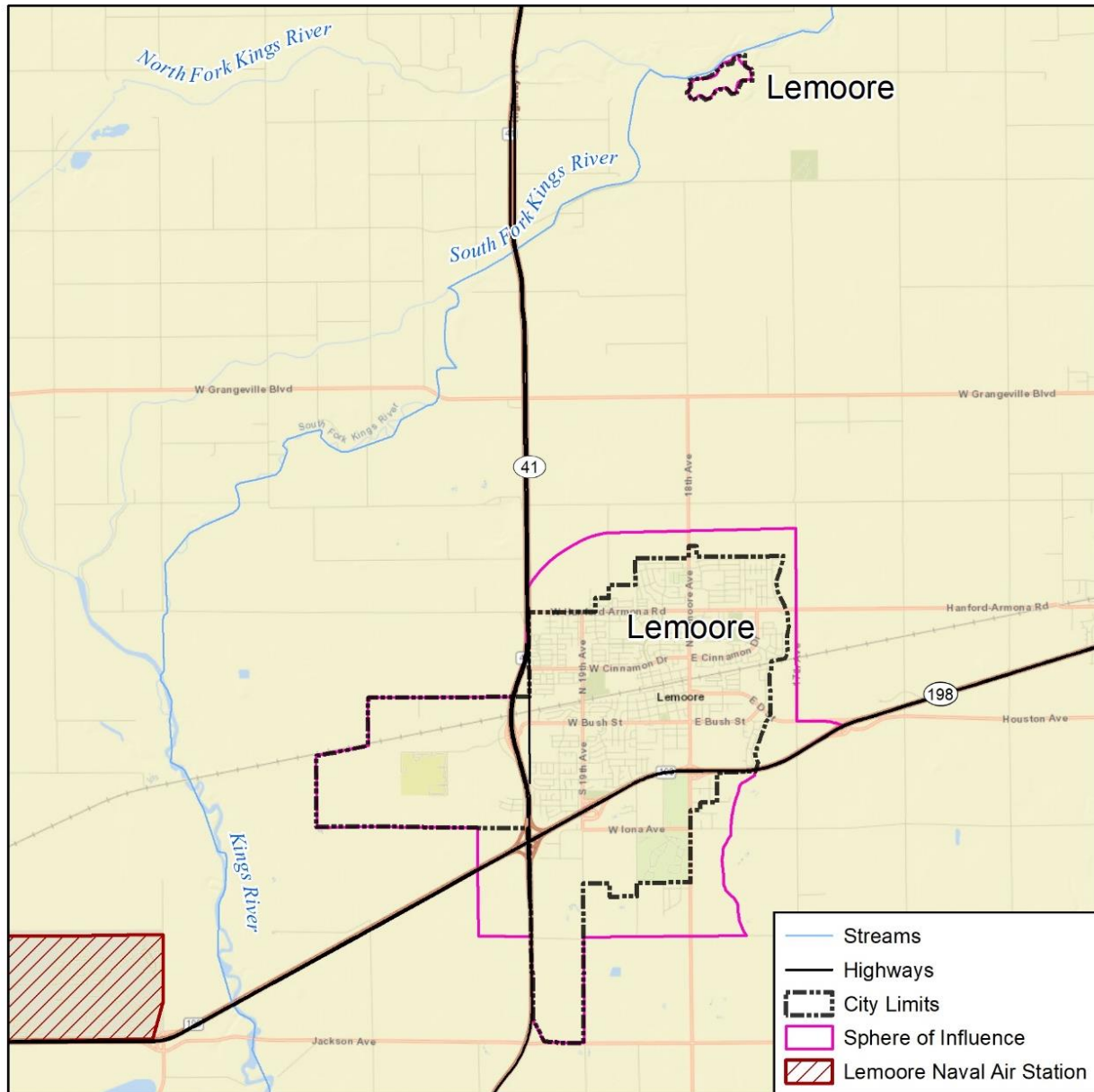
Nestled within the central expanse of California's San Joaquin Valley, the City of Lemoore occupies a strategic position, approximately 35 miles to the south of Fresno and 60 miles northwest of Bakersfield. Lemoore lies within Kings County, sharing its western border with the City of Hanford. Lemoore's connectivity is enhanced by the presence of State Route (SR) 198, which traverses the City in an east-west direction.

Lemoore experiences a Mediterranean climate with hot, dry summers and mild-relatively wet winters, typical of the San Joaquin Valley. The City receives an average annual precipitation of approximately 8.5 inches, concentrated mainly from November through March. High temperatures peak in July, with average readings hovering around 96.2 °F, while January is the coldest month, with average lows of about 42.6 °F.

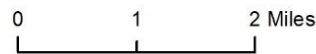
The City's level terrain is a result of the alluvial fan formations inherent to the San Joaquin Valley. This geographical trait has been instrumental in establishing Lemoore's significance in the realm of agriculture. It is an integral part of the agriculturally rich Central Valley, celebrated for its multifaceted and farming industry. Notably, Lemoore is the home of the Lemoore Naval Air Station (NAS), a distinguished military installation that adds to the City's distinctive identity.

Figure D-1 below shows the limits and Sphere of Influence (SOI) boundary for the City of Lemoore. The City limits, or the area where the City has authority to make land use decisions, is the City's Planning Area, and consists of approximately 5,376 acres, or 8.4 square miles.

Figure D-1 City of Lemoore Boundary



Map compiled 7/2023;
Intended for planning purposes only.
Data Source: Kings County, DWR



D.2.3 History

Dr. Lovern Lee Moore established his residence in what was once the western part of Tulare County, California, now known as the City of Lemoore, in April 1871. This location was close to Tulare Lake, which held the distinction of being the largest inland body of water in central California during that era. Upon Moore's arrival, the region was characterized by numerous individual farms, with sheep and grain farming being the predominant activities. Moore's efforts went beyond the typical agricultural endeavors.

Recognizing the potential for communal growth, Moore unified the local farm families and orchestrated the establishment of a post office and a central point for business dealings. Moreover, he introduced the district's inaugural real estate development and meticulously planned and named the streets. This initiative laid the foundation for the City's future layout. Subsequently, on July 11, 1900, Lemoore attained official City status through incorporation. This marked a pivotal transition from scattered agricultural enterprises to a structured urban entity, with Moore himself becoming the Lemoore's first mayor. As time passed, the City continued to evolve, adapting to changing agricultural practices and welcoming new residents seeking fresh opportunities. Today, Lemoore's vibrant community and thriving economy stand as a testament to the influence of strong leadership, which positions the City for economic development.

D.2.4 Economy

According to the City of Lemoore Economic Development Department, the City has experienced a consistent population increase of four to 5% over recent years. There are various economic opportunities for businesses that expand and relocate to the City. These include access to a dedicated and diligent labor force, expansive and cost-effective land options, incentives within enterprise zones, a foreign trade zone designation, and an overall pro-business environment. Still, the City retains its small-town charm and rustic beauty, embodied by its turn-of-the-century edifices and residences.

Given the City's central location in the San Joaquin Valley, positioned at the intersection of Highway 198 and 41, Lemoore enjoys direct access to Interstate 5 and Highway 99, each 25 miles away. Moreover, the Fresno/Yosemite International Airport, located within 35 miles, effectively serves both commercial and freight air traffic.

The available labor pool in Lemoore benefits from diversity. Given the region's strong ties to agriculture, there is an abundance of unskilled and semi-skilled general labor. Additionally, a substantial number of skilled workers possess various educational and technical training backgrounds. Many residents have connections to navy personnel stationed at NAS – Lemoore, and several are military veterans who have chosen Lemoore as their permanent residence. To further enhance the workforce, educational opportunities and technical training are provided by institutions like West Hills College, Chapman University, College of the Sequoias, and the Kings County Job Training Office.

The City of Lemoore is also committed to collaborating with local businesses as well as potential future enterprises. Both the City Council and City Manager are dedicated to fostering economic growth and vitality within the City. Correspondingly, the City staff is devoted to streamlining the process of establishing new businesses within the City limits. Numerous existing incentives are poised to positively impact companies' financial outcomes.

Estimates of select economic characteristics for the City of Lemoore are shown in Table D-1.

Table D-1 City of Lemoore Economic Characteristics, 2017-2021

CHARACTERISTIC	CITY OF LEMOORE
Families below Poverty Level (%)	13.4%
All People below Poverty Level (%)	12.7%
Median Family Income	\$68,65
Median Household Income	\$71,503
Per Capita Income	\$28,761
Population in Labor Force	59.2%
Population Employed*	60.3%
Unemployment Rate**	11.9%

Source: U.S. Census Bureau, California Department of Finance, 2017-2021 American Community Survey (ACS), 5-year estimates, www.census.gov/

*Excludes armed forces. **Does not reflect unemployment numbers due to COVID-19 Pandemic

The most common industries within a five-mile radius of Lemoore are educational services and health care. Public administration and the combined arts, entertainment, and recreation, and accommodation and food services are the other two major industries. Table D-2 and Table D-3 below show the labor force breakdown by occupations and industry based on estimates from the 2017-2021 five-year American Community Survey (ACS).

Table D-2 City of Lemoore Employment by Industry, 2017-2021

OCCUPATION	# EMPLOYED	% EMPLOYED
Agriculture, forestry, fishing and hunting, and mining	641	5.87%
Construction	272	2.49%
Manufacturing	938	8.59%
Wholesale trade	254	2.23%
Retail trade	1,030	9.43%
Transportation and warehousing, and utilities	975	8.92%
Information	68	0.62%
Finance and insurance, and real estate and rental and leasing	264	2.42%
Professional, scientific, and management, and administrative and waste management services	719	6.58%
Educational services, and health care and social assistance	2,298	21.03%
Arts, entertainment, and recreation, and accommodation and food services	1,275	11.67%
Other services, except public administration	343	3.14%
Public administration	1,849	16.92%
Total	10,926	100%

Source: U.S. Census Bureau, California Department of Finance, 2017-2021 American Community Survey (ACS), 5-year estimates, www.census.gov/

*Excludes armed forces

Table D-3 City of Lemoore Employment by Occupation, 2017-2021

OCCUPATION	# EMPLOYED	% EMPLOYED
Management, business, science, and arts occupations	3,070	28.1%
Service occupations	2,415	22.1%
Sales and office occupations	1,901	17.4%
Natural resources, construction, and maintenance occupations	1,355	12.4%
Production, transportation, and material moving occupations	2,185	20.0%
Total	10,926	100%

Source: U.S. Census Bureau, California Department of Finance, 2017-2021 American Community Survey (ACS), 5-year estimates, www.census.gov/

*Excludes armed forces

D.2.5 Population

According to ACS, the City of Lemoore had a total population of 24,508 in 2010, while the City had a total population of 26,631 in 2021. The City's population increased by 10% during the 11-year period. Select demographic and social characteristics for the City of Lemoore from the 2017-2021 ACS and the California DOF, are shown in Table D-4. As shown in this table, the City has a predominantly White and Latino population, and approximately 29% of the population speaks a language other than English at home.

Table D-4 City of Lemoore Demographic and Social Characteristics, 2017-2021

CHARACTERISTIC	CITY OF LEMOORE
Gender/Age	
Male	52%
Female	48%
Median age (years)	32
Under 5 years	8%
Under 18 years	25.8%
65 years and over	12.1%
Race/Ethnicity	
White	56.7%
Asian	7.5%
Black or African American	6.3%
American Indian/Alaska Native	0%
Hispanic or Latino (of any race)	43.6%
Native Hawaiian and Other Pacific Islander	0%
Some other race	0.3%
Two or more races	12.7%
Education*	
% High school graduate or higher	84.9%
% with bachelor's degree or higher	21.2%
Social Vulnerability	
% with Disability	8.6%
% Language other than English spoken at home	29.1%
% Speak English less than "Very Well"	
% of households with a computer	93.9%
% of households with an Internet subscription	90.1%
% of households with no vehicle available	3.27%

Source: U.S. Census Bureau, California Department of Finance, 2017-2021 American Community Survey (ACS), 5-year estimates, www.census.gov/

* Population 25 years and over

Table D-5 contains information from the ACS 5-year estimates (2017-2021) related to housing occupancy in the City of Lemoore.

Table D-5 City of Lemoore Housing Occupancy and Units, 2017-2021

HOUSING CHARACTERISTIC	ESTIMATE	PERCENTAGE
Total Households	9,033	100%
Average Household Size	2.95	-
Total Families	6,661	-
Vacant		6.1%
Housing Units	9,623	
1-unit structures	7,053	73.3%

HOUSING CHARACTERISTIC	ESTIMATE	PERCENTAGE
2 or more units structures	2,425	25.2%
Mobile Homes	154	1.6%
Owner Occupied	4,908	54.3%
Renter Occupied	4,125	45.7%

Source: U.S. Census Bureau, California Department of Finance, 2017-2021 American Community Survey (ACS), 5-year estimates, www.census.gov/

D.2.6 Disadvantaged Communities

Disadvantaged communities (DACs) are identified by the California Environmental Protection Agency (Cal EPA) pursuant to Section 39711 of the Health and Safety Code, based on geographic, socioeconomic, public health, and environmental hazard criteria, and may include, but not be limited to: areas disproportionately affected by environmental pollution or other hazards and areas with concentrations of people that are low income, high unemployment, low levels of home ownership, high rent burden, sensitive populations, or low levels of education attainment (California Health and Safety Code Section 39711). One of the ways the Cal EPA’s Office of Environmental Health Hazard Assessment (OEHHA) identifies DACs is using the CalEnviroScreen tool.

Employing a comprehensive approach, the OEHHA CalEnviroScreen tool applies a formula to generate a combined ranking score that considers 21 indicators for each census tract. These indicators span pollution measures like diesel emissions and concentrations of toxic sites, alongside demographic factors such as poverty and unemployment rates. Census tracts exhibiting CalEnviroScreen rankings ranging from 75 to 100% (i.e., within the top 25% of all tracts statewide) are designated as DACs. Census tracts are also defined as disadvantaged based on the highest 5% cumulative pollution burden scores, as well as those tracts identified in the 2017 DAC designations, and lands under control of federally recognized Tribes.¹

As shown in Table D-6, which is based on data derived from the OEHHA CalEnviroScreen tool, there is one large census tract designated as a DAC located on the far western edge of the City that also encompasses the non-contiguous portion of the City to the north along the South Fork of the Kings River. This census tract is composed of housing-burdened low-income households. This means the households in this census tract are both economically disadvantaged (making less than 80% of the County’s median family income) and substantially burdened by housing costs (paying greater than 50% of their income on housing costs). This situation renders these households more susceptible to negative impacts during hazard events, and less likely to recover after a disaster. California has very high housing costs relative to the rest of the country, which can make it hard for households to afford housing (OEHHA 2021). While this census tract has an overall CalEnviroScreen ranking of 88%, only 8% of the tract consists of housing-burdened and low-income households, which is lower than the DACs identified in the other Kings County municipalities. Still, the households in the City with lower incomes may spend a larger proportion of their income on housing and may suffer from housing-induced poverty that can affect disaster recovery (OEHHA 2021).

Table D-6 Disadvantaged Communities Statistics

Census Tract	% Housing-Burdened and Low-Income	# Housing units	#Low-Income Housing Units	# Low Income & Housing-Burdened Housing Units	CalEnviroScreen Ranking
6031000200	8%	750	284	56	88.5

Source: OEHHA 2023, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

Of the 26,631 people that live in the City according to the 2021 ACS 5-Year Estimates, approximately 1,679 people are potentially exposed to hazards in the City based on the vulnerability assessment in Section D.3.1. Outreach, engagement, and hazard mitigation efforts should therefore address the needs of the City’s low-income and housing burdened residents. The City can utilize the CalEnviroScreen information to conduct

¹ For more information on how DACs are designated refer to the final designations of DACs from May 2022 on the OEHHA CalEnviroScreen tool here: <https://oehha.ca.gov/calenviroscreen/sb535>

targeted outreach and engage community members to consider what other hazards and mitigation strategies or programs should be considered to meet community needs. The City can also engage these communities to proactively prioritize hazard mitigation projects that benefit DACs.

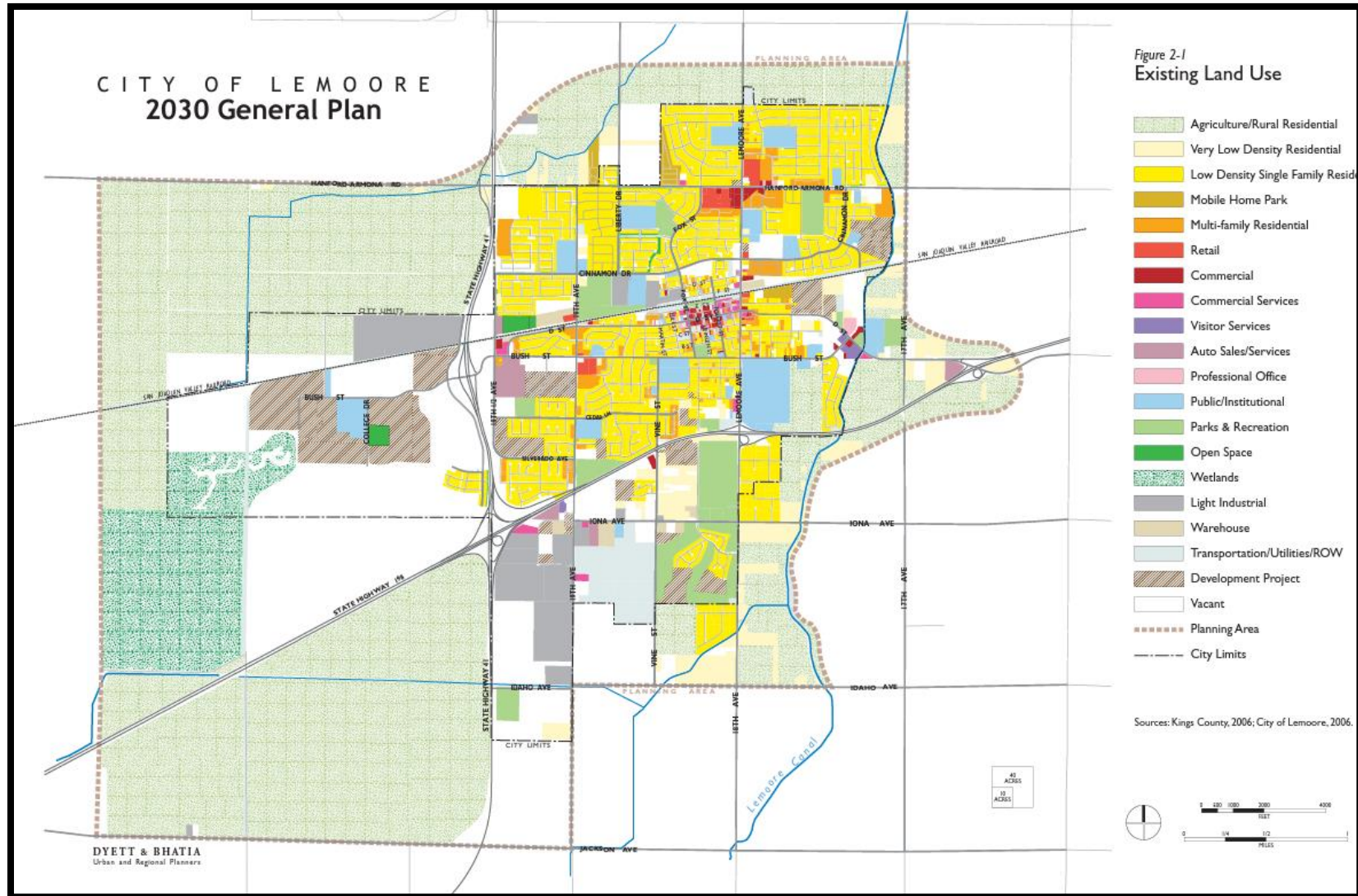
D.2.7 Development Trends

Growth has occurred along the west side of the City and will continue in this area, as well as the north side in the coming years. As noted in the City's 2030 General Plan Land Use Element, the land utilization observed in Lemoore is in line with the norm for cities situated within the Central Valley area. The predominant urban expansion can be credited to Lemoore's historical progression as an agricultural hub, followed by its subsequent transformation due to the expansion of NAS - Lemoore to the west. The City's downtown area contains a traditional central business district, encompassing a blend of commercial and public establishments. More extensive commercial, agricultural, and contemporary residential regions are situated in the outer reaches of the City's downtown. Industrial zones are positioned adjacent to the San Joaquin Valley Railroad and to the south of Iona Avenue. Green spaces and educational institutions are also interspersed throughout the residential neighborhoods.

The predominant land use within the City is dedicated to agriculture and rural purposes, encompassing 4,574 acres, which constitutes approximately 37% of the total land area. Slightly over 40% of the land falls under Williamson Act contracts which typically restricts those lands to agricultural uses; however, a portion of this land is currently not in active agricultural use. Most of the agricultural land is also concentrated along the western portion of the City's SOI (General Plan refers to planning areas as the SOI) near the Kings River. The following most substantial land use category in the City's SOI is vacant land, accounting for 2,082 acres or around 17% of the land. Within the residential classification, the most prominent subcategory is Low Density Single Family Residential, covering an estimated 1,146 acres or 9% of the land, with the majority of this land falling within the existing City Limits. The next residential land use is Very Low Density Residential, comprising 399 acres. Supplementary residential land designations include 35 acres for Mobile Home Parks, 34 acres for Low Density Multi-Family Residential, and 115 acres for Multi-Family Residential.

Among the non-residential land uses in Lemoore, approximately 1,212 acres or 10% of the entire City SOI is occupied by roads and other right-of-ways. Despite its role in employment generation, industrial land only covers 304 acres, equating to 2% of the total land. Primary industrial and commercial zones align with two State Routes. Additionally, certain parcels of industrial land are situated near the San Joaquin Valley Railroad. Throughout the City, parks of varying sizes are interspersed, often conveniently located near educational institutions. Figure D-2 shows the Land Use Diagram included in the 2030 General Plan.

Figure D-2 City of Lemoore General Plan Land Use Designations



Source: Lemoore General Plan 2030

The General Plan Land Use Map designates the general distribution of land uses, including housing, business, industrial, open space, and public facilities within the City's boundaries. Table D-7 below demonstrates the density and intensity standards and acreage totals for the 2030 General Plan land use designations.

Table D-7 Lemoore General Plan Land Use Density Assumptions

LAND USE CLASSIFICATION	UNIT DENSITY (MIN)	UNIT DENSITY (TYPICAL)	UNIT DENSITY (MAX)	FLOOR AREA RATION (FAR) (MIN)	FAR (TYPICAL)	FAR (MAX)
Agricultural/ Rural Residential	-	0.05	0.2	-	-	-
Very Low Density Residential	1	2.5	3	-	-	0.25
Low Density Residential	3	4.5	7	-	-	0.40
Low-Medium Residential	7	9	12	-	-	0.60
Medium Density Residential	12	14	17	-	-	0.80
High Density Residential	17	18	25	-	-	-
Mixed Use	8	9	20	0.2	0.25	1
Neighborhood Commercial	-	-	-	0.1	0.2	0.6
Regional Commercial	-	-	-	0.1	0.3	0.6
Professional Office	-	-	-	0.1	0.25	0.6
Light/Heavy Industrial	-	-	-	0.1	0.2	0.5
Business, Tech & Industrial. Reserve**	-	-	-	0.1	0.15	0.2

*Development allowed only when more than 75% of available non-residential land north of SR-198 is fully developed.
Source: Lemoore General Plan 2030

Table D-8 and Table D-7 displays the expansion acreage depicted in the General Plan Diagram. Upon complete buildout, slightly more than 4,000 acres of land would be utilized within the City's SOI, with nearly all of it falling within the confines of the UGB (Urban Growth Boundary). The areas designated for new development are intended for residential purposes, comprising a sum of approximately 2,000 acres.

Table D-8 City of Lemoore Potential Planning Area Buildout by 2030

LAND USE	GP LAND USE IN PLANNING AREA ONLY	TOTAL NEW GP LAND USE IN PLANNING AREA	% BUILDOUT BY LAND USE IN PLANNING AREA	DEV. PROJECTS IN PROGRESS	GP LAND USE IN UGB	TOTAL NEW GP LAND USE IN GB	% BUILDOUT BY LAND USE IN UGB
Residential	209	2,113	26%	339	1,565	1,904	47%
Agricultural /Rural Residential	209	213	3%	0	4	4	0%
Very Low Density Residential	0	515	6%	19	496	515	13%

LAND USE	GP LAND USE IN PLANNING AREA ONLY	TOTAL NEW GP LAND USE IN PLANNING AREA	% BUILDOUT BY LAND USE IN PLANNING AREA	DEV. PROJECTS IN PROGRESS	GP LAND USE IN UGB	TOTAL NEW GP LAND USE IN GB	% BUILDOUT BY LAND USE IN UGB
Low Density Residential	-	1,111	13%	307	803	1,111	27%
Low-Medium Residential	-	200	2%	10	190	200	5%
Medium Density Residential	-	74	1%	3	72	74	2%
High Density Residential	-	0	0%	0	0	0	0%
Mixed Use	-	165	2%	0	165	165	4%
Mixed Use	-	118	1%	0	118	118	3%
Neighborhood Commercial	-	48	1%	0	48	48	1%
Commercial/office/Industrial	-	1,361	16%	40	1,321	1,361	34%
Commercial	-	170	2%	31	139	170	4%
Professional Office	-	78	1%	0	78	78	2%
Industrial	-	715	9%	9	706	715	18%
Business, Tech & Industrial Reserve**	-	396	5%	0	398	398	10%
Other	4,004	4,630	56%	119	507	626	15%
Parks/Recreation	-	208	3%	39	168	208	5%
Community Facilities	-	218	3%	79	139	218	5%
Agriculture	3,341	3,352	41%	0	11	11	0%
Greenway/Basin	12	198	2%	0	186	186	5%
Wetlands	652	655	8%	0	2	2	0%
Total	4,214	8,270	100%	497	3,559	4,056	100%

*Planning for this area is not likely to be initiated before 2020 at a time when at least 75% of the planned development north of SR-196 has occurred,

Note: Acreage totals do not include existing developed land.

Source: Lemoore General Plan 2030

As shown in the Figure D-2, most of the City's downtown consists of commercial and mixed uses, which are surrounded by mainly low density single-family residential land uses. Beyond these residential uses are agricultural and rural residential uses. As previously noted, because most of these parcels are under Williamson Act contracts, and designated for agricultural and rural residential, these lands should not be developed in the future. Also, while the City has processed new building permits for single-family units over the past decade, the majority of these permits have been issued in areas designated for residential land uses; thereby limiting development in potential hazard-prone areas, like the floodplains to the far west of the City. The City has issued permits for commercial development in hazard prone areas, such as flood zones. However, mitigation measures were taken to ensure safety and damage prevention, such as raising ground-mounted solar panels in the western portion of the City. Several other permits have been pulled near the area with a 0.2% annual chance of flood hazard, but site-specific mitigation measures were also in place to minimize the flood risk for these project developments. Further, the City of Lemoore does not plan to annex any further west, which is the area at risk for flooding. In summary, development over the past decade has been consistent with the City's General Plan, other plans that guide development, and limited to the areas within the City's 2035 UGB, further limiting development in hazard areas. Through the implementation of various planning tools like the General Plan, Zoning Ordinance, and Municipal Code, and the integration of mitigation measure to minimize risk for those development approved in the 0.2% floodplain to the west, the City's net vulnerability to natural hazards has remained the same.

D.2.8 Future Development

The areas located in the SOI shown in Table D-9 are areas the City plans to grow into and potentially slated for future development. Understanding the potential hazard exposure in the area can help to mitigate the impacts of events before development occurs in those areas. During this plan update

process parcel analysis was conducted using the SOI and overlaid with available hazard risk layers to determine where future development may be at risk of natural hazard events. The results of the analysis have been integrated into the applicable hazard sections: dam incidents. Table D-10 is the summary of the SOI total exposure for the City of Lemoore.

Table D-9 Sphere of Influence Total Exposure Summary

Property Type	Improved Parcel Count	Building Count	Improved Value	Estimated Content Value	Total Value
Agricultural	14	14	\$965,374	\$965,374	\$1,930,748
Commercial	5	97	\$1,415,207	\$1,415,207	\$2,830,414
Exempt	7	9	\$3,900,590	\$3,900,590	\$7,801,180
Industrial	1	1	\$199,265	\$298,898	\$498,163
Multi-Use	10	12	\$1,892,321	\$1,892,321	\$3,784,642
Residential	154	158	\$22,152,791	\$11,076,396	\$33,229,187
Total	191	291	\$30,525,548	\$19,548,785	\$50,074,333

Source: Kings County Assessor, WSP analysis

D.3 HAZARD IDENTIFICATION AND SUMMARY

The City of Lemoore LPT identified the hazards that affect the City and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to their community (see Table D-10). There are no hazards that are unique to Lemoore, although the hazard risk in the City varies and is distinct from the hazard risk in the County’s Planning Area. The purpose of this section is to profile the City of Lemoore’ hazards where different from the County and assess the City’s unique vulnerabilities.

The hazards profiled in the County MJHMP Base Plan discuss the overall impacts to the County’s Planning Area. This information is summarized in the hazard description, geographic extent, magnitude/severity, previous occurrences, and probability of future occurrences. The information in the City of Lemoore’ risk assessment summarizes all priority hazards, and specifically those hazards that vary from the County’s planning area. The hazard profile information is organized in a similar format here as a way to identify priority hazards for mitigation purposes.

Table D-10 summarizes the hazards profiled in the County’s Planning Area and risk assessment to provide a way for the LPT to evaluate which hazards are addressed in their General Plan Safety and Noise Element and which hazards are relevant and priority hazards for the City. The City’s General Plan Safety and Noise Element addressed climate change, seismic and geologic hazards (including earthquake), flood hazards (including dam inundation), and fire hazards as well as hazardous materials and operations. Among the hazards addressed in the City’s General Plan Safety and Noise Element dam inundation, earthquake, flood hazards, landslide, and wildfire hazards are further addressed in this Annex while wildfire is addressed in the Base Plan. Climate change considerations are also addressed in the Base Plan.

Table D-10 City of Lemoore –Hazard Profiles

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE	PRIORITY HAZARD?
Agriculture Pest and Disease	Extensive	Likely	Critical	Low	No
Cyber Attack	Significant	Occasional	Critical	High	Yes
Dam Incidents	Extensive	Unlikely	Critical	Medium	Yes
Drought	Extensive	Likely	Critical	Medium	Yes
Earthquake	Limited	Occasional	Critical	High	Yes
Extreme Temperatures: Freeze and Heat	Extensive	Highly Likely	Limited	High	Yes
Flood	Limited	Likely	Limited	Medium	Yes
Land Subsidence	Significant	Occasional	Negligible	Medium	Yes
Landslide, Mud/Debris Flow, Rockfall	Limited	Occasional	Negligible	Low	No
Public Health Hazards: Pandemic/Epidemic	Extensive	Highly Likely	Critical	Medium	Yes
Severe Weather: Dense Fog	Extensive	Highly Likely	Critical	Medium	Yes
Severe Weather: Hail, Heavy Rain, Thunderstorms, Lightning	Extensive	Highly Likely	Negligible	Medium	Yes
Severe Weather: High Wind/Tornado	Extensive	Highly Likely	Negligible	Medium	Yes
Wildfire	Limited	Unlikely	Negligible	Low	No

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE	PRIORITY HAZARD?
<p>Geographic Area Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area</p> <p>Probability 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.</p>		<p>Magnitude/Severity (Extent) 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</p> <p>Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact</p>			

D.3.1 Vulnerability Assessment

The intent of this section is to assess Lemoore’s vulnerability that is separate from that of the Planning Area as a whole, which has already been assessed in Section 4 Hazard Identification and Risk Assessment of the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk of hazards ranked as a priority.

The information to support the hazard identification and risk assessment was based on a combination of the previous 2012 MJHMP for the City and County and jurisdiction-specific information collected during the 2022-2023 update. A Plan Update Guide and associated worksheets were distributed to each participating municipality to complete during the 2022-2023 update process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction.

Each participating jurisdiction was in support of the main hazard summary identified in the Base Plan (see Table 4-3). However, the hazard summary rankings for each jurisdictional annex may vary due to specific hazard risks and vulnerabilities unique to that jurisdiction. The information in this Annex helps differentiate the jurisdiction’s risk and vulnerabilities from that of the overall County, where applicable.

Note: The hazard “Significance” reflects the overall ranking for each hazard and is based on a combination of the City of Lemoore LPT’s input from the Plan Update Guide, the risk assessment developed during the planning process (see Section 4 of the Base Plan), and the set of problem statements developed by the City LPT. The hazard significance summaries in Table D-10 above reflect the hazards that could potentially affect the City. The discussion of vulnerability for each of the following hazards is located in Section D.3.6 Estimating Potential Losses, which includes an overview on the local issues and areas of concern associated with the hazard, a problem statement for the priority hazard, and a quantitative risk assessment, where spatial data is available. Based on this analysis, the priority hazards for mitigation purposes for the City of Lemoore are identified below.

- Cyber Attack
- Dam Incidents
- Drought
- Earthquake
- Extreme Temperatures
- Flood
- Land Subsidence

- Public Health Hazards: Pandemic/Epidemic
- Severe Weather: Dense Fog
- Severe Weather: Hail, Heavy Rain, Thunderstorms, Lightning
- Severe Weather: High Wind/Tornado

D.3.2 Assets

This section considers Lemoore’s assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets and growth and development trends.

D.3.3 Property Exposure

The following data on property exposure is derived from the Kings County 2021 Parcel and Assessor data. This data should only be used as a guideline to overall values in the City as the information has some limitations. It is also important to note that in the event of a disaster, it is generally 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 and is not included in the values below. Table D-11 shows the exposure of properties (e.g., the values at risk) broken down by property type for the City of Lemoore.

Table D-11 City of Lemoore Property Exposure by Type

PROPERTY TYPE	IMPROVED PARCEL COUNT	BUILDING COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	6	6	\$360,817	\$360,817	\$721,634
Commercial	228	704	\$132,810,700	\$132,810,700	\$265,621,400
Exempt	26	30	\$6,332,106	\$6,332,106	\$12,664,212
Industrial	24	32	\$109,777,286	\$164,665,929	\$274,443,215
Multi-Family Residential	166	2,445	\$152,673,286	\$76,336,643	\$229,009,929
Multi-Use	21	30	\$9,741,781	\$9,741,781	\$19,483,562
Residential	6,638	6,765	\$1,130,157,720	\$565,078,860	1,695,236,580
Total	7,109	10,012	\$1,541,853,696	\$955,326,836	2,497,180,532

Source: Kings County Assessor, WSP analysis

D.3.4 Critical Facilities and Infrastructure

For the purposes of this plan, a critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. FEMA sorts critical facilities into seven lifeline categories as shown in Figure 4-1 in the Base Plan.

Table D-12 shows a summary of the critical facilities within the City of Lemoore and Figure D-3 shows their locations. Critical facilities and other community assets as important to protect in the event of a disaster.

Table D-12 Critical Facilities within the City of Lemoore

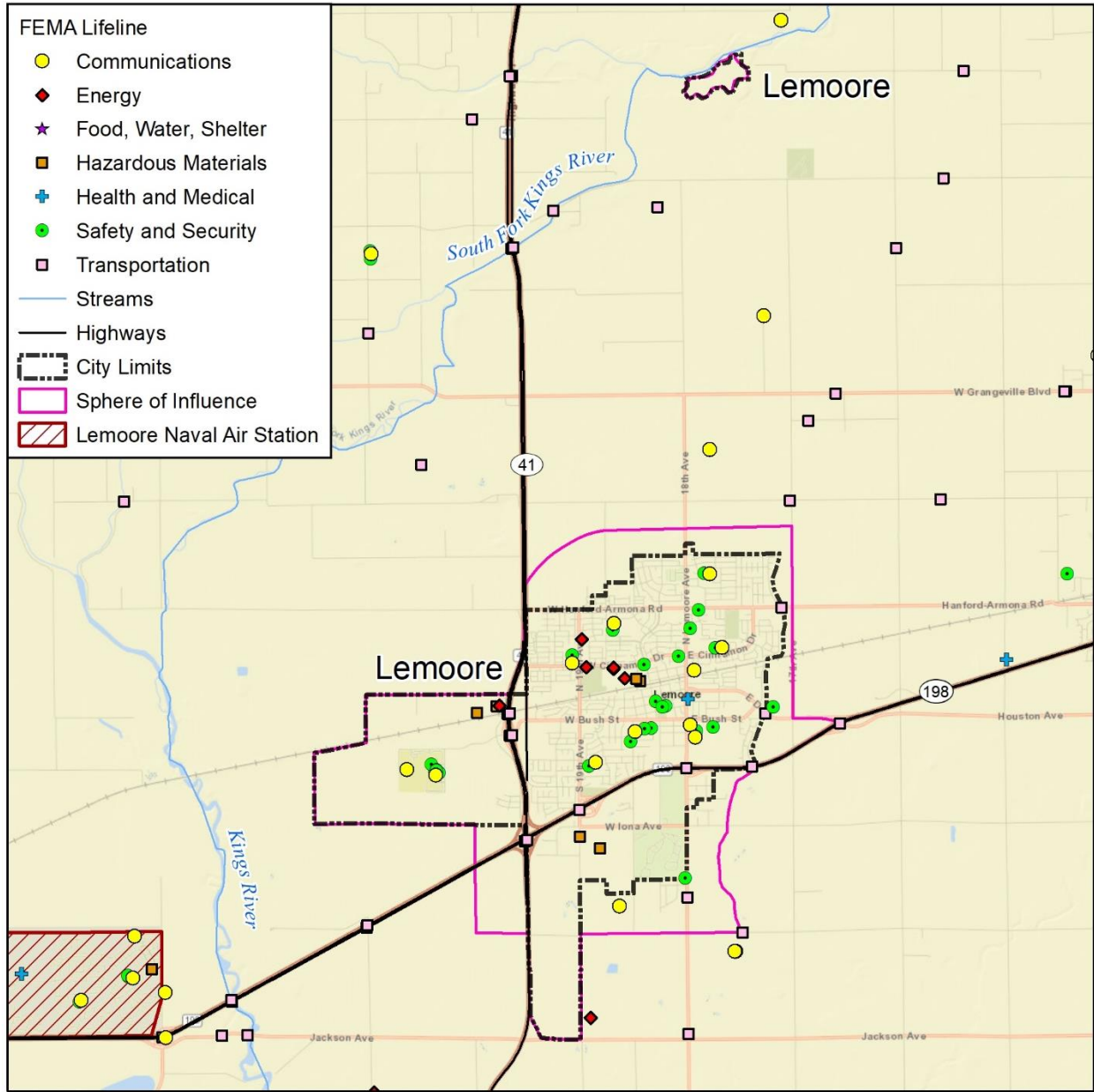
LIFELINE	# OF CRITICAL FACILITIES
Communication	11
Energy	6
Food, Water, Shelter	-
Hazardous Materials	6
Health and Medical	1
Safety and Security	23
Transportation	10
Total	57

Source: Kings County, HIFLD, NID, DWR, WSP analysis

Within the City of Lemoore, the following are considered critical facilities:

- Lemoore Volunteer Fire Department North Side Station
- Lemoore Volunteer Fire Department
- American Ambulance Incorporated
- Kings County Fire Department Station 7 South Lemoore
- West Hills College-Lemoore
- Lemoore Police Department
- Water supply lines and wells
- Wastewater treatment plant, pumping stations, and trunk lines
- Major electrical transmission lines and substations
- Major communication lines and microwave transmission facilities
- Major public and private schools
- Public Library
- Hospital facilities, nursing homes and dialysis centers
- Wells 7, 10, 11, 12, 13, 14
- EW Rail
- 40 G Street
- North Well field
- City Municipal Complex

Figure D-3 Lemoore Critical Facilities



Map compiled 9/2023;
Intended for planning purposes only.
Data Source: Kings County,
HIFLD, NID, DWR

0 1 2 Miles



D.3.5 Historic, Cultural and Natural Resources

Lemoore is situated in an area that has historical ties to the Tachi tribe of the Yokuts indigenous people. This tribe, known as the Tachi Yokuts, inhabited the region north of Tulare Lake and extending westward to the hills near Coalinga. Historical records and archaeological findings suggest that these Native American inhabitants were the final group among a succession of hunter-gatherer populations to reside in the Tulare Lake vicinity (Wallace 1991).

Artifacts recovered from archaeological sites near the lake, primarily concentrated along a former lower shoreline, have included an impressive collection of more than 325 Clovis-type lithic projectile points (Stepp 1997). These Clovis points are recognized as significant indicators of an early North American stone tool technology that emerged around 11,000 to 13,000 years ago. Consequently, it is likely that human presence along the Tulare Lake's edge dates back more than 10,000 years.

The City of Lemoore serves as a prime illustration of a Central Valley railroad town from the late 19th and early 20th centuries. Noteworthy features include its prominent high school situated to the south of downtown and a tall and a wooden mill positioned to the east of downtown. As reported by the South San Joaquin Valley Information Center (SSJVIC) at California State University Bakersfield, there is currently no record of any buildings or structures from Lemoore being listed in the National Register of Historic Places (NRHP) or designated as California Historic Landmarks.

However, considerable attention is drawn to the Lemoore Canal, which holds strong potential for inclusion on the NRHP. This canal, originally referred to as the Lower Kings River Ditch, holds historical significance as the inaugural irrigation system established in the region that now constitutes Kings County (formerly part of Tulare County). It is recognized as providing ongoing importance in supporting the agricultural progress of the County.

The City of Lemoore also recognizes a total of 37 historic buildings and structures that carry historical significance. Notably, a significant portion of these local historic sites are concentrated within the downtown district. This area is defined by the northern presence of railroad tracks, the eastern boundary of Lemoore Avenue, the southern border of C Street, and the western edge of Hill Street. Through its historic buildings, Lemoore's evolution over time is visually evident, reflecting its shifting roles as a hub of agriculture and commerce.

D.3.6 Estimating Potential Losses

D.3.6.1 *Cyber-Attack*

All servers, networks, and users are vulnerable to cyber-attacks. While there have been no recorded cyber-attack events occurring in the City of Lemoore, minor cyber-attacks such as phishing emails often go unreported. Cyber-attack is ranked an overall medium significance hazard for the City of Lemoore and all jurisdictions within Kings County. However, jurisdictions with greater populations and therefore more people exposed to a cyber-attack event are at a higher risk.

Refer to Chapter 4 for a discussion of the cyber-attack risk relative to the City of Lemoore and Kings County.

D.3.6.2 *Dam Incidents*

During the 2022-2023 plan update process, the HMPC and City's LPT highlighted concerns regarding the Pine Flat Dam situated on the Kings River in Fresno County. This dam holds the potential to trigger dam inundation flooding in the City of Lemoore, constituting a considerable threat due to its high hazard classification. Despite the significance of assessing potential inundation areas for all dams, such data remains inaccessible. Reasons include the lack of available GIS data and restrictions on releasing such information in public documents. Consequently, a quantitative analysis of dam inundation exposure couldn't be conducted.

However, based on dam inundation mapping done for the 2035 Kings County General Plan Safety and Noise Element, the overall northeastern County, including the cities of Hanford and Lemoore, would be impacted by a dam failure at the Pine Flat Dam. According to the Safety and Noise Element, if the Pine Flat Dam were to breach at full capacity, it would take approximately five hours to reach the County. If such an incident were to occur, those in the dam inundation area with limited mobility or who have no access to vehicles, as well as those in isolated or mobile housing, would be at the greatest risk of harm.

Dam incidents are ranked an overall medium significance hazard for the City of Lemoore. Refer to Chapter 4 for a discussion of dam incident risk relative to the City of Lemoore and Kings County.

D.3.6.3 Drought

The City of Lemoore currently supplies water to residential, commercial, industrial, and institutional customers within the City limits. In 2017, the City's Utilities Department provided approximately 2,076 million gallons (MG) of water through 6,784 service connections (UWMP 2017). The City continuously assesses its infrastructure to ensure water distribution to the City in the case of a natural disaster or other emergency. A response plan has been implemented and procedures are in place to ensure water is distributed in the case of emergency.

The City utilizes local groundwater as its sole source of municipal water supply. The City's municipal water system extracts its water supply from underground aquifers via nine groundwater wells, three in a well field north of town, and six located within the City; there is also one emergency standby well (Lemoore Public Works 2023). The City maintains three ground-level storage reservoirs within the distribution system, with a total capacity of 2.9 MG (UWMP 2017). The City is waiting on bids to rebuild a 1.5 MG water storage tank that was destroyed in a human-caused explosion in 2021 (WRCB 2023). In addition to the main domestic water supply, the City operates a separate system to supply industrial water to the Olam tomato processing plant.

The City's service area rests upon the Tulare Lake Subbasin, which is part of the larger Tulare Lake Hydrologic Region encompassing eight subbasins responsible for the transport, filtration, and storage of water. The City also relies on groundwater sourced from the Tulare Lake Subbasin for its water supply. The Kings River is the major contributor of surface water runoff for the region within the Tulare Lake Subbasin. Regardless of climatic conditions, there is an estimated 82.5 million acre-feet (AF) of fresh groundwater within the Tulare Lake Subbasin. Considering the City's size and a conservative estimate of 100 vertical feet of groundwater accessible to City wells at various depths, it has been calculated that the City presently has access to 178,228 MG of groundwater. This supply remains available to the City, irrespective of climatic conditions, including average years, single-dry years, or multiple-dry years.

However, due to the City's dependence on groundwater wells, the drawdown of groundwater may be more severe during drought years and periods of high mean temperatures. Given that the central San Joaquin Valley has experienced severe drought conditions in recent history, there is a potential for groundwater levels to reach a critical point, especially in terms of the depth to groundwater in the wells. As a result, the need to deepen wells may arise in the future during prolonged droughts. These water shortage vulnerabilities are discussed in Chapter 4 of the Base Plan, which shows that the County's highest vulnerability to drought is situated in the area around the City of Lemoore. This is due to the presence of several small water providers in the vicinity, as well as the high number of private domestic water wells (DWR 2023).

Given the City relies entirely on groundwater sources, the City is vulnerable to drought and related climate change considerations, with anticipated changes primarily linked to increasing average temperatures, intensifying storm events, and prolonged drought periods based on the City's geographical location and current climate conditions. Other climate change effects, such as increased precipitation variability which could entail longer periods of time without rain, may result in depleted stored groundwater resources, leading to reduced crop productivity and potentially higher water costs. Variations in annual precipitation and temperature could also impact the City's overall water consumption and available supply volumes.

To address these drought challenges, the City has implemented watering regulations to promote water conservation and educate all customers. Almost all City connections, accounting for 99%, are metered, with a few exceptions in downtown and low-usage commercial service connections. The City recently updated its water rates and utilizes the annual Consumer Confidence Report to convey additional information on water conservation and other demand management measures when necessary. Display cases and bulletin boards at City facilities serve as permanent platforms for sharing current City information. The monthly water bills distributed to all water service customers play a role in public education, presenting data on previous-year water usage to enable self-monitoring of water demand. Additionally, the bills contain space for public service announcements aimed at reminding citizens of conservation and demand management measures. The City Manager has also appointed a conservation coordinator, the Public Works Director, responsible for coordinating and expanding the City's water conservation program and providing residents with valuable water conservation information.

In summary, the City has staff and resources to manage water resources and implements conservation programs. The City may benefit from projects and initiatives to promote groundwater recharge and recovery. The City currently does not intentionally divert stormwater for beneficial use within its water distribution system, and there are no immediate plans for such diversion. However, the City may consider these actions in the future to bolster aquifer storage and recovery.

Drought is ranked an overall medium significance hazard for the City of Lemoore. Refer to Chapter 4 for a discussion of drought hazards relative to the City of Lemoore and Kings County.

D.3.6.4 Earthquake

The City of Lemoore lies within a seismically active area. As mentioned in the Base Plan, no major fault systems are known to exist in Kings County. However, minor surface ruptures could occur in areas of minor faulting, which occur primarily in the southwestern part of the County along the Kettleman Hills mountain range. Moreover, the San Andreas Fault is located less than four miles west of the Kings County line.

As shown in Figure 4-14 Kings County Earthquake Ground Shaking Potential and Nearby Faults of the Base Plan, earthquake hazard is the most severe in the southwest of Kings County. The potential for ground shaking in the Lemoore area is 50-60%g, while ground shaking at the southwestern County line can reach 100% g and above. There have not been any damaging earthquakes greater than magnitude 6.0 recorded in Kings County in over 200 years, though several have been very close. Geologic studies estimate that over the past 1,400 to 1,500 years, large earthquakes have occurred at about 150-year intervals on the southern San Andreas fault. As the last large earthquake on the southern San Andreas fault was the Fort Tejon earthquake in 1857, that section of the fault is considered a likely location for an earthquake within the next few decades. The system of fault lines, however, are far enough away that no damage was recorded in Lemoore from the earthquake or aftershocks of the 6.7 magnitude 1983 Coalinga earthquake (Lemoore General Plan 2012). The closest active fault to Lemoore is the Nunez fault located in western Fresno County. The Nunez fault is a 4.2-kilometer long, north-south trending, right-reverse oblique-slip fault situated approximately eight miles northwest of Coalinga. Surface rupture occurred along this fault in the 1983 Coalinga earthquake, which had a magnitude of 6.7 (City of Lemoore 2008). This was followed by another earthquake with a magnitude of 6.0 in 1985. This fault is far enough away from the City of Lemoore that aftershocks during both earthquakes did not cause any damage.

Refer to the Base Plan for details on earthquake hazard’s potential impact on the City of Lemoore and Kings County.

D.3.6.5 Extreme Temperatures

Based on data gathered by the National Oceanic and Atmospheric Administration (NOAA) from the Lemoore Reeves NAS weather station (USW00023110) during the period between 1981 and 2010, Lemoore has an average of 23.9 days per year where the maximum temperature exceeds 100°F, and 32.3 days per year when the minimum temperature falls below 32°F. This data indicates that Lemoore experiences a wide range of temperatures, making it susceptible to extreme weather conditions on both ends of the temperature spectrum. The summary of monthly normals for the Lemoore Reeves NAS station is displayed in Table D-13 below.

Table D-13 Period of Record General Temperature Summary for Lemoore Reeves NAS Station

	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Temperatures (degrees Fahrenheit)												
Average Maximum Temperature	55.0	62.1	68.7	75.6	84.6	91.7	96.8	95.4	90.4	80.3	65.8	54.9
Average Minimum Temperature	35.6	38.6	41.7	44.7	51.1	56.4	60.5	59.0	59.0	47.3	38.5	34.2
Average Temperature	45.3	50.4	55.2	60.1	67.9	74.1	78.6	77.2	72.8	63.8	52.2	44.5
Extreme Temperatures (Mean Number of Days)												
Maximum over 100°F	0.0	0.0	0.0	0.0	1.0	4.2	9.2	6.3	2.7	0.5	0.0	0.0
Minimum under 32°F	8.8	4.4	1.9	0.4	0.0	0.0	0.0	0.0	0.0	0.1	4.6	12.1

Source: NOAA 2023, <https://www.ncdc.noaa.gov/cdo-web/datatools/>

The City of Lemoore opens a cooling center out of the Lemoore Recreation Center when temperatures are expected to exceed 105°F for two consecutive nights. Additionally, the Kings County Library operates a heating and cooling center at the County library in Lemoore during business hours.

Extreme temperatures are an overall high significance hazard in Lemoore. Refer to Chapter 4 for a discussion of the extreme temperature risk relative to the City of Lemoore and Kings County.

D.3.6.6 Flood

The extent of flood severity is influenced by various factors, encompassing the intensity and duration of rainfall, the landscape's topography, and the type of ground cover in the region. An abundance of rainfall within a brief timeframe can lead to sudden flash floods. Conversely, even a modest amount of rain can trigger flooding, particularly in regions with frozen or saturated soil from prior wet spells. Furthermore, floods might occur if rainfall accumulates over impermeable surfaces like extensive parking lots, paved roads, or densely developed zones.

The repercussions of flooding encompass a broad spectrum of effects, including injuries and loss of life, financial setbacks, psychological trauma, as well as damage to infrastructure such as roads and bridges, and properties. This damage spans across different aspects including structural elements (such as foundations), electrical systems (outlets, wiring, meters, etc.), mechanical equipment (washers, dryers, furnaces, water heaters, etc.), and finishing touches like floors and walls.

Floodplains and Special Flood Hazard Area

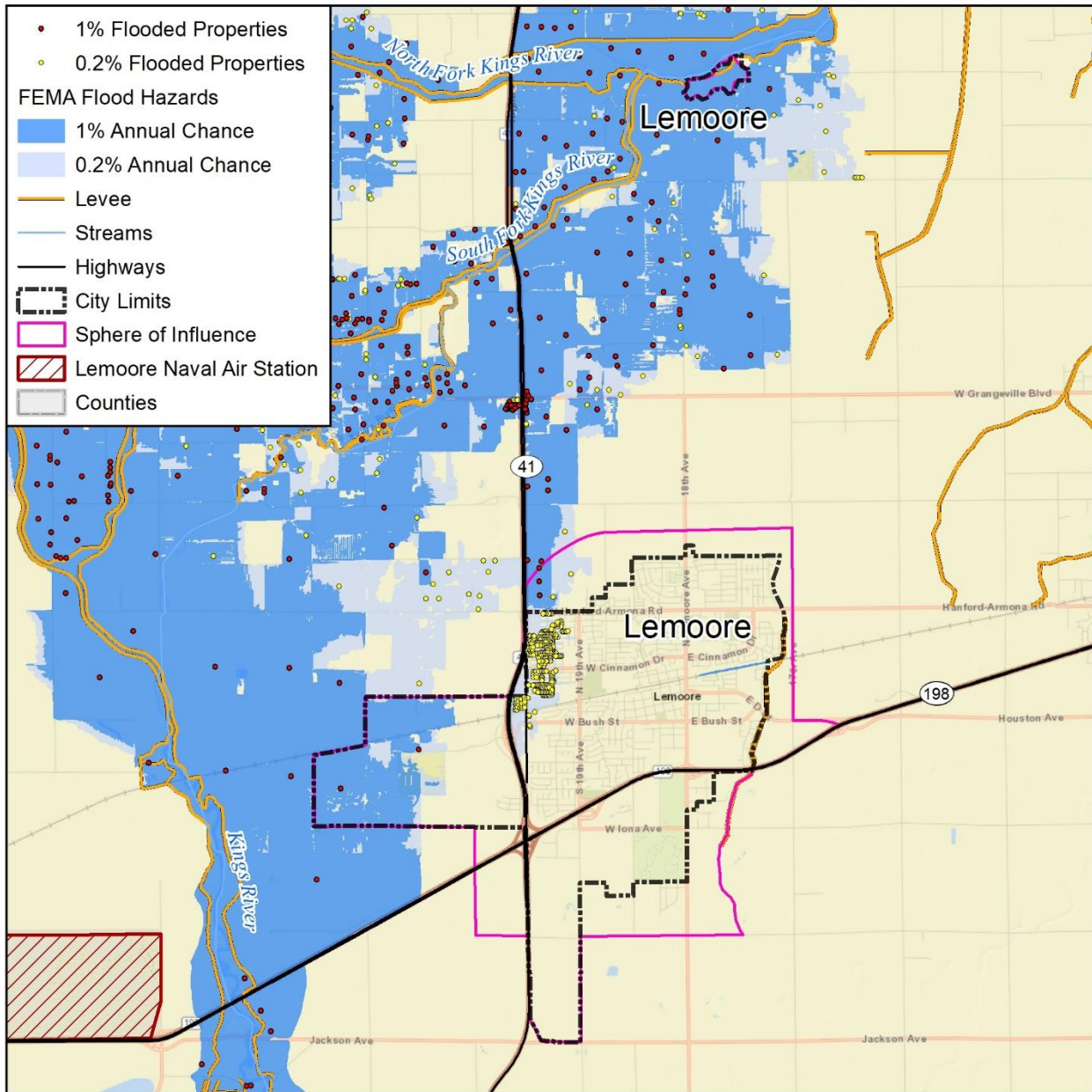
As referenced in the Base Plan, federal, state, and local agencies use the 1% annual chance flood, often called the "base flood" or "100-year flood," as a regulatory benchmark for flood risk. This predefined boundary, also known as the Special Flood Hazard Area (SFHA) serves as a practical method for evaluating susceptibility and potential hazards within regions prone to flooding. A floodplain is a flat area near water bodies prone to periodic flooding, reducing flood impact on communities. Floodplains have fertile soil and diverse ecosystems, requiring careful management for safety and environmental protection. During times of increased water flow, such as heavy rainfall or snowmelt, the floodplain serves as a natural area for excess water to spread out and temporarily inundate. Floodplains are crucial for managing and mitigating flood risks, as they help to absorb and distribute floodwaters, protecting nearby structures and communities from the full impact of flooding.

As noted in the General Plan, the 100-year and 500-year floodplains for the City of Lemoore are delineated by the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs). Flood hazards for the City of Lemoore are shown in Figure D-4. As shown in the figure, mostly the far western portion of the City is exposed to flood hazards, including a small non-contiguous portion of the City to the north. Within the City's SOI, 14% (1,710 acres) is located within the 100-year floodplain and 6% is located in the 500-year flood plain (764 acres). Within the UGB, 6% (448 acres) is located within the 100-year flood plain. These floodplains are largely located in the western portion of the City's SOI near the wetlands and the westside industrial park. The remainder of the City's SOI (80%) is located outside of these two floodplains.²

The City also reports minor localized flooding on Cedar Lane east of 19th Avenue, East D Street east of Lemoore Avenue, and near the areas north of Hanford Aroma Road (City of Lemoore 2008). As noted in the City's Safety and Noise Element, upgrades to the storm drainage facilities along these roads would mitigate the localized flooding problems.

² The City applied for an amendment to the current FEMA floodplain maps. The City will amend the General Plan maps after approval is received.

Figure D-4 City of Lemoore FEMA 1% & 0.2% Annual Chance Floodplains



Map compiled 7/2023;
Intended for planning purposes only.
Data Source: Kings County, DWR
FEMA NFHL 6/17/2019

0 1 2 Miles



The Kings River, which is the primary source of irrigation water for the areas around the City, is regulated by the Pine Flat Dam, located east of Fresno. A Flood Inundation Analysis performed for Pine Flat Dam by the U.S. Army Corps of Engineers indicates the potential effects of dam failure on the downstream floodplain covers the entire City SOI. The extremely low probability of the occurrence of dam failure, large volume of flood water available for dilution of potential pollutants, and the relatively long warning period to prepare downstream dairy farms for flooding indicate that inundation related to dam failure would not be a significant impact on growth and development in and around Lemoore (see Section D.3.6.2).

A flood vulnerability assessment was completed during the 2022-2023 update, following the methodology described in Section 4 of the Base Plan. Table D-14 summarizes the values at risk in the City's 1% annual chance floodplain. Table D-15 summarizes the values at risk in the City's 0.2% annual chance floodplain.

Table D-14 City of Lemoore FEMA 1% Annual Chance Flood Hazard, by Property Type

Property Type	Improved Parcel Count	Building Count	Improved Value	Content Value	Total Value	Estimated Loss	Population
Agricultural	1	1	\$11,954	\$11,954	\$23,908	\$5,977	
Exempt	1	1	\$-	\$-	\$-	\$-	
Total	2	2	\$11,954	\$11,954	\$23,908	\$5,977	-

Source: Kings County Assessor’s Office; National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

Table D-15 City of Lemoore FEMA 0.2% Annual Chance Flood Hazard, by Property Type

Property Type	Improved Parcel Count	Building Count	Improved Value	Content Value	Total Value	Estimated Loss	Population
Commercial	3	4	\$1,542,712	\$1,542,712	\$3,085,424	\$771,356	
Industrial	1	1	\$399,406	\$599,109	\$998,515	\$249,629	
Multi-Family Residential	2	274	\$34,356,891	\$17,178,446	\$51,535,337	\$12,883,834	808
Multi-Use	1	1	\$3,821,051	\$3,821,051	\$7,642,102	\$1,910,526	3
Residential	212	212	\$41,915,687	\$20,957,844	\$62,873,531	\$15,718,383	625
Total	219	492	\$82,035,747	\$44,099,161	\$126,134,908	\$31,533,727	1,437

Source: Kings County Assessor’s Office; National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

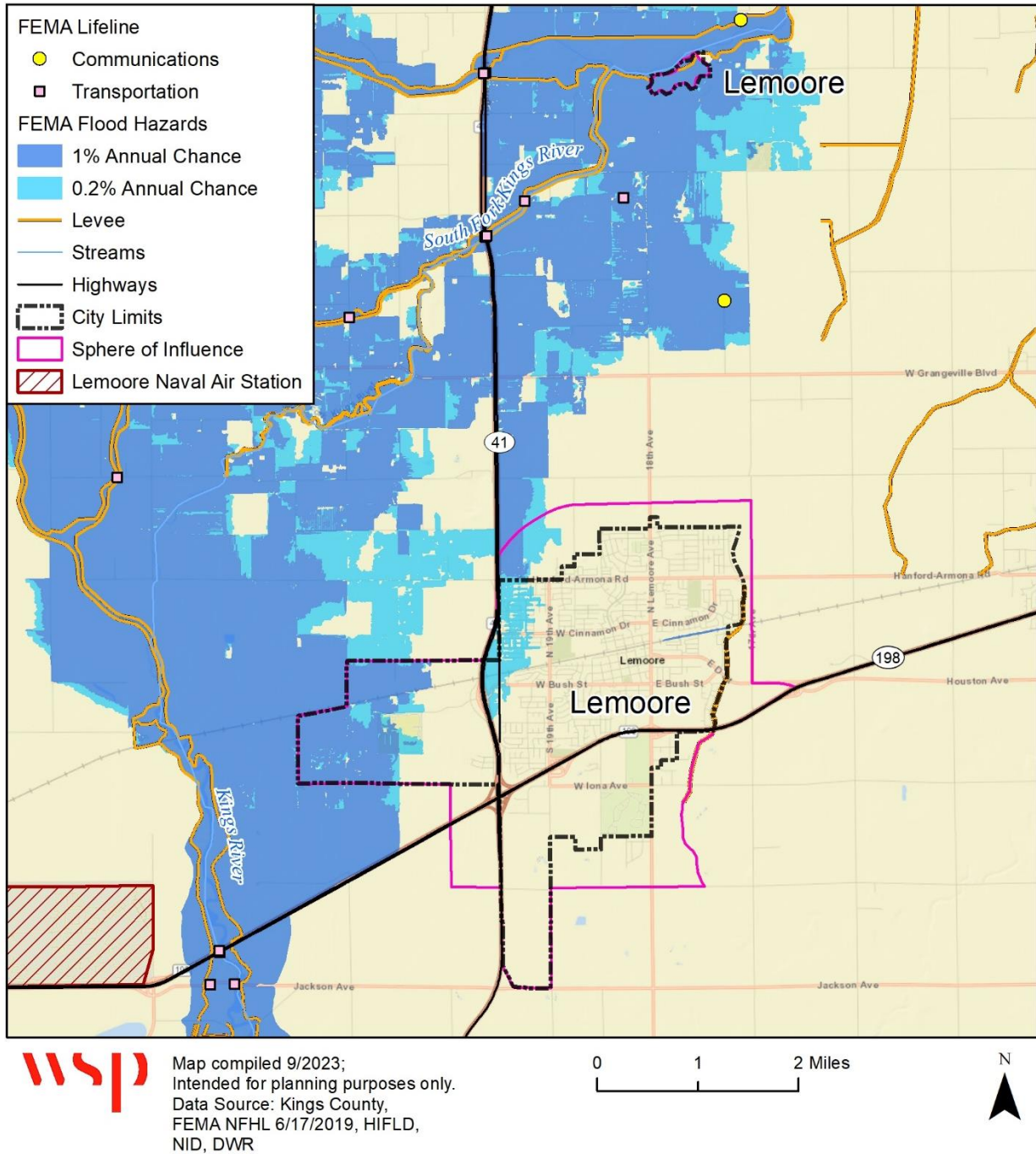
Based on this analysis, the City of Lemoore has 2 buildings located within the 1% annual chance floodplain for a total value of almost \$24,000. The potential loss is estimated at almost \$6,000 if these areas were inundated by the 1% annual chance flood. In addition, the City of Lemoore has 492 buildings located within the 0.2% annual chance floodplain for a total value of over \$126 million. Most of these properties are located along the far western portion of the City and within the non-contiguous portion of the City to the north. The potential loss is estimated at almost \$32 million if these areas were inundated by the 0.2% annual chance flood. The population at risk was calculated for the 1% and 0.2% annual chance floodplains based on the number of residential properties at risk and the average number of persons per household (2.95). No population is at risk to 1% annual chance flood events; however, 1,437 persons are at risk to 0.2% annual chance flood in the City.

The Department of Water Resources (DWR) developed Best Available Maps (BAM) following legislation enacted in 2017 (Senate Bill 5) for the 100-, 200-, and 500-year floodplains located within the Sacramento-San Joaquin Valley. The BAM maps contains the best available information on flood hazards in cities and counties. While the BAM maps do not replace existing FEMA regulatory floodplains shown on the Flood Insurance Rate Maps (FIRM) they identify potential flood risk in areas that may warrant further studies and are intended to facilitate land use decision making. There is no DWR Awareness 100-year floodplain located within the City of Lemoore.

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. According to the critical facility flood hazard analysis during the 2022-2023 plan update process, none of Lemoore’s facilities are located in 1% or 0.2% annual chance floodplains; most of these critical facilities are in the unincorporated County. Figure D-5 below shows the City’s critical facilities in the 1% and 0.2% annual chance floodplains.

Figure D-5 Critical Facilities at Risk of FEMA 1% & 0.2% Annual Flood Hazard



Insurance Coverage, Claims Paid, and Repetitive Losses

The City of Lemoore joined the NFIP on April 3, 1987. NFIP Insurance data indicates that as of May 2023, there were nine flood insurance policies in force in the City with \$ 3,034,000 of coverage. All nine policies are located in B, C & X zones. All nine policies are for single family residential. There have not been any historical claims. According to the FEMA Community Information System accessed August 25, 2023, the City currently has no Repetitive Loss or Severe Repetitive Loss properties.

Future Development

The results of the SOI flood analysis are shown below. A total of two buildings within the SOI are exposed to the 1% annual chance flood (see Table D-16). Another two buildings within the SOI are exposed to the 0.2% annual chance flood (see Table D-17). This indicates the risk to existing development that could be under the City’s jurisdiction if the area was annexed.

Table D-16 Sphere of Influence Areas Exposed to 1% Annual Chance Flood Hazard

Property Type	Improved Parcel Count	Building Count	Improved Value	Content Value	Total Value	Estimated Loss	Population
Agricultural	2	2	\$25,742	\$25,742	\$51,484	\$12,871	-
Total	40	44	\$38,205,152	\$37,338,575	\$75,543,727	\$18,885,932	96

Source: Kings County Assessor’s Office; National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

Table D-17 Sphere of Influence Areas Exposed to 0.2% Annual Chance Flood Hazard

Property Type	Improved Parcel Count	Building Count	Improved Value	Content Value	Total Value	Estimated Loss	Population
Residential	1	1	\$33,200	\$16,600	\$49,800	\$12,450	-
Exempt	1	1	\$30,770	\$30,770	\$61,540	\$15,385	3
Total	2	2	\$63,970	\$47,370	\$111,340	\$27,835	3

Source: Kings County Assessor’s Office; National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

Flood hazards are ranked medium for the City of Lemoore based on flood risk associated with the 1% and 0.2% annual chance floodplains. There are also localized flooding issues along several roads in the City that can be improved through storm drainage facility upgrades. Refer to Chapter 4 for a discussion of flood risk relative to the City of Lemoore and the County.

D.3.6.7 Land Subsidence

The 2030 Lemoore General Plan defines subsidence as “the gradual settling or sinking of the earth’s surface with little or no horizontal motion,” further explaining that subsidence in Kings County is predominately related to groundwater withdrawal. Land subsidence is prevalent along the northeastern portion of Kings County. According to data from DWR, the City of Lemoore has experienced moderate subsidence. Between 2015 and 2023, the City experienced vertical displacement of -3.5 to -4.5 feet. The northeastern portion of the City, which has experienced the most vertical displacement (between -4.0 to -4.5 feet), is largely zoned for residential and agricultural uses.

Land subsidence is an overall medium significance hazard for the City of Lemoore and all jurisdictions within Kings County. Refer to Chapter 4 for a discussion of land subsidence risk relative to the City of Lemoore and the County.

D.3.6.8 Public Health Hazards: Pandemics/Epidemics

All populations are vulnerable to public health hazards. Elder populations, young children, and individuals with pre-existing medical conditions are more likely to face long lasting impacts from communicable disease. These groups are at a higher risk of facing prolonged and often more serious impacts from infectious diseases due to their compromised immune systems or underdeveloped defense mechanisms.

While areas of high population density are likely to experience a greater number of cases due to a larger population, larger cities tend to have advantages in terms of access to medical resources. The availability of medical facilities, advanced healthcare services, and a concentration of healthcare professionals can contribute to a more robust response to disease outbreaks. In such urban environments, medical resources are often better equipped to manage and treat a larger volume of cases. However, the effectiveness of response doesn’t solely depend on the presence of medical resources. It also hinges on the coordination of

public health interventions, early detection, and the implementation of preventative measures. In contrast, rural or less densely populated areas might have limitations in terms of immediate medical access, but their smaller populations can make it easier to implement containment strategies and monitor outbreaks closely.

Public health hazards are an overall medium significance hazard for the City of Lemoore and all jurisdictions within Kings County. Refer to Chapter 4 for a discussion of public health hazards risk relative to the City of Lemoore and the County.

D.3.6.9 Severe Weather: Dense Fog

Thick fog, referred to as Tule fog, is a common meteorological phenomenon experienced in Kings County, primarily during the winter months, typically spanning from December through February. This fog formation transpires rapidly in the early morning hours and can persist for extended periods, often stretching over days to weeks. The National Center for Environmental Information (NCEI) Storm Events Database, covering the timeframe from 1996 to 2022, has documented a total of 333 dense fog occurrences in Kings County (as detailed in Table 4-65 of the Base Plan). 131 of these incidents were registered in Lemoore with \$6,000 in crop damages and \$150,000 in property damages. Each event with recorded property and crop damages is summarized in Table

Table D-18 Dense Fog Events in Lemoore with Damages (2017-2022)

Date	Injuries	Property Damage	Summary
01/31/2017	0	\$6,000 (Crop)	High pressure with clearing skies over the region coupled with recent heavy precipitation created ideal conditions for dense nighttime and morning radiational fog to develop. California Highway Patrol reported dense fog caused a multiple vehicle collision with 3 vehicles involved on westbound Highway 198 just east of 16th avenue east of Lemoore in Kings County. No injuries were reported.
11/21/2021	0	\$50,000 (Property)	Another night of clear skies, light winds and inversion conditions resulted in widespread dense fog forming in the San Joaquin Valley during the evening of November 21 into the early morning of November 22. The fog persisted over a widespread area until late morning when it lifted into a low clouds deck which eroded during the afternoon. The fog resulted in at least three major vehicular accidents in the San Joaquin Valley during the morning of November 22.
01/14/2022	0	\$100,000 (Property)	A weak upper-level low pressure system brought some mid-level clouds to the area during the morning of January 13 inhibiting fog formation in the valley that morning. However, skies cleared out during the early morning of January 14 which allowed for widespread dense fog to form in the San Joaquin Valley as light winds and inversion conditions prevailed. The fog resulted in several multi-vehicle accidents during the morning of January 14 and California Highway Patrol paced traffic on several highways as visibility was as low as 50 feet on some highways. In addition, several school districts in the San Joaquin Valley opened late and cancelled bus service for the day. The fog slowly dissipated during the early afternoon.

Source: NCEI Storms Event Database 2023

Severe weather hazards associated with dense fog are an overall medium significance hazard for the City of Hanford. Refer to Chapter 4 for a discussion of dense fog hazards risk relative to the City of Hanford and the County. recurring atmospheric conditions associated with Tule fog.

D.3.6.10 Severe Weather: Heavy Rain, Thunderstorms, Lightning, and Hail

Between 1968 and 2022, the NCEI Storm Events Database recorded a total of 127 instances of hail, heavy rain, thunderstorms, and lightning events in Kings County. Of these events, 13 were recorded in Lemoore consisting of four heavy rain events, four thunderstorm events, four hail events, and one lightning event. There were no recorded deaths or injuries. There has been \$90,000 in property damages, summarized in Table .

Table D-19 Heavy Rain, Thunderstorms, Hail, and Lightning Events (1968-2022)

Date	Property Damage	Summary
Heavy Rain		
Dec. 14, 2003	N/A	In the Southern Sierra and Tulare County Mountains at the higher elevations substantial snow fell primarily during the morning of the 14th. Estimated amounts included Chilkoot Meadow 15 inches of new snow, Volcanic Knob 13", Beach Meadow 22", and Lodgepole 15". Pre-frontal wind was also present as the foothill areas reported southeast wind gusts to 35 MPH at Cathays Valley. Post-frontal conditions later in the day had north winds sustained at 41 MPH in the Indian Wells Valley area with a gust to 64 MPH. Jawbone RAWS had northwest wind gusts to 58 MPH. Locally heavy rain occurred on the San Joaquin Valley floor with the city of Lemoore reporting street flooding in the late morning hours from 0.41" of rain in that short period.
April 28, 2005	N/A	Early afternoon thunderstorm activity brought locally heavy rain (0.88"), hail, and reports of funnel clouds around the city of Lemoore.
March 28, 2006	N/A	A small F0 Tornado occurred just west of Atwater, CA, which resulted in small structure roof damage and the tossing of equipment and trash cans at nearly the same time as another tornado 10 miles to the ESE in Merced County. Locally heavy rain from the thunderstorm activity in Merced County also resulted in reports of roadway flooding just northeast of Livingston by 1633 PST. Urban flooding was the result of locally heavy rain and thundershowers specifically in the Lemoore/Hanford area of Kings County as well as Porterville in Tulare County.
Nov. 01, 2014	N/A	An apartment roof collapsed due to heavy rain. Reported by local media via twitter. Rain estimated 0.75 inches from combination of nearby ASOS and COCORAHs reports.
Thunderstorm		
June 15, 1995	\$25,000 (Property)	Oak tree limbs were broken, and other full-foliage trees were toppled by brief strong wind in the Hanford/Lemoore area, 30 miles south-southeast of Fresno. In Hanford, one of the toppled trees damaged a car. A post-event survey was unable to ascertain whether severe thunderstorm wind criteria were met because soils were moist, and trees were full foliage. However, the damage location just south of the Fresno County line and timing of the damage places this damage in proximity to severe storm damage in south-central Fresno County at Raisin City/Caruthers/and Easton.
Feb.14, 1998	\$50,000 (Property)	Afternoon convective activity on the 14th provided wind gusts to 40 MPH at 1610 PST damaging powerlines and dropping service to 1800 electric customers in the Lemoore area.
May 14, 2003	\$10,000 (Property)	A thunderstorm outflow 6.5 miles NW of the town of Lemoore and ENE of NAS Lemoore swept southward on the afternoon of the 14th. Damage occurred to fences, dairy barns, and small structures. Eyewitnesses also reported the presence of a gustnado along the outflow that focused damage along the vortex's 15-yard wide, 3/8-mile path length. Gusty wind contributed to downed power lines setting off about 4 minor fires around the southwestern portion of the San Joaquin Valley. Damage was primarily to agricultural commodities destroyed by the wind-caused fires.
April 2, 2019	\$1,000 (Property)	A low-pressure system moved across the Pacific Northwest and northern California on April 2. While most of the moisture associated with this system remained to the north of our area, a cooler and unstable airmass moved over the area during the afternoon behind a cold front which pushed through the area. Scattered showers and thunderstorms developed in the post-frontal unstable atmosphere during the afternoon and produced locally heavy rainfall along with small hail and strong winds gusts. The front itself brought locally strong wind gusts to the Kern County Mountains where a few low impact indicator sites measured gusts exceeding 55 mph.

Hail		
Nov. 22, 1996	\$2,000 (Property)	Associated with the tornadic supercell at Lemoore N.A.S. was hail damage to vehicles. Side and front windows on vehicles were smashed by large hail stones during storm passage. Post storm survey determined that hail stones reached up to 2.5 inches in diameter.
May 31, 2002	N/A	Remnants of Hurricane Alma interacted with a closed mid-latitude low providing moisture for a de-stabilizing air mass over Interior Central California in the late evening hours of Friday, May 31st. The resulting widespread, late evening convection led to strong, gusty wind in wet microbursts and street flooding from localized, torrential rains. The most visual damage occurred with a series of very small microbursts evidenced by crop damage in North Kings County. Also, a late report of 3/4+" hail was received from North Kings County.
April 28, 2005	N/A	Mid-day and afternoon thunderstorms during the 28th led to many reports of hail. Damage from hail on the 28th and other days of unseasonably persistent rain into early May resulted in significant crop damage in Central California. These damage figures will be reported in the May 2005 Storm Data.
March 10, 2006	N/A	Associated with the severe thunderstorms was locally heavy rain. Lemoore, in Kings County, received 0.48" of rain in about an hour that led to extensive street flooding. A late afternoon thunderstorm along Highway 41 just north of the Fresno/Madera County Line brought small hail and icy rain onto the roadway as well as impacting crops in the vicinity.
Lightning		
April 28, 2005	N/A	Early afternoon thunderstorm activity brought locally heavy rain (0.88"), hail, and reports of funnel clouds around the city of Lemoore.

Source: NCEI Storms Event Database 2023

D.3.6.11 Severe Weather: High Wind/Tornado

Between 1968 and 2022, the NCEI Storm Events Database recorded a total of 98 instances of high wind, strong wind, and tornado events in Kings County.³ Of these 98 events, 15 were recorded in Lemoore, including one high wind event on February 3, 2000, that resulted in one death and four injuries. In addition to these events, the USDA declared three disaster designations, one in 2016 and two in 2017, due to high wind events. Table D-20 summarizes the high wind and tornado events recorded by the NCEI in Lemoore.

Table D-20 High Wind and Tornado Events in Lemoore, 1968-2022

Date	Property Damage	Summary
Tornado		
March 5, 1994	\$0	Thunderstorms rolled through the central San Joaquin Valley spawning a funnel cloud and a tornado along with damaging hail in Lemoore. The tornado was reported to have touched down for only about 15 seconds and no damage was reported. The hail and strong winds caused \$6 million in crop damage.
Nov. 22, 1996	\$250,000	This tornado was observed to be very slow moving with cell movement northwest to southeast and a path length of one mile or so over barren ground in the mid-field of Lemoore NAS. Storm damage to the Lemoore NAS administrative section was substantial but no injuries occurred. Damage included roof removal of the base recycling center, wind damage to roofs on several administrative structures, powerlines and poles, and fixed structures.
High Wind		
Feb. 3, 2000	\$100,000	Lemoore had sustained wind at 21 knots on the South San Joaquin Valley floor. Over 4,500 customers in the South San Joaquin Valley lost power due to downed trees, along with

³ The NCEI Storm database defines high winds as sustained non-convective winds of 35 knots (40 mph) or greater lasting for 1 hour or longer, or gusts of 50 knots (58 mph) or greater for any duration (or otherwise locally/regionally defined). Events with winds less than High Wind criteria, resulting in fatalities, injuries, or significant property damage are encoded as a Strong Wind events.

Date	Property Damage	Summary
		several weather-related vehicle accidents, including one with a fatality due to areas of blowing dust 5 miles southeast of Shafter.
Oct. 21, 2000	\$0	Gusty wind along the west side of the San Joaquin Valley resulted in wind speeds up to 41 MPH at Kettleman Hills and 37 MPH at Lemoore NAS.
May 2, 2001	\$0	A strong gradient wind situation began to develop on the 1st and peaked on the 2nd of the month. Lemoore NAS reported a peak gust of 37 knots (43 MPH) and broken tree limbs were reported in several locations on the San Joaquin Valley floor.
March 13, 2002	\$0	The West Side of the Central and Southern San Joaquin Valley experienced gusty wind, with the Kettleman Hills reporting gusts up to 42 MPH and Lemoore reporting gusts up to 37 MPH. Local utility reports indicated 6,000 customers went without power in the Central San Joaquin Valley due to downed power lines and trees.
June 8, 2002	\$0	Higher than normal wind speeds caused concerns in the Central and Southern San Joaquin Valley. Northwest wind gusted to 38 MPH at Lemoore on the morning of the 8th. On the east side of the Valley, wind did not quite reach wind advisory levels although speeds were noted at 26 MPH in Hanford.
June 9, 2002	\$0	Another day of strong onshore pressure gradients brought gusty wind to the west side of the Central and Southern San Joaquin Valley. Sustained wind of 30 MPH and gusts to 36 MPH occurred at Lemoore NAS while gusts reached 43 MPH at Kettleman Hills.
Strong Winds		
Dec. 14, 2002	\$5,000	Numerous locations around the Central and South San Joaquin Valley reported downed trees and powerlines. Lemoore NAS reported sustained winds of 33 MPH while the west side near Kettleman Hills reached gusts of 55 MPH.
Feb. 19, 2003	\$5,000	On the South San Joaquin Valley floor, wind speeds reached 37 MPH at Hanford and 44 MPH at Bakersfield. The strong wind caused a major power outage affecting 12,000 customers in the city of Lemoore and an additional 18,000 customers elsewhere in Kings and Southwest Fresno Counties.
May 14, 2003	\$150,000	A thunderstorm outflow northwest of Lemoore and east-northeast of Lemoore NAS caused damage to fences, dairy barns, and small structures. A gustnado focused damage along the vortex's path length. Gusty wind contributed to downed power lines, setting off about four minor fires around the southwestern portion of the San Joaquin Valley. Damage was primarily to agricultural commodities destroyed by the wind-caused fires.
Jan. 2, 2006	\$100,000	Lemoore received just over three inches of rain in about 30 hours. Strong winds brought down several large trees in the city of Lemoore, including one 100-year-old tree onto a house.
March 21, 2009	\$500	A major storm arrived on the 21st, heralded by strong winds ahead of the cold front. Several gusts between 35 to 38 mph were recorded on the west side of the San Joaquin Valley. Coalinga dropped to a low of 25 degrees and Lemoore NAS had lows of 31.
April 9, 2019	\$5,000	California Highway patrol reported power lines down on the roadway in Lemoore.
Feb. 2, 2020	\$5,000	Public reports of trees blown down in the housing area of Lemoore NAS.

Source: NCEI Storms Event Database 2023

Tornadoes and windstorms pose a significant risk to both the residents and the property within the City of Lemoore. Vulnerability varies depending on the intensity of the event, with certain entities, including mobile homes, damaged vegetation, trees, and utility infrastructure, being particularly susceptible. While vulnerability might differ based on the strength of the event, due to the regional scale of these events, the risk to the City of Lemoore does not vary significantly from the risk to the County as a whole.

High wind and tornado events are an overall medium significance hazard for the City of Lemoore and all jurisdictions within Kings County. Refer to Chapter 4 for a discussion of high wind and tornado risk relative to the City of Lemoore and the County.

D.4 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 outreach and partnerships, and other mitigation efforts. To develop this capability assessment, the jurisdictional planning representatives reviewed a matrix of common mitigation activities to inventory which of these policies or programs and shared any updates or changes through the Lemoore Plan Update Guide. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contribute to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. Additionally, in summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The City of Lemoore’s capabilities are summarized below.

D.4.1 Regulatory Capability

The regulatory and planning capabilities table lists planning and land management tools typically used by local jurisdictions to implement hazard mitigation activities. Table D-21 below indicates those that are in place in the City of Lemoore.

Table D-21 City of Lemoore –Regulatory and Planning Capabilities

REGULATORY TOOL (ORDINANCES, CODES, PLANS)	YES/NO	COMMENTS
General Plan	Yes	2030 General Plan Adopted May 2008
Zoning ordinance	Yes	Code current through Ordinance 2023-01, passed February 21, 2023
Subdivision ordinance	Yes	Code of Ordinances Title 8 Chapter 7 Article J Subdivision Design Standards
Growth management ordinance		
Floodplain ordinance	Yes	Code of Ordinances Title 9 Chapter 8 Flood Damage Prevention
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	2008 Storm Water Management Plan
Building code	Yes	Currently under the 2019 standards, will soon be updated to 2022
Fire Department ISO rating	Yes	Class 2 ISO
Erosion or sediment control program	Yes	Part of Storm Water Management Plan
Stormwater management program	Yes	Yes, August 2008
Site plan review requirements	Yes	Code of Ordinance Title 9 Chapter 2 Article B Planning Permits and Entitlements
Capital improvements plan	No	
Economic development plan	No	
Local emergency operations plan	Yes	Published in 2005
Other special plans	No	
Flood insurance study or other engineering study for streams	Yes	2014 FIS FEMA SFHA
Elevation certificates (for floodplain development)	Yes	
Other	No	

Lemoore General Plan 2030 (2008)

The 2030 Lemoore General Plan is a comprehensive planning document that has been collaboratively developed with input from City officials and residents, aiming to articulate a vision for the Lemoore community in the year 2030. It builds upon the cherished aspects of Lemoore, such as its relaxed pace of life, safe neighborhoods, sense of community, and small-town atmosphere, with a commitment to preserving and enhancing these qualities as the City grows. The plan translates these ideals into policies

and actions that will guide decision-makers in shaping the City's physical development, service provision, and resource management over the next decade.

This General Plan serves several crucial purposes. It is legally mandated under State law and addresses issues related to urban development and resource conservation. It aligns local development processes with broader regional and statewide goals while remaining rooted in the input of Lemoore's residents. The plan focuses on concrete and achievable goals within the planning horizon, outlining specific actions for the City to take. These actions are unified under an overarching vision of a vibrant, safe, and appealing City with a small-town character, a robust and diverse economy, affordable housing, efficient transportation, and an exceptional quality of life.

Importantly, the General Plan is a long-term tool designed for continuous use. State law mandates that other city documents, such as specific plans, subdivision regulations, and zoning ordinances, must align with and be consistent with the General Plan. While it doesn't cover every aspect of city governance, it provides a foundational framework. It also outlines a long-term vision, guides various city departments and decision-making bodies, helps evaluate development proposals, assists in designing projects that preserve the community's character and environment, and underpins the development of more detailed plans and programs, such as zoning ordinances, specific plans, and the Capital Improvements Program. In summary, the 2030 Lemoore General Plan is a dynamic roadmap for Lemoore's future, reflecting its community values and aspirations.

Safety and Noise Element

The City's Safety and Noise Element identifies natural and man-made public and safety hazards in the City. It also establishes policies and programs to mitigate potential impacts through preventative and response measures. The City's Element addresses seismic hazards, wildfires, drainage and flood control, hazardous materials, health and safety services, and the community noise environment.

In response to the seismic hazards posed by earthquakes in the City, it is acknowledged that existing structures may be affected to varying degrees based on the earthquake's characteristics. New structures are required to adhere to the current California Uniform Building Code (UBC) standards to ensure proper design, construction, and maintenance, thereby reducing exposure to geological hazards. Critical facilities like hospitals, fire and police stations, and emergency communication centers must be designed to remain functional after a significant seismic event, employing measures like flexible utility connections, building anchors, and reinforced concrete. The requirements of Zone II of the Uniform Building Code are deemed suitable for normal facilities in the City.

These guiding policies aim to minimize property damage and personal injury resulting from seismic and geological hazards. Implementing policies involve also early-stage geologic and seismic hazard assessments for proposed development sites; enforcement of appropriate building standards and codes; stricter safety provisions for critical-use structures; mitigation for structural alterations; utility resilience to seismic forces; and erosion controls. There are also policy standards and inspection requirements for above-ground storage tanks to reduce risks to life and property. These policies collectively aim to enhance safety and reduce vulnerabilities in the face of earthquake-related threats.

The Safety Element also outlines wildfire policies through a series of comprehensive policies and initiatives. These measures include ensuring Fire Department personnel are trained in wildfire prevention, response, and evacuation procedures, continuing the Weed Abatement Program administered by the Volunteer Fire Department to reduce fire hazards before the fire season, and enforcing the Uniform Fire Code through the approval of construction plans and final occupancy permits. Additionally, the City utilizes public awareness programs to educate the community about the dangers of open burning and ways homeowners can protect their properties from wildfires. Further, during drought periods, the City will actively update both the news media and City residents on current wildfire threat levels, fostering heightened awareness and preparedness within the community. These integrated efforts underscore the city's commitment to mitigating wildfire risks and ensuring the safety of its residents and businesses.

The City's Safety and Noise Element also contains goals and policies aimed at mitigated drainage and flood control, hazardous materials, and health and safety services. For example, the hazardous material policies prohibit the establishment or expansion of businesses meeting federal Emergency Planning and Community Right-to-Know Act (EPCRA) reporting requirements within a quarter mile of schools, hospitals, and residential neighborhoods. Policies require the remediation and cleanup of sites contaminated with hazardous substances, with the level of remediation determined by the City based on public health risks and compliance with federal and state standards. The coordination of the Hazardous Material Disclosure Program with the Kings County Health Department is also emphasized, ensuring the identification of

facilities handling hazardous materials and enhancing emergency response capabilities. There is also a commitment to promoting the reduction, recycling, and safe disposal of household and business hazardous wastes through public education and awareness initiatives. These policies collectively underscore the City's commitment to environmental safety and responsible management of hazardous materials.

Zoning Ordinance (2023)

The Lemoore Zoning Ordinance, referred to as the Zoning Ordinance 8905, serves several purposes in regulating land development and use in accordance with the Lemoore City's General Plan. Its primary objectives are to ensure public health, safety, comfort, and convenience while promoting economic development, community aesthetics, and the protection of natural resources. The code outlines the authority granted to the City by the State of California and applies to all land uses, structures, subdivisions, and developments within the City. It repeals and supersedes previous zoning regulations, except for vested land use development permits. Compliance with the zoning code is required for establishing, constructing, or altering any land use or structure, and it sets minimum requirements to safeguard public welfare.

The Zoning Ordinance also addresses conflicts with other legal provisions and outlines the authority and responsibilities of various administrative bodies, such as the Planning Director, City Manager, Planning Commission, and City Council. Violations of the code may result in penalties, and the code emphasizes its role in ensuring public safety and regulating land development within the City's jurisdiction. Additionally, it includes provisions for handling zoning code changes for ongoing projects and emphasizes the importance of adhering to the code's standards and requirements. Finally, the Zoning Ordinance enacts the City Code of Lemoore as the official code of the City, outlines its adoption and maintenance, and establishes penalties for unauthorized alterations or tampering with the code.

Zoning Ordinance Article E: Fire Code

This article of the Zoning Ordinance outlines the adoption of various building and fire codes in the City. The City has adopted the 2016 California Fire Code, referencing the 2015 International Fire Code, and has made specific amendments to this code. Additionally, the article discusses the establishment and duties of the Bureau of Fire Prevention within the City, including its authority over various fire-related matters. The article also covers the adoption of the 2016 California Building Code, with references to the 2015 International Residential Code. Like the Fire Code, the Building Code is adopted with specific amendments. One such amendment relates to roof sheathing requirements. Lastly, the article adopts the 2016 California Administrative Code and specifies that all provisions of this code are now part of the administrative code of the City. The article concludes with sections related to appeals, violations, and the repeal of conflicting ordinances in the City.

City of Lemoore Municipal Code, Title 7, Chapter 7, Water and Sewer Regulations

The City's water and sewer regulations are outlined in Title 7 of the City's Municipal Code. Title 8, Chapter 4, Storm and Surface Water Drainage System and Title 8, Chapter 8, Flood Damage Prevention of the Municipal Code contain the City's regulations regarding hydrology, storm drainage, and flooding.

The City's approach to flood management and storm drainage involves several key measures. First, new development within flood-prone areas must adhere to the City's Flood Damage Prevention Ordinance. Second, there is a commitment to identify and address deficiencies in the existing storm drainage infrastructure in collaboration with regional and federal agencies.

The City plans to continually upgrade its storm drainage facilities in partnership with various agencies to meet future needs. New developments are required to conduct hydrologic studies and implement mitigation measures to minimize surface water runoff and flood risk. These measures may include the creation of retention basins, landscaped areas, pump stations, and permeable paving. Developers are also obligated to ensure ongoing maintenance of detention basins, either through the City or private entities, with a focus on wetland preservation and regulatory compliance. Additionally, there is a commitment to ensuring early warning systems and emergency response training in the event of a catastrophic failure of Pine Flat Dam for the safety of City staff and emergency services.

The floodplain management regulations state that the Floodplain Administrator (Public Works Director) plays a crucial role in enforcing and granting development permits. They are responsible for ensuring compliance, using flood data, notifying agencies of watercourse changes, and documenting floodplain development. These regulations apply citywide but don't guarantee complete flood protection. Development permits must meet specific requirements, including elevation criteria, and appeals can be

made to the City Council. The regulations also include standards for construction, utilities, subdivisions, manufactured homes, and recreational vehicles, all aimed at reducing flood risks.

Variations from these rules are rare and granted under strict conditions, mainly for properties surrounded by lower structures, historic sites, or functionally dependent uses. City Council approval is required, often with additional conditions.

Storm Water Management Plan

The City of Lemoore has developed a Storm Water Management Plan (SWMP) in accordance with the National Pollution Discharge Elimination System's (NPDES) Phase II Rule, which designated Lemoore as a small Municipal Separate Storm Sewer System (MS4) under the NPDES Phase II General Permit. The California State Water Resources Control Board (SWRCB) is responsible for enforcing this rule for small MS4 operators in urban areas with fewer than 100,000 residents, including Lemoore, which is also recognized as a high-growth area. The SWMP must address various requirements, including implementing Best Management Practices (BMPs) to safeguard water quality, reducing illicit pollutant discharges, setting timelines for control measures, and designating responsible entities for implementation. The plan outlines six Minimum Control Measures (MCM) that focus on public education, public involvement, illicit discharge detection, construction site runoff control, post-construction stormwater management, and pollution prevention for municipal operations. Lemoore is currently following these measures to enhance and protect stormwater quality in the City.

Noise Management Policy

The City's noise management policies are multifaceted, encompassing both general noise and aircraft noise concerns. To ensure an acceptable noise environment for residents, the policies aim to enforce strict standards and compatibility of new developments with the noise environment. Sensitive areas like schools, hospitals, and senior care facilities will be protected from excessive noise. Specific measures include the enactment of a Noise Control Ordinance with noise measurement standards, required noise insulation standards for new residential development, and enforcement procedures. Noise compatibility standards will serve as criteria for new land uses, with stringent requirements for areas where noise levels exceed 65 dBA.

The policies also require acoustical design elements for new dwellings exposed to high noise levels, such as substantial weight and insulation for facades, sound-rated windows and doors, acoustic baffling, and mechanical ventilation systems. Developers will need to meet specific noise reduction criteria or seek approval from a Board-Certified Acoustical Engineer. Under the policies, noise studies and guidelines are established, and developers are required to mitigate noise impacts through various means, including noise source screening, setbacks, soundproofing, and noise walls.

For aircraft noise, noise studies and mitigation measures are required for projects with noise exposure exceeding acceptable levels, which may include insulation, disclosure programs, or aviation easements. The City also coordinates with NAS - Lemoore to incorporate their Air Installation Compatible Use Zone (AICUZ) study into zoning updates, with a focus on minimizing noise impacts on noise-sensitive development. These comprehensive policies underscore the City's commitment to managing noise effectively, ensuring an appropriate living environment for its residents.

Emergency Operations Plan (2005)

The California Emergencies Services Act mandates that every city, including Lemoore, prepare and maintain an Emergency Plan to address various emergency scenarios, such as natural disasters, man-made crises, or wartime emergencies. Lemoore's Emergency Operations Plan (EOP), established in 2005, serves as a blueprint for city staff in handling extraordinary emergency situations. It primarily focuses on large-scale disasters and prescribes response procedures. In the event of a county-wide disaster, the City follows the Kings County EOP. Guiding policies emphasize the need to bolster law enforcement, firefighting, and emergency response capabilities, with implementing policies requiring regular assessments of manpower, facilities, and equipment needs. The City commits to providing protection and support for public education programs related to crime prevention, fire protection, and safety. Specific policies include the development of additional police and fire stations, maintenance of mutual aid agreements, collaboration with various agencies, and ensuring adequate access for emergency vehicles and fire protection measures in new developments. The Land Use Element also includes policies to ensure new development contributes to financing additional public safety facilities as needed to mitigate its impacts.

D.4.2 Administrative and Technical Capability

Table D-22 below identifies City personnel with responsibilities for activities related to mitigation and loss prevention in the City of Lemoore. Many positions are full time and/or filled by the same person. A summary of technical resources follows.

Table D-22 City of Lemoore –Personnel Capabilities

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION	COMMENTS
Planner/engineer with knowledge of land development/land management practices	Yes	City planner/Engineer	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Engineer/Building Official	
Planner/engineer/scientist with an understanding of natural hazards	Yes	City planner/Engineer	
Personnel skilled in GIS	Yes	City planner/Engineer	
Full time building official	Yes	City planner/Engineer	
Floodplain manager	Yes	Public Works Director	
Emergency manager	Yes	Police Chief	
Grant writer	Yes	Analysis	
Other personnel	No		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Yes	Police Department Dispatch	Outdoor Warning System
Other	No		

City Council

Lemoore is governed by the council-manager form of government. The City Council sets policy for the city and appoints a City Manager to oversee the day-to-day operations. The City has a City Council/City Manager form of local government. The City Council is responsible for approving all legislation and formulating City policies. The Council's objectives include translating public attitudes and service requirements into policies and programs, so that desired levels of service can be provided efficiently and economically.

The Council also keeps abreast of current State and Federal legislation. By participation in the League of California Cities, Council members compare policies and techniques and procedures with other cities throughout the State. Close liaison is maintained with other Kings County elected officials to ensure that Lemoore's policies and programs are coordinated with other public agencies.

City Attorney

The City Attorney provides legal advice and services to the City Council and City staff. A review of legal issues ensures that recommendation, policies and administrative procedures are undertaken after consideration of sound professional advice. At Council direction, the City Attorney may also provide for appropriate representation for the City in all legal proceedings.

City Clerk

The City Clerk serves as the Clerk of the City Council and is responsible for the preparation of agendas, the recording and maintenance of all Council actions, and the preparation and filing of public notices. As the official records keeper for the City, the Clerk is responsible for the coordination and administration of City records, documents, and public files. The City Clerk manages all City Public Records Act (PRAs) requests. The Clerk is also the Elections Officer for the City and the Filing Officer/Official for Fair Political Practices Commission requirements.

City Manager

The City Manager is responsible for directing the administration of departments and divisions, preparing and submitting the Annual Budget, maintaining communication and good relations with the general public. The City Manager advises the Council on the City's financial condition, and makes recommendations considered necessary for the welfare of the City and efficient operation of government.

The City Manager also directs development and implementation of the City's General Plan and Utility Plans, strategic financial policy, personnel administration, and intergovernmental coordination/liaison activities. Additionally, the City Manager's Office provides clerical and staff assistance to the City Council.

Community Development Department

The Community Development Department is responsible for providing information and administering building and planning functions including environmental studies, GIS, the Planning Commission, zoning code, economic development, planning applications, the General Plan, business resources, and housing and assessment documents.

Engineering Department

The primary function of the Engineering Department is to promote the orderly development of the City by providing general engineering services to regulate the construction of municipal structures, city streets, sewage disposal, water supply and storm drainage facilities. The Engineering Department is responsible for issuing encroachment and water/sewer connection permits, maintaining the City's maps, preparing the plans and specifications for most of the City's major projects, and providing drawings to help other departments.

The Engineering Department provides design and inspection services for most of the City's capital improvement programs. The Department also reviews and inspects all improvements to the City's infrastructure, including new subdivisions. Drawing and mapping services are also provided for other departments of the City. Moreover, the Department oversees traffic safety, solid waste and recycling services, and public transportation services.

Finance Department

The Finance Division provides financial services to all city departments, including cash management, preparations of financial reports, budget preparation and control, revenue and expenditure controls, accounts receivable, payroll, purchasing, business licenses, general accounting, and financial advice.

Fire Department

Lemoore has a volunteer fire department.

Parks and Recreation Department

The Lemoore Parks and Recreation Department provides a wide array of recreation programs. The Department is responsible for coordinating activities including youth programs, special classes, adult sports and activities, as well as community events.

Public Works Department

The Public Works Department maintains and improves the City's infrastructure. Ensuring that your trash is picked up, water flowing, sewer lines are clear, and wastewater treated properly.

Police Department

The Lemoore Police Department is charged with the protection of life and property and the primary responsibility for crime prevention and suppression. The Police Department is a team of dedicated public servants who care about the Lemoore community and strive to serve with compassion, honesty, and respect. It offers programs and services throughout the year that allow the partnership with the community to grow.

Planning Commission

The Planning Commission is responsible for developing and adopting the General Plan for the City's physical development, including any adjacent land relevant to the planning process. The City Council, through ordinances or resolutions, along with State and Federal laws, can further define and govern the Planning Commission's powers, duties, and procedures, emphasizing the significance of adherence to regulatory frameworks in city planning.

D.4.3 Fiscal Capability

Table D-23 identifies financial tools or resources that the City could potentially use to help fund mitigation activities. There are currently no specific funding sources for hazard mitigation.

Table D-23 City of Lemoore –Available Financial Tools and Resources

FINANCIAL RESOURCES	ACCESSIBLE/ ELIGIBLE TO USE	HAS THIS BEEN USED FOR MITIGATION IN THE PAST?	COMMENTS
Community Development Block Grants	Eligible to Use	No	
Capital improvements project funding	Accessible	No	
Authority to levy taxes for specific purposes	Accessible	No	
Fees for water, sewer, gas, or electric services, new development	Accessible	No	Maintenance Districts
Incur debt through general obligation bonds	Accessible	No	Impact Fees
Incur debt through special tax bonds	Accessible	No	
Incur debt through private activities	Accessible	No	
Federal Grant Programs (Hazard Mitigation Grant Program)	Accessible	No	

D.4.4 Outreach and Partnerships

The City of Lemoore facilitates the coordination of emergency response efforts through its Emergency Operations Center (EOC), which is a central location of authority that allows for face-to-face coordination and decision making between City staff and outside organizations.

In an emergency, the City would activate its EOC to coordinate responses from various agencies, including the Kings County Sheriff's Department, Kings County Fire Department, American Red Cross, FEMA, and other mutual aid resources. Members of these agencies, along with City staff, would manage and respond to disasters.

To prepare for emergencies, the City does the following:

- Conducts frequent staff training
- Holds tabletop exercises
- Participates in the annual Countywide disaster drill
- Identifies resources to be used in emergencies
- Tests coordination efforts with external organizations

These efforts are designed to help ensure that the City and its emergency responders are well trained and equipped to coordinate and respond to any emergency. Moreover, as outlined in the Kings County 2015 EOP, the emergency response role of cities and special districts is generally focused on restoring their

normal services or functional area of responsibility. During disasters, cities and some types of special districts will be more extensively involved in the emergency response by directly coordinating, communicating, and assisting local governments. If a city or special district does not send a representative to the EOC, then the Liaison Officer in the County's EOC will be responsible for establishing communications and coordination with the cities or special district liaisons.

Additionally, the City is involved with the Central San Joaquin Valley Risk Management Authority (CSJVRMA), a member-driven Joint Powers Authority providing cost-effective risk financing and loss control services to its members. CSJVRMA assists its members in managing and reducing various risks, from liability claims to workers' compensation, through a comprehensive range of services and resources tailored to their needs.

The City of Lemoore plans to conduct outreach related to hazard mitigation using various platforms, including the City's social media accounts, City bulletin boards and sending information via mail. The City will also work with local partners to assist with messaging the public.

D.4.5 Other Mitigation Efforts

The City of Lemoore has taken measures to support mitigation efforts including hiring a dedicated Public Works Inspector who is tasked with ensuring construction and improvement projects are compliant with current codes. Efforts to upgrade and maintain the City storm drainage system are ongoing, and the Stormwater Drainage Plan continues to be updated regularly. In 2023, the City hired a Water Conservation Officer to mitigate water waste and to coordinate water conservation education and public outreach.

D.4.5 Opportunities for Enhancement

Based on the capability assessment, the City of Lemoore has existing regulatory, administrative/technical, fiscal mechanisms in place that help to mitigate hazards. In addition to these existing capabilities, there are opportunities for the City to expand or improve on these policies and programs to further protect the community. These are organized below by regulatory, administrative/technical, fiscal, and outreach opportunities.

Regulatory Opportunities

The City of Lemoore has a comprehensive General Plan that provides a framework for community development. Consideration should be given to the creation of an Economic Development Plan to further facilitate sustainable growth and stimulate economic advancement. The creation of an updated EOP may also be considered, as it can contribute to effective emergency response strategies that consider the most recent hazard information. These strategic initiatives would not only bolster Lemoore's resilience but also enhance its capacity for sustained growth. The City should also incorporate the 2023-2028 Kings County MJHMP and City of Lemoore Annex by reference by amending the City of Lemoore Safety and Noise Element upon adoption of the MJHMP.

Administrative/Technical Opportunities

Subject to budget constraints, allocating resources for a dedicated staff member focused on a topic such as land development, building codes, natural hazard management, floodplain management, emergency response, or GIS, would yield enhanced capabilities in the coordination of land management. Additional future enhancements could encompass initiatives like equipping staff with hazard training related FEMA's Hazard Mitigation Assistance (HMA) grant program or the State's Prepare California Jumpstart program or pursuing hazard mitigation grant funding through collaborative efforts with Kings County and Cal OES.

Additional opportunities may exist to engage and educate key stakeholders within the City. Stakeholders may be interested in aligning efforts related to hazard mitigation and also supporting HMGP Sub applications and other hazard mitigation trainings.

Fiscal Opportunities

Based on the information provided through the Plan Update Guide, the City of Lemoore has ample opportunity to expand its financial capacity for mitigation planning. The utilization of these resources has the potential to support significant initiatives, such as the development of a Capital Improvements Plan or conducting an environmental study aimed at identifying optimal strategies for enhancing critical infrastructure, such as fortifying floodwater protections at well sites.

Outreach Opportunities

The City currently partners with local City and County departments to enhance hazard mitigation and climate adaptation efforts. The City has infrastructure in place to provide community education through its water conservation and environmental education outreach programs. The City can expand their outreach capabilities related to the implementation of the 2023-2028 Kings County MJHMP and the City of Lemoore Annex through continued public involvement with social media posts and advertisements that focus on projects successes related to the Annex Mitigation Strategy, as well as focused outreach to DACs, under-represented, and special-interest groups. The City can also develop outreach kits for partner organizations by expanding on the information included in the MJHMP Outreach Strategy included in Appendix F.

D.5 MITIGATION STRATEGY

D.5.1 Goals and Objectives

The City of Lemoore adopted the hazard mitigation goals and objectives developed by the HMPC and described in Section 5 Mitigation Strategy of the Base Plan. Like the Mitigation Strategy in the Base Plan, this section outlines the City’s roadmap for future hazard mitigation administration and implementation. The purpose of the strategy is to reduce vulnerabilities from key priority hazards outlined in the risk assessment through regulatory tools and projects.

D.5.2 Progress on Previous Mitigation Actions

During the 2022-2023 planning process, the City’s CPT reviewed all the mitigation actions from the 2012 MJHMP. As shown in Table D-24, one mitigation action was completed. Table D-24 The remaining four mitigation actions were carried forward into the 2023-2028 MJHMP and Lemoore Mitigation Strategy.

Table D-24 Completed Mitigation Actions

DESCRIPTION / BACKGROUND / BENEFITS	GOALS AND LIFELINES	HAZARD(S) MITIGATED	STATUS
Study the potential impacts of the High-Speed Rail Project	Goal 1, Goal 2, Goal 3, Transportation	Drought, Earthquake, Extreme Heat, Flood, Fog, Freeze, Wildfire	Complete. The High-Speed Rail Project is now under construction.

D.5.3 Continued Compliance with the National Flood Insurance Program (NFIP)

The City of Lemoore joined the NFIP on April 3, 1987. In addition to the mitigation actions identified herein the City will continue to comply with the NFIP. According to the Municipal Code, floodplain management is under the purview of the Public Works Department. This includes ongoing activities such as enforcing local floodplain development regulations (Chapter 8, Flood Damage Prevention), issuing permits for appropriate development in SFHAs and ensuring that this development is mitigated in accordance with the regulations. This will also include periodic reviews of the floodplain ordinance to ensure that it is clear and up to date and reflects new or revised flood hazard mapping. The City Public Works and Community Development Departments work on the storm water programs.

D.5.4 Mitigation Actions

As part of the 2022-2023 planning process, the City’s LPT developed an updated list of hazard mitigation projects specific to the City. The process used to identify, develop, and prioritize these actions is described in Chapter 5 of the Base Plan. The City’s LPT identified and prioritized 14 actions, including four actions carried forward from the 2012 MJHMP, and 10 new actions summarized in Table D-25. These mitigation actions are based on the risk assessment and the HMPC’s goals and objectives for the plan update. The list is grouped by hazard(s) mitigated. Background information as well as information on how the action will be implemented and administered, such as ideas for implementation, responsible office, partners, potential funding, estimated cost, and timeline also are described. Per the DMA requirement, actions have also been identified that address reducing losses to existing development and future development.

Moreover, the LPT reviewed existing mitigation actions from the County's 2012 MJHMP and provided status updates on past hazard mitigation planning efforts.

The mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of the jurisdiction to implement over the next five years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each significant (medium or high) hazard for the five-year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement. Should future projects be identified for significant hazards where the implementing jurisdiction has the capacity to implement, the jurisdiction would add those projects to their Annex. The City also recognizes that other mitigation actions proposed in the County's mitigation strategy will cover the significant hazards in the City that are not currently linked to a mitigation action.

Table D-25 City of Lemoore Mitigation Action Plan

ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/BACKGROUND /BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
L-1	Goal 1, Goal 3; Communications, Safety and Security	Multi-Hazard: Drought, Earthquake, Extreme Heat, Flood, Fog, Freeze, Wildfire	Public Education Program for All Hazards	City of Lemoore, City Public Works, Kings County Health Department, Kings County OES	Low	General Fund, FEMA HMA HMGP, EMPC	High	Ongoing	In Progress. This project entails establishing a training program to educate citizens about hazards and encourage households to have emergency kits, plans, and drills in place.
L-2	Goal 1, Goal 2, Goal 3, Goal 4; Water Systems	Drought	Long-Term Water Supply - Improve coordination, planning, and investment in long-term water supplies to meet demands of ongoing growth and development	City of Lemoore, Kings County Water District, Kings County, Kings County COG	Moderate	DWR Funds	High	Ongoing	In Progress. The City has installed a new well head and is actively pursuing funding sources to complete treatment and connection to water supply for development on the south side of town.
L-3	Goal 1, Goal 2, Goal 3, Goal 4; Water Systems	Multi-Hazard, Earthquake, Flood, Land Subsidence	Assess the Vulnerability of Critical Water Facilities	City of Lemoore Public Works, Police Department	High	Water Fund	High	Ongoing	In Progress, The City regularly performs routine assessments evaluating the integrity of the water systems and performs routine maintenance to ensure longevity and reliability.
L-4	Goal 1, Goal 4; Safety and Security, Communications, Health and Medical	Multi-Hazard, Earthquake, Extreme Temperatures: Extreme Heat and Freeze, Flood, Severe Weather	Develop a Program to Support Vulnerable Populations during Emergency Events	City of Lemoore Police Department	Moderate	General Fund, Staff Time, APGP, EMPC	High	Ongoing	Ongoing. This project was carried over from the 2012 MJHMP. The program identifies available community resources that can be activated and/or relied upon during times of emergency events. The City of Lemoore continues to coordinate with local partners to assess preparedness and response activities to identify gaps and improve support efforts.

ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/BACKGROUND /BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
L-5	Goal 1, Goal 3, Goal 4, Communications	Multi-Hazard	Municipal GIS Program - Establish a centralized, inter-jurisdictional GIS program in partnership with the County of Kings to improve all phases of emergency management.	City of Lemoore Planning Department	Low	FEMA HMA HMGP, ESRI, General Fund	High	Medium Term	Ongoing. This project was completed as part of the 2012 MJHMP but carried forward in that plan as an ongoing effort. The City continues to participate in the Municipal GIS Program with the Kings County Planning Department.
L-6	Goal 1, Goal 3; Transportation	Multi-Hazard, Dam Incidents, Earthquake, Flood, Subsidence, Landslide, Fog, Severe Storms, Wildfire	Develop a transportation routing app, similar to the Caltrans app, to divert traffic due to road conditions during hazard events	Kings County Public Works, Kings County Administration, Kings County, City of Lemoore	Low	FEMA HMA HMGP	Low	Medium Term	New Action in 2023.
L-7	Goal 1, Goal 2, Goal 3, Goal 4, Water Systems	Drought	Public Education Program for Water Supply and Conservation	City of Lemoore Administration Department, Finance Department	Low	FEMA HMA HMGP, DWR Grants	Medium	Short Term	New Action in 2023. The City of Lemoore recently hired a Water Conservation Officer to provide public education on water supply and conservation measures.
L-8	Goal 1, Goal 2, Goal 3, Goal 4, Water Systems	Flood	Well Protection and Flood Mitigation - Protect Wells from Floodwaters during Future Flooding Events by Building Infrastructure and Protection around the Well Sites	City of Lemoore Public Works	High	FEMA HMA HMGP, DWR Funds, USDA DWSRF	Medium	Medium Term	New Action in 2023. The City of Lemoore Public Works Department has created berms around City wells and is researching additional protective measure solutions.
L-9	Goal 1, Goal 2; Safety and Security, Water Systems	Flooding, Wildfire	Create a flood channel debris management plan to allow the flow of water, increase capacity, and remove fire hazards.	City of Lemoore, Kings County Public Works, Water and Irrigation Districts, City Public Works, Kings County	High	FEMA HMA HMGP	High	Medium Term	New Action in 2023. The City will coordinate with partner agencies to evaluate areas of concern and assist with local plan efforts.

ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/BACKGROUND /BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
L-10	Goal 1, Goal 2, Goal 3, Goal 4; Safety and Security, Food, water, Shelter, Transportation	Drought, Subsidence	Conduct updated land subsidence study to understand elevations, shifts, and vulnerability.	City of Lemoore, Kings County Administration, Water Management Agencies	Moderate	DWR, USACE, Cal OES	Low	Short Term	New Action in 2023. The City currently performs subsidence studies at areas of concern.
L-11	Goal 3; Safety and Security, Communications	Cyber-attack	Use antivirus solutions, malware, and firewalls to block threats	Kings County, Avenal, Corcoran, Hanford, Lemoore	Moderate	General fund, HSGP	Medium	Ongoing	New Action in 2023 City of Lemoore IT staff will assess cyber security needs and seek solutions to improve security measures.
L-12	Goal 3; Health and Medical	Public Health Hazards	Utilize trainings and exercises, epidemiology and surveillance to control and combat public health risks	County and City Public Health Departments	Moderate	General Fund	Low	Ongoing	New Action in 2023. The City does not have a Public Health Department, but will coordinate with the Kings County Public Health Department during public health emergencies.
L-13	Goal 1, Goal 3; Communications, Safety and Security	Dam Incidents	Develop plan addressing communication and evacuation for vulnerable populations in areas potentially impacted by Pine Flat Dam failure.	City of Lemoore, Kings County OES	Low	General Fund	Medium	Ongoing	New Action in 2023. The City will coordinate with Kings County OES to create a response plan addressing the impacts of a dam failure.

KEY:

*This key provides additional information on cost estimates, potential funding, community lifelines, and the timing for implementation for each action.

Cost Estimate

- Little to no cost
- Low: Less than \$10,000
- Moderate: \$10,000 – \$100,000
- High: \$100,000 – \$1,000,000
- Very High: More than \$1,000,000

Potential Funding

- APGP – California funding to local, regional, and tribal communities in integrated climate adaptation planning; supports climate-resilient projects in California.
- BRIC – Building Resilient Infrastructure and Communities Grant
- DWR Urban Community Drought Relief Grant Program – Grant program designed to strengthen drought resilience and better prepare communities for dry conditions.
- DWR Riverine Stewardship Program and Urban Stream Restoration Program – DWR program to fund five projects that will restore streams and creeks and reduce flood risks in California.
- EMPC – Emergency Management Performance Grant
- FEMA HMA HMGP – Federal Emergency Management Agency Hazard Mitigation Assistance Hazard Mitigation Grant Program

- HHPD - High Hazard Potential Dam Grant
- HSGP - Homeland Security Grant Program
- RWQCB - Regional Water Quality Control Board
- SHSGP - Homeland Security Grant Program
- USACE - U.S. Army Corps of Engineer Funding like Silver Jacket Program, Flood Risk Management Program
- USDA DWSRF - Program that help water systems finance infrastructure improvements to ensure compliance with drinking water standards and public health objectives.

FEMA Community Lifelines

- Safety and Security
- Food, Hydration, and Shelter
- Health and Medical
- Energy
- Communications
- Transportation
- Hazardous Materials
- Water Systems

Timeline

- Short Term: 1-2 years
- Medium Term: 3-5 years
- Long Term: 5+ years
- Ongoing: Action is implemented every year

D.6 IMPLEMENTATION AND MAINTENANCE

Moving forward, the City will use the mitigation action table in the previous section to track the progress on the implementation of each project. Implementation of the plan overall is discussed in Section 6 in the Base Plan.

D.6.1 Incorporation into Existing Planning Mechanisms

The information contained within this plan, including results from the Vulnerability Assessment, and the Mitigation Strategy will be used by the City to help inform updates and the development of local plans, programs and policies. The Emergency Services and Public Works Department may utilize the hazard information when implementing the City's capital projects and the Community Development Department Planning Division may utilize the hazard information when reviewing a site plan or other type of development applications. The City will also incorporate this MJHMP into the Safety and Noise Element of their General Plan.

D.6.2 Monitoring, Evaluation and Updating the Plan

The City will follow the procedures to monitor, review, and update this plan in accordance with Kings County as outlined in Section 6 of the Base Plan. The City will continue to involve the public in mitigation, as described in Section 6.2.1 of the Base Plan. The Police Chief and Community Development Director will be responsible for representing the City in the County HMPC, and for coordination with City staff and departments during plan updates. The City realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.

D.7 REFERENCES

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