



ANNEX B CITY OF CORCORAN

B.1 PURPOSE

This Annex summarizes the hazard mitigation elements specific to the City of Corcoran. 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 Corcoran. This Annex provides additional information specific to the City of Corcoran, including details on the City's profile, planning process, risk assessment, and mitigation strategy for the community.

B.2 COMMUNITY PROFILE

B.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 Corcoran participated in Kings County's 2012 MJHMP process; however, the 2012 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.

During the current update process, the City of Corcoran 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 Corcoran. The City's LPT is also responsible for the update, implementation, and maintenance of the plan. LPT members are listed in Appendix A.

B.2.2 Geography and Climate

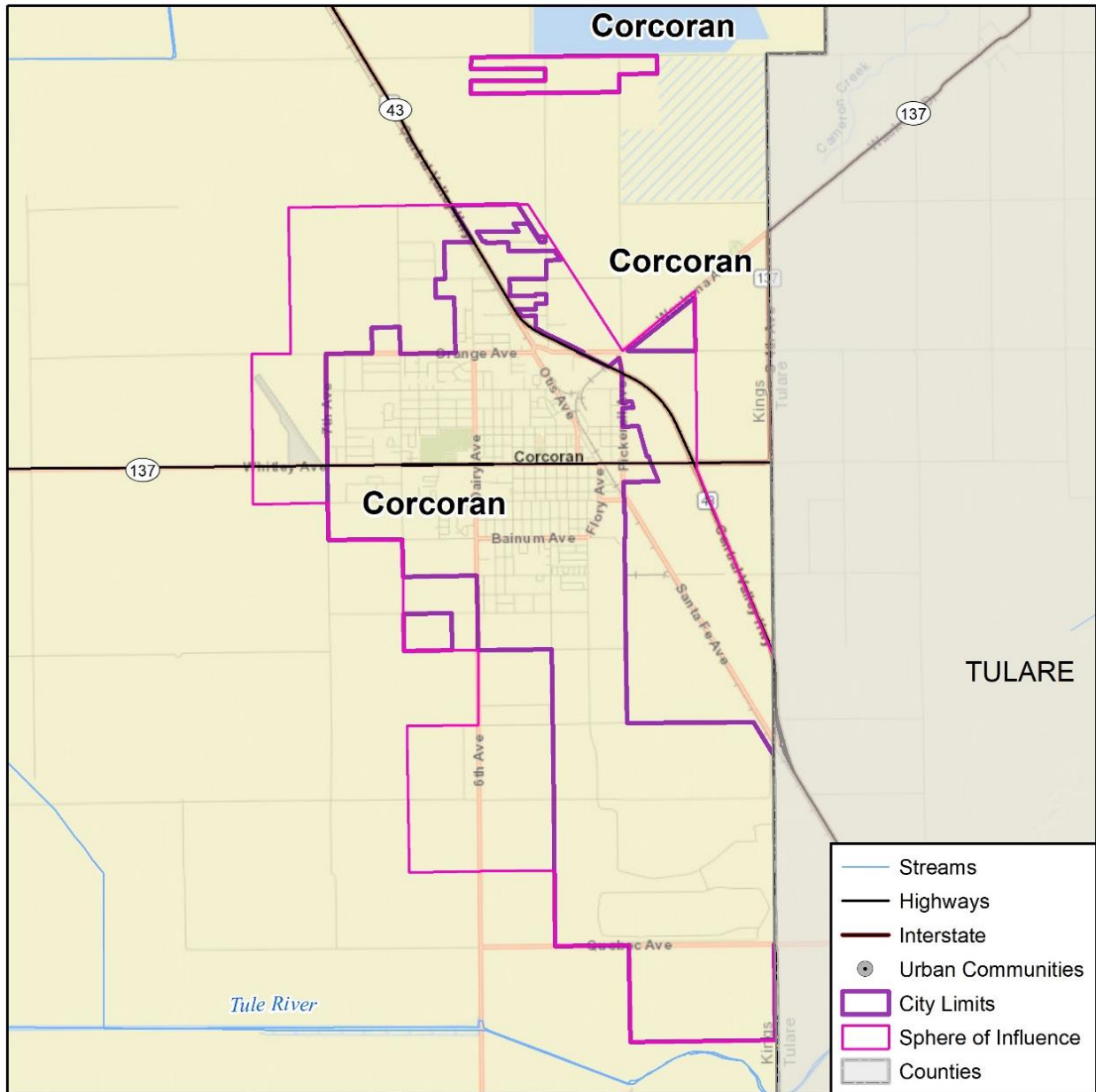
Corcoran is located in the center of Kings County, California in the central San Joaquin Valley about 17 miles south-southeast of Hanford, at an elevation of 207 feet above mean sea level (msl). According to the U. S. Census Bureau, the City encompasses 6.4 square miles, all of it land. The City is located on the northeast edge of the Tulare Lake Basin, and Cross Creek is located to the west of the City and the Tule River is located to the south. The City is part of the Hanford–Corcoran Metropolitan Statistical Area (MSA). Corcoran is most notable as the site of the California Corcoran State Prison. The California Substance Abuse Treatment Facility and State Prison is a separate facility that is also located in the City.

The City receives an average annual precipitation of 7.16 inches and receives most of this precipitation from December through March (WRCC 2023). The average high temperature in summer is 98°F and in the winter is 50°F. The City experiences its average monthly highest temperature in July (99.23 °F), and its monthly lowest temperature in January (36.72 °F). Similar to the rest of Kings County, the City of Corcoran has a mild Mediterranean climate.

Figure B-1 below shows the City limits and Sphere of Influence (SOI) boundary for the City of Corcoran. 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 4,096 acre, or 6.4 square miles.



Figure B-1 City of Corcoran



Map compiled 2/2022;
Intended for planning purposes only.
Data Source: Kings County, DWR, HIFLD

0 1 2 Miles



B.2.3 History

At the turn of the 20th Century, the City served as a junction for the San Francisco and San Joaquin Valley Railroad. The City's name came from either two individuals prominently noted in the City's history: General Corcoran, a San Joaquin Valley pioneer that operated a steamboat between Stockton and Tulare Lake or Thomas Corcoran, a railroad superintendent that worked for the Santa Fe Railroad. The City of Corcoran was soon developed by H.J. Whitley, a prominent land developer from Southern California, who traveled to the area in 1905 and purchased 32,000 acres of land. The City's main street, Whitley Avenue, is named after him. Corcoran grew rapidly in subsequent years with the rise of the cotton industry, attracting workers to its booming agricultural industry. The town was incorporated in 1914 (City of Corcoran 2023). The



mechanization of cotton planting and harvesting caused a significant loss of jobs, residents, and economic vitality in Corcoran. Today, the City remains a center of agriculture and J.G. Boswell Company, the nation's largest cotton producer, operates major farming operations in the City. The City's other main employers are two state prisons: the Corcoran State Prison completed in 1989, which is one of the State's largest prisons employing approximately 1,900 people and housing approximately 4,951 inmates and the California Substance Abuse Treatment Facility and State Prison completed in 1997 employing approximately 1,745 people and housing approximately 7,000 inmates (City of Corcoran 2023).

B.2.4 Economy

The City of Corcoran is focused on encouraging healthy growth of the existing businesses and industries in Corcoran and attracting new business and industry to the community. In addition to the state prisons, the community is served by the Corcoran Unified School District, West Hills College and the College of the Sequoias, and an innovative Technology Learning Center at Corcoran High School. The City has also pushed to attract additional industries to diversify the local economic base, and Virtus Nutrition LLC, Buttonwillow Warehouse, and San Francisco Bay Brand, Inc. are all located in one of the City's two industrial parks (City of Corcoran 2023). The City Manager works closely with the City Council along with the City and County-wide agencies to facilitate economic growth and vitality.

Estimates of select economic characteristics for the City of Corcoran are shown in Table B-1. As shown in the table approximately 23.7% of the City's families fall below the poverty level compared to 11.6% on a national level.

Table B-1 City of Corcoran Economic Characteristics, 2017-2021

CHARACTERISTIC	CITY OF CORCORAN
Families below Poverty Level (%)	23.7%
All People below Poverty Level (%)	27.6%
Median Family Income	\$47,738
Median Household Income	\$46,782
Per Capita Income	\$11,428
Population in Labor Force	28.3%
Population Employed*	25.1%
Unemployment Rate**	11.1 %

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

*Excludes armed forces.

The most common industries in Corcoran are agriculture, forestry, fishing and hunting, and mining (almost 30 percent of workers). Educational services, and health care and social assistance is another one major industry (almost 17 percent of workers). Table B-2 and Table B-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 B-2 City of Corcoran Employment by Industry, 2017-2021

OCCUPATION	# EMPLOYED	% EMPLOYED
Agriculture, forestry, fishing and hunting, and mining	1,398	29.8%
Construction	94	2.0%
Manufacturing	375	8.0%
Wholesale trade	133	2.8%
Retail trade	292	6.2%
Transportation and warehousing, and utilities	133	2.8%
Information	23	0.5%



OCCUPATION	# EMPLOYED	% EMPLOYED
Finance and insurance, and real estate and rental and leasing	50	1.1%
Professional, scientific, and management, and administrative and waste management services	310	6.6%
Educational services, and health care and social assistance	794	16.9%
Arts, entertainment, and recreation, and accommodation and food services	433	9.2%
Other services, except public administration	101	2.2%
Public administration	552	11.8%
Total	4,688	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 B-3 City of Corcoran Employment by Occupation, 2017-2021

OCCUPATION	# EMPLOYED	% EMPLOYED
Management, business, science, and arts occupations	625	13.3%
Service occupations	1,157	24.7%
Sales and office occupations	678	14.5%
Natural resources, construction, and maintenance occupations	1,578	33.7%
Production, transportation, and material moving occupations	650	13.9%
Total	4,688	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

B.2.5 Population

According to ACS, the City of Corcoran had a total population of 25,136 in 2010, while the City had a total population of 22,616 in 2021, which includes approximately 11,951 inmates housed at the two state prisons. According to the U.S. Census, the City's population declined by 10% throughout the past 12 years, but the City's LPT noted minor population growth with an increase of approximately 45 residents between 2010 and 2020 and explained the decline represented by the U.S. Census data is due to the Corcoran State Prison population release reduction. The City also did not experience significant population growth due to a lack of available housing.

Select demographic and social characteristics for the City of Corcoran from the 2017-2021 ACS and the California Department of Finance (DOF), are shown in Table B-4. As shown in the table, the City has a higher male population than females, which could be associated with the number of inmates at the prisons. Approximately 64% of the population is Hispanic or Latino, and 50% of the community speaks a language other than English at home.

Table B-4 City of Corcoran Demographic and Social Characteristics, 2017-2021

CHARACTERISTIC	CITY OF CORCORAN
Gender/Age	
Male	75.6%
Female	24.4%
Median age (years)	35.9
Under 5 years	5.6%
Under 18 years	17.5%



CHARACTERISTIC	CITY OF CORCORAN
65 years and over	5.1%
Race/Ethnicity	
White	18.1%
Asian	2.6%
Black or African American	12.4%
American Indian/Alaska Native	1.4%
Hispanic or Latino (of any race)	64.1%
Native Hawaiian and Other Pacific Islander	0.1%
Some other race	0.5%
Two or more races	0.9%
Education*	
% High school graduate or higher	57.8%
% with bachelor's degree or higher	3.9%
Social Vulnerability	
% with Disability	14.6%
% Language other than English spoken at home	50.6%
% Speak English less than "Very Well"	28.9%
% of households with a computer	85.9%
% of households with an Internet subscription	73.0%
% of households with no vehicle available	12.9%

Source: U.S. Census Bureau, California Department of Finance, 2015-2019 American Community Survey (ACS), 5-year estimates, www.census.gov/

* Population 25 years and over

Table B-5 displays information from the ACS 5-year estimates (2015-2019) related to housing occupancy in the City of Corcoran

Table B-5 City of Corcoran Housing Occupancy and Units, 2015-2019

HOUSING CHARACTERISTIC	ESTIMATE	PERCENTAGE
Housing Occupancy		
Total Housing Units	4,366	100%
Units Occupied	4,081	93.5%
Vacant	285	6.5%
Housing Units		
1-unit detached	2,839	65.0%
1-unit attached	303	6.9%
2 units	96	2.2%
3 or 4 units	296	6.8%
5-9 units	141	3.2%
10-19 units	14	0.3%
20 or more units	458	10.5%
Mobile Home	219	5.0%
Boat, RV, van etc.	0	0.0%
Housing Tenure		



HOUSING CHARACTERISTIC	ESTIMATE	PERCENTAGE
Owner Occupied	2010	49.3%
Renter Occupied	2071	50.7%

Source: U.S. Census Bureau, California Department of Finance, 2015-2019 American Community Survey (ACS), 5-year estimates, www.census.gov/

B.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 B-6, which is based on data derived from the OEHHA CalEnviroScreen tool, there are three census tracts in the City designated as a DAC that have a CalEnviroScreen ranking above 75 percent (6031001402 is 81, 6031001300 is 86, and 6031001601 is 92). There are also two additional census tracts in the eastern, western and southern portions of the City of Corcoran that have higher housing burdens (6031001500 and 6031001401) based on information from the CalEnviroScreen tool, and approximately 19% and 18% of the people residing within these census tracts respectively are housing-burdened low-income households. This means the households in these census tracts 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 makes 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). 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 B-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
6031001402	87%	710	405	200	81
6031001300	34%	1,265	795	180	86
6031001601	53%	1,100	530	195	92
6031001500	58%	1,510	875	285	67
6031001401	55%	815	500	148	66

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

Of the 22,616 people that live in the City according to the U.S. Census data, approximately 185 people are potentially exposed to hazards based on the vulnerability assessment in Section B.3.1. Among this

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>



population, those who reside in the DACs in the City are considered more socially vulnerable to hazards. While there are two DACs within the City, given the two State Prisons account for a large portion of the City's population, the 2012 MJHMP noted that the inmate population skews the census data for Corcoran and in turn the social vulnerability of the community. Outreach, engagement, and hazard mitigation efforts should therefore address the needs of the City's low-income residents and the large segment of the population where English is not their primary language. The City can also use CalEnviroScreen information to conduct 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.

B.2.7 Development Trends

The City's 2014 General Plan Land Use Element contains goals, objectives and policies that demonstrate community desires. Outlined goals and objectives that are closely related to future development include:

- Preserve and enhance Corcoran's unique character and achieve an optimal balance of residential, commercial, industrial, and open space land uses.
- Minimize urban sprawl and leap-frog development and provide for an orderly and efficient transition from rural to urban land uses.
- Designate growth areas that can be served by logical infrastructure extensions.

Figure B-2 below is the Land Use Diagram included in the General Plan 2035.

As previously noted, the City has experienced an overall decline in total population over the past decade according to the U.S. Census data. This overall decline in population is due largely to the Corcoran State Prison population release reduction. According to the Kings County Regional Housing Needs Assessment, the City of Corcoran will require an additional 715 housing units to accommodate existing and future growth, including 122 units for very low income, 116 for low income, 118 for moderate income, and 359 for above moderate income. However, as noted by the City's LPT during the 2022-2023 plan update process, the City experienced only minor population growth over the past decade, with lack of affordable housing being a major factor contributing to the City's slow of growth.

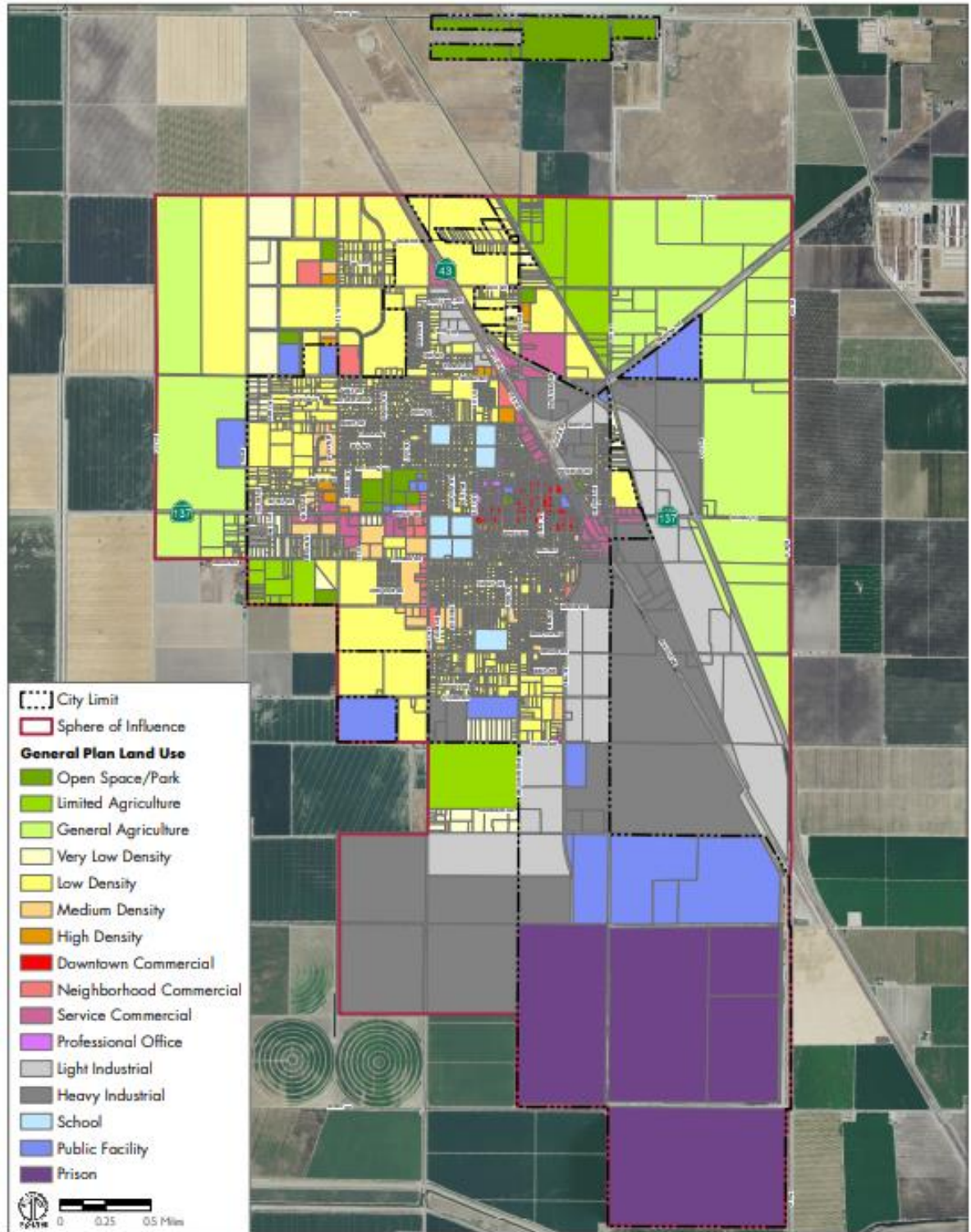
Some development has occurred to meet housing demands. Currently, a 50-unit residential subdivision is in development with three additional subdivisions representing about 200 housing units potentially being approved over the next two years. Commercial infill development is also currently taking place within the City's downtown and industrial areas. Still, the City is poised for additional residential and commercial growth to meet housing needs.

This new potential growth is within the already established General Plan development area that historically maintains a compact urban area that avoids flood hazards. New growth within the City's existing urban area (including the infill development in the City's downtown) will have similar risk and exposure to drought, earthquake, extreme heat, fog, and freeze hazards. Since the designated Federal Emergency Management Agency (FEMA) 1% annual chance flood zones are located west and southwest of the City, the added population growth and urban development in the City avoids these hazard areas. The City also requires all new development to address flooding problems by enforcing the Floodplain Management Regulations. Further, there is no significant change in development patterns that increases the risk or severity of the hazards identified above that would change the net vulnerability of the City, nor does the growth pattern compromise the needs of any underserved community.

Since the previous plan, development of the High-Speed Rail and the addition of a rail station are anticipated to have the greatest potential to change future development trends.



Figure B-2 City of Corcoran, Land Use Map, General Plan 2014



Source: Corcoran General Plan 2014



B.2.8 Future Development

The areas located in the SOI shown in Figure B-1 are areas each 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 and flooding. Table B-7 is the summary of the SOI total exposure for the City of Corcoran.

Table B-7 Sphere of Influence Total Exposure Summary

PROPERTY TYPE	IMPROVED PARCEL COUNT	BUILDING COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	10	11	\$6,111,986	\$6,111,986	\$12,223,972
Commercial	10	10	\$2,626,337	\$2,626,337	\$5,252,674
Exempt	15	17	\$32,315,688	\$32,315,688	\$64,631,376
Industrial	5	5	\$26,886,521	\$40,329,782	\$67,216,303
Multi-Family Residential	1	1	\$42,602	\$21,301	\$63,903
Multi-Use	2	2	\$489,782	\$489,782	\$979,564
Residential	149	157	\$13,927,882	\$6,963,941	\$20,891,823
Total	192	203	\$82,400,798	\$88,858,817	\$171,259,615

Source: Kings County Assessor, WSP analysis



B.3 HAZARD IDENTIFICATION AND SUMMARY

The City of Corcoran 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 B-8). There are no hazards that are unique to Corcoran, 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 Corcoran’ hazards where different from the County and assess the City’s unique vulnerabilities.

The hazards profiled in the Kings 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 Corcoran’ risk assessment summarizes only 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 B-8 summarizes the hazards profiled in the County’s planning area and risk assessment to provide a way for the City’s LPT to evaluate which hazards are addressed in their General Plan Safety Element and which hazards are relevant and priority hazards for the City. The City’s General Plan Safety Element addressed seismic hazards, slope instability leading to mudslides and landslides, flooding, wildland and urban fires, hazardous materials and waste, and evacuation routes. Among the hazards addressed in the City’s General Plan Safety Element, seismic and flood hazards are further addressed in this Annex while wildfire is addressed in the Base Plan. This Annex also addresses drought hazards. Hazardous materials and waste hazard is not included in this Annex or the Base Plan.

Table B-8 City of Corcoran –Hazard Profiles

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



<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>
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B.3.1 Vulnerability Assessment

The intent of this section is to assess Corcoran’ 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 in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk of hazards ranked of medium or high significance. For the other hazard profiles, the City described the specific vulnerabilities in the community by developing problem statements that qualitatively summarize areas of concern associated with the hazards that vary from other parts of the County planning area. These specific vulnerabilities are referred to as “problem statements” in the risk assessment. The problem statements are based on the risk assessment mapping and modelling and where spatial data and maps are not available, they are based on specific input from the City LPT. With this information mitigation actions were then developed to address these specific vulnerabilities; this process provides the connection between the problem statement and the mitigation action.

The information to support the hazard identification and risk assessment was based on a combination of the previous LHMP 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 4-2). 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’s LPT 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 B-8 above reflect the hazards that could potentially affect City. The discussion of vulnerability for each of the following hazards is located in Section B.3.5 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 Corcoran are identified below.

- Cyber-Attack



- Dam Incidents
- Drought
- Earthquake
- Extreme Temperatures: Freeze and Extreme Heat
- Flood
- Land Subsidence
- Public Health Hazards: Pandemics/Epidemics
- Severe Weather: Heavy Rain, Thunderstorms, Hail, and Lightning
- Severe Weather: High Wind/Tornado

B.3.2 Assets

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

B.3.3 Property Exposure

The following data on property exposure is derived from the Kings County 2023 assessor’s parcel 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 B-9 shows the exposure of properties (e.g., the values at risk) broken down by property type for the City of Corcoran.

Table B-9 City of Corcoran Property Exposure by Type

PROPERTY TYPE	IMPROVED PARCEL COUNT	BUILDING COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	6	6	\$964,105	\$964,105	\$1,928,210
Commercial	112	134	\$18,337,766	\$18,337,766	\$36,675,532
Exempt	27	33	\$3,072,688	\$3,072,688	\$6,145,376
Industrial	9	10	\$849,591	\$1,274,387	\$2,123,978
Multi-Family Residential	51	564	\$42,930,514	\$21,465,257	\$64,395,771
Multi-Use	9	12	\$965,833	\$965,833	\$1,931,666
Residential	1,683	1,755	\$145,608,108	\$72,804,054	\$218,412,162
Total	1,897	2,514	\$212,728,605	\$118,884,090	\$331,612,695

Source: Kings County Assessor, WSP analysis

B.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 B-10 shows a summary of the critical facilities within the City of Corcoran. Critical facilities and other community assets as important to protect in the event of a disaster.

Table B-10 Critical Facilities within the City of Corcoran

LIFELINE	# OF CRITICAL FACILITIES
Communication	12
Energy	45



LIFELINE	# OF CRITICAL FACILITIES
Food, Water, Shelter	-
Hazardous Materials	3
Health and Medical	2
Safety and Security	17
Transportation	3
Total	42

Source: Kings County GIS, WSP analysis

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

- California State Prison - Corcoran - Fire Department
- Kings County Fire Department Station 11 Corcoran
- CDCR (CA) - Corcoran State Prison
- Kings County Sheriff's Department - Corcoran Substation
- Corcoran Police Department
- City Hall
- Veteran's Hall
- Train Depot
- 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

B.3.5 Historic, Cultural and Natural Resources

The National Registry of Historic Places (NRHP) database does not list any historical resource properties within the City of Corcoran.

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters.

According to the City's General Plan Agricultural and Natural Resources Element, the City's planning area has a variety of natural and altered habitats supporting a diverse assemblage of plant and animal species. The U.S. Fish and Wildlife Service lists 20 threatened and endangered species in Kings County, with an additional candidate for listing. See Section 4.4 for more information on plant and animal species in the County.

B.3.6 Estimating Potential Losses

B.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 Corcoran, minor cyber-attacks such as phishing emails often go unreported. Cyber-attack is ranked an overall medium significance hazard for the City of Corcoran 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 in the Base Plan for a discussion of the cyber-attack risk relative to the City of Corcoran and Kings County.

B.3.6.2 Dam Incidents

According to the HMPC's input during the 2022-2023 plan update process and input from the City's LPT, the Schafer dam on Lake Success in Tulare County has the potential to cause dam inundation flooding in the City of Corcoran. Schafer dam is rated as High Significance by the National Inventory of Dams (NID) and has an Emergency Action Plan (EAP) in place. However, the dam inundation data is not available for Schafer dam to be shown on a map or used for vulnerability assessment.

Moreover, during the 2022-2023 plan update process, the City's LPT stated that Kings County has been a party of interest in Schafer dam and this dam has undergone retrofit and reinforcement for public safety. The March 2023 atmospheric river (AR) flash flooding demonstrated that flooding from Schafer dam can and did directly impact the City of Corcoran along the southeast portion of the City, including the directly adjacent two State Prison facilities that were protected by a portion of the Corcoran Levee along 4th Avenue between Quebec and Santa Fe Avenues.

The City is not located in mapped inundation areas for other dams in the region; however, the City could be at risk if an upstream dam failure occurred in conjunction with existing flooding in the Tulare Lake Basin. Refer to Chapter 4 in the Base Plan for information on dam incidents.

B.3.6.3 Drought

The City's Utilities Department provides water supply production, treatment, and distribution to approximately 21,835 residents through 3,548 commercial and residential connections (SDWIS 2023). The City currently uses groundwater as the sole source of water supply, with wells extracting water from the Tulare Lake Subbasin of the San Joaquin Valley Groundwater Basin. Surface water is primarily used for irrigation purposes and the Cross Creek Flood Control District controls and distributes these water rights (Kings County 2012). The Tulare Lake subbasin has a surface area of approximately 524,000 acres and is managed by the El Rico Groundwater Sustainability Agency (GSA) (UWMP 2022). The City has nine groundwater wells, two of which are active, four of which are on standby, and three which have limited use due to water quality concerns. Between 2018 to 2020, the City reduced its groundwater pumping slightly, and the Basin is anticipated to meet the City's water demands in the future (UWMP 2022). Given the City relies on primarily groundwater sources and there are a number of domestic water wells in the vicinity, the City is at risk to water shortage vulnerabilities. These water shortage vulnerabilities are discussed in Chapter 4 of the Base Plan, which shows that the City of Corcoran is situated in an area vulnerable to drought. This is due to the presence of small water providers in the area northeast of the City and the number of private domestic water wells (DWR 2023).

The City of Corcoran is committed to optimizing its groundwater resources by employing a range of strategies. These include demand management initiatives, the implementation of conservation measures, and active participation in the sustainable management of the regional groundwater basin (UWMP 2022). The City's dedication to water preservation is underscored by the Corcoran City Code, which explicitly outlaws wasteful use of its water supplies in Section 8.1.4. To enforce this code, the City Manager retains the authority to mandate the installation of water meters and backflow prevention devices on properties where wasteful water practices are identified. As of 2020, more than half of the City's water accounts are metered, a proportion that is set to increase as the City plans to meter its remaining connections by 2025, aligning with the requirements of Section 325 of the Urban Water Management Planning Act.

Differential pricing mechanisms further enhance the City's conservation efforts. While residences without meters are charged a flat rate based on lot size, those equipped with meters are subject to conservation pricing. This pricing structure serves as an incentive for efficient water consumption and offers a signal to high-water users to reconsider their usage patterns. The City has taken proactive steps to educate its residents about water conservation through various public information initiatives. These efforts encompass the distribution of informative pamphlets through monthly billing statements and the City's official website. Recognizing the importance of ongoing water conservation efforts, Corcoran has appointed a dedicated Conservation Coordinator. This individual is tasked with evaluating and expanding the City's conservation programs while keeping residents informed about the latest conservation initiatives. Through



these multifaceted actions, Corcoran fosters a culture of responsible water use and heightened public awareness about sustainable practices.

In summary, the City has staff and resources to manage water resources and decrease the demand on the Tulare Lake subbasin. The City also has already taken steps to conserve water. The City may benefit from developing groundwater recharge programs to mitigate impacts during drought events in the future. As such, various projects and policy initiatives are proposed to reduce the City's reliance on groundwater pumping to allow for aquifer recovery. Future water conservation policies are also updated to comply with new legislation and water use objectives.

B.3.6.4 Earthquake

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, near 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 in the Base Plan, earthquake hazards are the most severe in the southwest of Kings County. The potential for ground shaking in this area ranges from 60-100% g. The potential for ground shaking near the City of Corcoran ranges from 50-60%. The City of Corcoran is also in Seismic Zone 3, where California has requirements for the seismic building safety of police and fire facilities and hospitals. While the potential seismic risk for the City is not as severe as other parts of the County (to the west), Corcoran is in areas where soils have liquefaction potential. Refer to the Base Plan for details on earthquake hazard's potential impact on the City of Corcoran and Kings County.

The Corcoran hospital building completed a minor retrofit back in the 80s. The building today does not pass the seismic requirements for emergency hospital use. The current owner, Adventist health, is currently constructing a new medical facility and planning to tear down the old hospital in the next two years. The Corcoran Station apartments across from City Hall had retrofitting completed during the remodel of the building in the 90s. Downtown buildings along Whitley Avenue's historic downtown corridor that were constructed with brick during the first half of the 1900 have not been seismically retrofitted and are addressed when remodels and reconstruction are proposed through the City's building permit process.

Extreme Temperatures: Freeze and Extreme Heat

Extreme heat is likely to occur in Corcoran. Extreme heat events have occurred in the summers of 2006, 2012, and have dramatically increased over the past decade. According to data from the Western Regional Climate Center (WRCC) for the Corcoran Irrigation District weather station (042012) for the period of record from 1948-2016, the extreme maximum temperature in July is 115°F, and extreme minimum temperature in January was 14°F. Thus, the City experiences a broad range of temperatures and is vulnerable to extremes on either end of the spectrum. Table B-11 summarizes the temperatures throughout the year for the Corcoran Irrigation District weather station.

Table B-11 Period of Record General Temperature Summary for Corcoran Irrigation District Station

	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Temperatures (degrees Fahrenheit)												
Average Maximum Temperature	54.6	61.8	68.2	76	85.3	93.1	98.9	97.1	91.5	80.9	66	54.9
Average Minimum Temperature	36.5	39.7	42.7	46.5	52.8	58.7	63.4	61.9	57.5	49.3	40.6	35.8
Average Temperature	45.6	50.8	55.5	61.3	69	75.9	81.2	79.5	74.5	65.1	53.3	45.4
Extreme Maximum Temperatures (degrees Fahrenheit)												
Extreme Maximum Temperature	75	81	88	100	107	114	115	112	109	105	89	79



	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Extreme Minimum Temperatures (degrees Fahrenheit)												
Extreme Minimum Temperature	14	22	26	29	36	44	49	49	38	27	21	17

Source: WRCC 2023

In response to the challenges posed by extreme heat, the City has implemented a comprehensive strategy that encompasses the establishment of supplementary cooling centers and the dissemination of critical community alerts using the Nixle alert system. The initial plan involved enhancing the City's Veteran's Memorial Building to function as a cooling center during instances of extreme heat (see Section B.5.3). However, despite this specific building not undergoing expansion as initially intended, alternative measures have been taken. Notably, the Recreational Association of Corcoran (RAC) building and the Corcoran Transit Station have been designated as additional cooling sites, effectively broadening the network of available facilities to mitigate the impacts of extreme heat on the community. This adaptive approach underscores the City's commitment to safeguarding its residents and addressing the evolving needs brought about by extreme weather events.

Refer to Chapter 4 in the Base Plan for a discussion of the extreme temperature risk relative to the City of Corcoran and Kings County.

B.3.6.5 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, localized flooding 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.

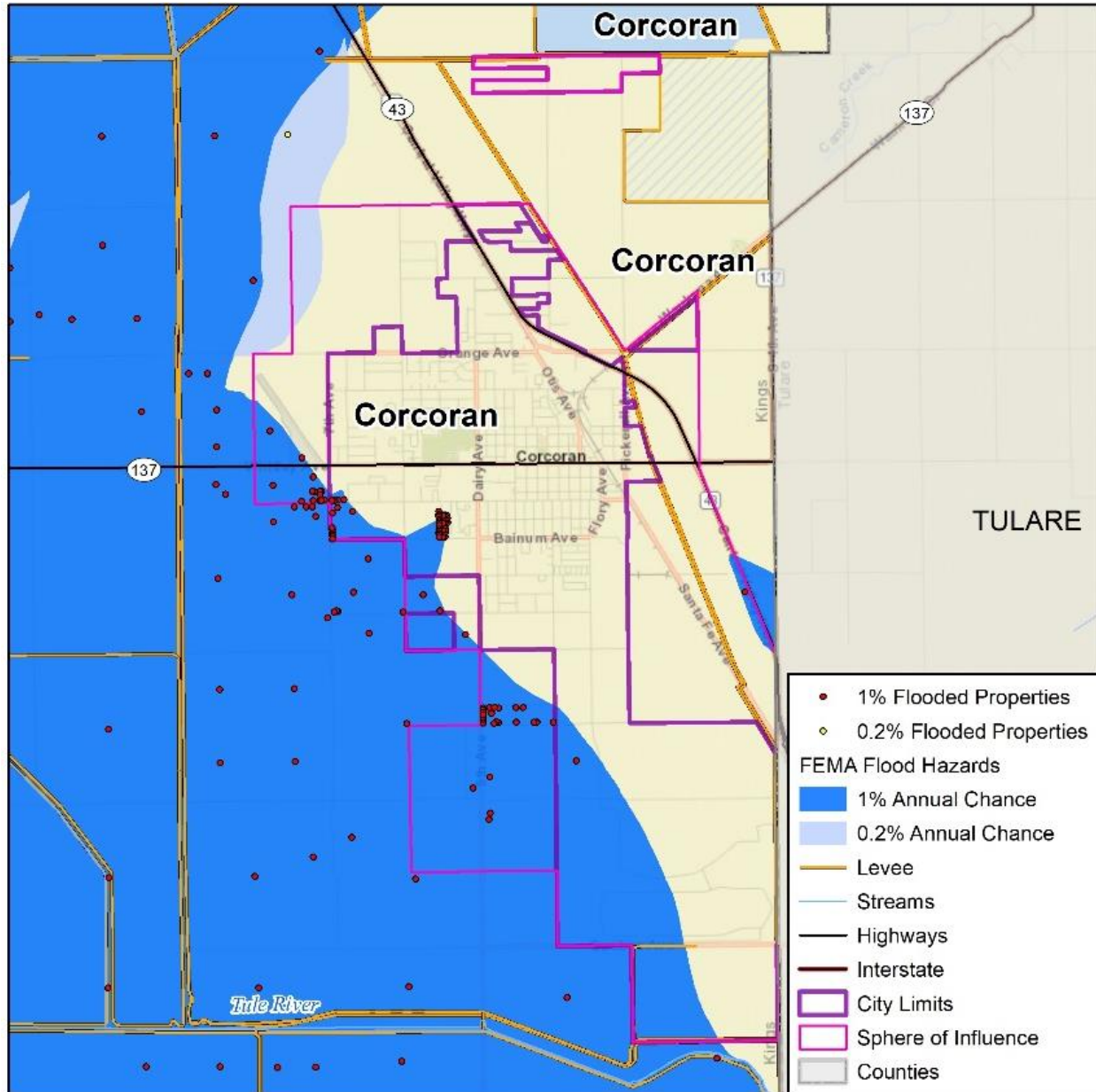
Floodplains and Special Flood Hazard Areas

As referenced in the Base Plan, federal, state, and local agencies use the 1% likelihood flood, often called the "base flood" or "100-year flood," as a regulatory benchmark. FEMA maps these Special Hazard Flood Areas (SFHA) or flood zones where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies in the regulatory maps.

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. The primary types of flood events that may impact the City of Corcoran are riverine and interior/urban flooding. The City of Corcoran is situated on the eastern edge of Tulare Lake, a historic water body that submerged extensive areas spanning Kings, Tulare, and Kern counties for centuries. The 1% annual chance floodplain and the 0.2% annual chance floodplain for the City of Corcoran are shown in Figure B-3. Tulare Lake is also mapped in the 1% annual chance floodplain (100-year flood zone). Regardless of the type of flood, the cause is often the result of severe weather and excessive rainfall, either in the flood area, upstream, or from winter snowmelt.



Figure B-3 City of Corcoran 1% & 0.2% Annual Chance Floodplain



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

0 1 2 Miles



During the early 1900s, the Tulare Lake's water level dramatically receded due to the construction of dams, canals, and levees. In 1983, emergency flood protection levees, including the Corcoran Levee were constructed along Cross Creek and the Tule River to further protect the City from Tulare Lake flooding. The Corcoran Levee was developed and certified by the U.S. Army Corp of Engineers, and then assigned to the newly established Cross Creek Flood Control District for continued maintenance. The Corcoran Levee was reinforced and raised in 2017, and in response to extreme weather and flooding in 2023 was reinforced and elevated an additional 3.5 feet. These alterations were made to manage and redirect water for agricultural purposes. Subsequently, the lakebed was modified to support agricultural products such as cotton, tomatoes, and pistachios. Nevertheless, the lake resurfaces periodically, typically during exceptionally wet years as it did in March 2023 when the Tule River flooded against the Corcoran Levee.



As indicated by FEMA flood maps, portions of the two state prisons in Corcoran are in locations that have potential risk of flooding (see Figure B-3). Although the existing Corcoran Levee and other flood control infrastructure have safeguarded the City and its correctional facilities from substantial flooding, the protective capacity could be subject to modification due to shifting climatic conditions, and therefore plans should be in place to improve the levee system in the future. For example, as of March 2023, previously unflooded areas surrounding Tulare Lake became inundated due a severe storm event, which heavily soaked the region and carried an unusually significant volume of low-elevation snowmelt along the Tule River. The resulting flood events resulted in approximately 101 square miles of land having been inundated, predominantly encompassing agricultural fields. This measurement is anticipated to surge significantly in the near future.

Reflecting on the previous occurrence when the lakebed swelled to its current proportions back in 1983, the draining process extended for nearly two years. A similar timeline might unfold in future occurrences, in particular the recent March 2023 flood event. Climate change is also expected to increase the intensity of major storms, which could create more frequent and severe flooding in and around the City. In summary, the risk to riverine flooding in the City is high due to development in the eastern edge of the floodplain and localized flooding issues; however, regular maintenance, emergency repairs and reinforcement, and fortification and improvements of the levee system continue to protect the community from flooding.

A flood vulnerability assessment was completed during the 2022-2023 update, following the methodology described in Section 4 of the Base Plan. Table B-12 summarizes the values at risk in the City's 1% annual chance floodplain. There are no properties within the 0.2% annual chance floodplain.



Table B-12 City of Avenal 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
Exempt	3	3	\$225,007	\$225,007	\$450,014	\$112,504	-
Residential	40	40	\$5,726,687	\$2,863,344	\$8,590,031	\$2,147,508	132
Total	43	43	\$5,951,694	\$3,088,351	\$9,040,045	\$2,260,011	132

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

Based on this analysis, the City of Corcoran has 43 buildings located within the 1% annual chance floodplain for a total value of \$9 million. The potential loss is estimated at over \$2.2 million if these areas were inundated by the 1% annual chance flood. The population at risk was calculated for the 1% annual chance floodplains based on the number of residential properties at risk and the average number of persons per household (3.31). There are an estimated 132 persons at risk to 1% annual chance flood annual chance flood in the City of Corcoran.

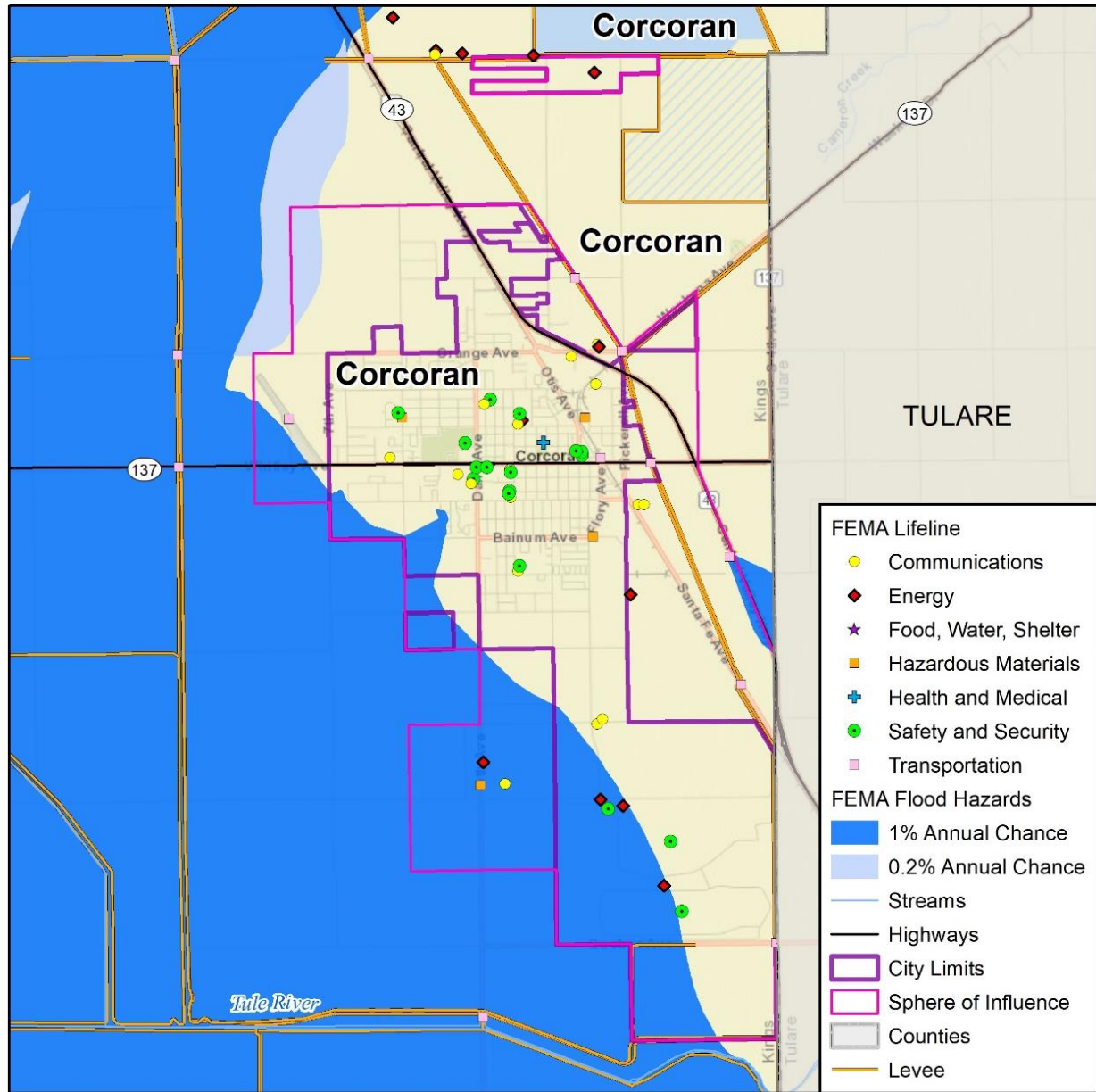
The Department of Water Resources (DWR) developed Best Available Maps (BAM) following legislation enacted in 20017 (Senate Bill 5) for the 100-, 200-, and 500-year floodplains located within the Sacramento-San Joaquin Valley. The BAM maps contains the best available information on flood hazards in cities 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 aeras that may warrant further studies and are intended to facilitate land use decision making. There are no DWR Awareness 100-year floodplains within the City of Corcoran.

Critical Facilities at Risk

Critical facilities are those community components that are most needed to withstand the impacts of disaster as previously described. Table B-13 lists the critical facilities in the City’s 1% annual chance floodplains. Figure B-4 shows the location of the critical facilities in the City’s 1% annual percent chance floodplains. The City does not have facilities that are located in 0.2% annual chance floodplains.



Figure B-4 Critical Facilities at Risk of FEMA 1% Annual Flood Hazard



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

0 1 2 Miles



Table B-13 Critical Facilities at risk of 1% Annual Chance Flood Hazard, by FEMA Lifeline

FEMA LIFELINE	COUNT
Communications	-
Energy	3
Food, Water, Shelter	-
Hazardous Materials	-
Health and Medical	-
Safety and Security	1



FEMA LIFELINE	COUNT
Transportation	-
Total	4

Source: Kings County; Kings County, HIFLD, NID, DWR, National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

Four facilities are potentially exposed to a 1% annual chance flood events, including the California Corcoran State Prison - Fire Department, CDCR (CA) - Corcoran State Prison, CDCR Corcoran, and Quebec Corcoran. The impact on the community could be substantial if any of these facilities are damaged or destroyed during a flood event. Impacts to any of the City’s key wastewater facilities and infrastructure and conveyance systems would also result in severe service disruptions to the community and subsequent costs associated with response and recovery.

Flood Insurance Coverage, Claims Paid, and Repetitive Losses

Flooding is the most common and costly natural disaster in the United States. In terms of economic disruption, property damage, and loss of life, floods are often referred to as "nature's number-one disaster." Consequently, flood insurance is typically not included in standard homeowner's and renter's insurance policies. To safeguard their property against flood-related losses, individuals are advised to acquire flood insurance through the NFIP. Established by Congress in 1968 to mitigate the rising costs of federal disaster relief, the NFIP is administered by FEMA, a division of the U.S. Department of Homeland Security. It provides federally backed flood insurance to communities that adopt and enforce effective floodplain management ordinances aimed at reducing potential flood losses.

The NFIP offers flood insurance coverage to individuals residing in participating communities. Community membership is contingent on adopting and enforcing floodplain management and development regulations. The NFIP operates on the basis of voluntary community participation, regardless of size. In this context, a "community" refers to a political entity with the legal authority to implement and enforce floodplain management ordinances within its jurisdiction, including incorporated cities, towns, townships, boroughs, villages, or unincorporated areas of counties or parishes.

National flood insurance is only available in communities that apply for participation in the NFIP and commit to implementing prescribed flood mitigation measures. In return for adhering to basic floodplain management standards, local governments enable property owners to purchase modest levels of flood insurance coverage. Communities that adopt more comprehensive floodplain management measures can be promoted to the Regular Program, allowing local policyholders to access higher levels of insurance coverage.

Integral floodplain management involves both evaluating and permitting development within the SFHA, while also addressing equity and outreach. This entails raising new residential structures to or above the Base Flood Elevation (BFE), implementing floodproofing for non-residential structures, constraining development in floodways, strategically siting public utilities and facilities to minimize flood damage, and reinforcing foundations against floatation, collapse, or lateral shifting. These efforts prioritize fairness and engagement within flood-prone communities.

The City of Corcoran joined the NFIP on November 28, 1997. NFIP Insurance data indicates that as of May 2023, there were four flood insurance policies in force in the City with \$ 1,202,000 of coverage. All four policies are located in B, C & X zones. All four 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 in Table B-14. A total of 44 buildings within the SOI are exposed to the 1% annual chance flood. None of the parcels/buildings in SOI are exposed to 0.2% annual chance flood events. This indicates the risk to existing development that could be under the City's jurisdiction if the area was annexed.



Table B-14 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	5	6	\$5,592,772	\$5,592,772	\$11,185,544	\$2,796,386	
Exempt	6	8	\$30,409,226	\$30,409,226	\$60,818,452	\$15,204,613	
Multi-Use	1	1	\$470,000	\$470,000	\$940,000	\$235,000	
Residential	28	29	\$1,733,154	\$866,577	\$2,599,731	\$649,933	96
Total	40	44	\$38,205,152	\$37,338,575	\$75,543,727	\$18,885,932	96

Source: Kings County; Kings County, HIFLD, NID, DWR, National Flood Hazard Layer Effective 6/17/2019; FEMA; WSP analysis

B.3.6.6 Land Subsidence

Land subsidence is prevalent along the northeastern portion of Kings County. According to data from DWR, the City of Corcoran has experienced moderate subsidence. Between 2015 and 2023, the City experienced vertical displacement of -4 to -5.5 feet. The southeastern portion of the City, which has experienced the most vertical displacement (between -5 to -5.5 feet), is currently zoned for resource conservation and open space. However, the Corcoran State Prison is located in the southeastern portion of the City, making it susceptible to subsidence in the area.

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

B.3.6.7 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 Corcoran and all jurisdictions within Kings County. Refer to Chapter 4 for a discussion of public health hazards risk relative to the City of Corcoran and the County.

B.3.6.8 Severe Weather: Heavy Rain, Thunderstorms, Hail and Lightning

Between 1968 and 2022, the NCEI Storm Events Database recorded a total of 96 instances of hail, heavy rain, thunderstorms, and lightning events in Kings County. Of these events, four were recorded in Corcoran, consisting of two hail events, one lightning event, and two heavy rain events. There were no recorded deaths, injuries, property or crop damage associated with these events, summarized in Table



B-15. As previously noted in the flood section, Corcoran has also experience recent flood events from heavy rain and atmospheric rivers.

Table B-15 Heavy Rain, Thunderstorm, Hail and Lightning Events in Corcoran, 1968-2022

DATE	SUMMARY
Heavy Rain	
Jan. 1, 2006	Rainfall in excess of 2.5 in just over 30 hours lead to water covered roadways in several locations around Kings County. Hanford measured 2.82" of rain in that time period with the cities of Lemoore and Corcoran receiving just over 3" of rain. Ponding basins overflowed in the city of Lemoore and flooding occurred in smaller cities of Huron and Corcoran. Strong wind during the evening of the 2nd brought down several large trees in the city of Lemoore including one 100-year-old tree onto a house.
Hail	
Feb. 22, 2007	An unstable airmass over the Corcoran produced strong thunderstorms during the afternoon of the 22nd and persisted into the early evening hours. A thunderstorm that developed southwest of Hanford intensified rapidly as it moved east, becoming severe as it reached the Kings/Tulare County line. A spotter reported hail in excess of a .9-inch diameter from the storm.
Sept. 11, 2001	Public report of nickel sized hail in Corcoran. Some deep tropical moisture associated with a fairly strong upper-level shortwave pushed into central California and produced a severe thunderstorm outbreak. Numerous reports of downburst winds exceeding 60 mph were reported and the impacts from these thunderstorms included downed power lines, damage to roofs; and large objects being knocked over and damaged. Rainfall amounts were generally a quarter of an inch or less, with public reporting of nickel sized hail in Corcoran.
Lightning	
July 30, 2007	A west-to-east line of convection developed over the Kings-Tulare-Kern County line through the Southern San Joaquin Valley. Monsoonal moisture aloft from the east in combination with high surface heating brought lightning over the southwest portion of Tulare County in and around Delano. Over the next couple of hours, the line slowly translated north with a center of lightning activity ending at Corcoran in Kings County.

Source: NCEI Storm Events Database 2023

B.3.6.9 Severe Weather: High Wind/Tornado

Between 1968 and 2021, the NCEI Storm Events Database recorded a total of 98 instances of high wind and tornado events in Kings County. Of these events, only one, a high wind event on February 9, 2002, resulted in minor damage being recorded in Corcoran. In addition to these events, the USDA declared three disaster designations, one in 2016 and two in 2017, due to high wind events.

Tornadoes and windstorms pose a significant risk to both the residents and the property within the City of Corcoran. 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 Corcoran 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 Corcoran and all jurisdictions within Kings County. Refer to Chapter 4 of the Base Plan for a discussion of high wind and tornado risk relative to the City of Corcoran and the County.

B.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 are already in place and shared any updates or changes through the Corcoran 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 Corcoran's capabilities are summarized below.

B.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 B-16 below indicates those that are in place in the City of Corcoran.

Table B-16 City of Corcoran –Regulatory and Planning Capabilities

REGULATORY TOOL (ORDINANCES, CODES, PLANS)	YES/NO	COMMENTS
General Plan	Yes	Enhanced and Adopted in 2014
Zoning ordinance	Yes	The City's Zoning Ordinance, Title 11 Zoning Regulations, is the implementation ordinance for the City's land use and development regulations and sets forth development project review processes and criteria to address hazard related risks and vulnerabilities.
Subdivision ordinance	Yes	Title 12 Subdivision Regulations; includes development fees
Growth management ordinance	No	Growth is constrained by Local Agency Formation Commission (LAFCO) SOI, City also restricts densities in certain land uses
Floodplain ordinance	Yes	Chapter 9 Floodplain Management Regulations
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	Water Use and Service, Resource Conservation and Open Space District Land Uses
Building code	Yes	Uniform Building Code, (January 1, 2019) The City plans to adopt the latest version in 2023 and the 2022 Title 24 Codes also in 2023 (to go into effect March 1, 2023). The City's Community Development Department is responsible for implementing these codes. While the codes do not specify hazard mitigate, they are based on reducing earthquake, severe weather (wind, tornado), and flood hazard impacts.
Fire Department ISO rating	No	Rating 4: Kings County Fire Department
Erosion or sediment control program	No	
Stormwater management program	Yes	2006 Revised Master Plan; there are also stormwater drainage charges for new development
Site plan review requirements	Yes	Established through Zoning Ordinance
Capital improvements plan	Yes	5-Year Capital Improvements Plan (CIP); available through the Finance Department



REGULATORY TOOL (ORDINANCES, CODES, PLANS)	YES/NO	COMMENTS
Economic development plan	Yes	Available through the Community Development Department
Local emergency operations plan	Yes	Kings County EOP 2015; Coordinated through the Police Department. The City does not have a stand-alone EOP.
Other special plans	N/A	
Flood insurance study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	Only necessary for the development within the flood zone, and the City growth is directed away from the 100-year flood zone
Other		

Corcoran General Plan Enhancement 2005 – 2025 (2014)

California state law requires each city and county to adopt a General Plan “for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning” (California Government Code Section 65300). The California Supreme Court has called the General Plan the “constitution for future development.” Corcoran’s General Plan expresses the community’s development goals and embodies public policy relative to the distribution of future land uses, both public and private. State law specifies that each General Plan address seven issue areas (“elements”): land use, circulation, open space, conservation, housing, safety and noise. Additional elements may be added as a local option.

The Corcoran General Plan Enhancement provides comprehensive planning for the future. It encompasses what the City is now, what it intends to be, and provides the overall framework of how to achieve this future condition. Estimates are made about future population, household types, and employment, so that plans for land use, circulation and public facilities can be made to meet future needs. The General Plan represents an agreement on the fundamental values and a vision that is shared by the residents and the business community of Corcoran and the surrounding area of interest. Its purpose is to provide decision makers and City staff with direction for confronting present issues, as an aid in coordinating planning issues with other governmental agencies, and for navigating the future.

This General Plan is an update, expansion and reorganization of the 1997 General Plan. Significant changes to the 1997 General Plan occurred; including expanding the boundaries of the SOI to Nevada Avenue to the north and to the Tulare County boundary to the east, an updated circulation system; and a new Planning Area beyond the SOI. The Planning Area now encompasses the City limits and SOI, and unincorporated territory bearing a relation to the City’s planning.

The Corcoran Zoning Ordinance is the implementation ordinance for the City’s land use and development regulations and sets forth development project review processes and criteria to address hazard-related risk and vulnerabilities.

Safety Element

The Safety Element in the 2014 General Plan Enhancement outlines the importance of ensuring the safety of residents and businesses in Corcoran. It addresses various safety concerns, including crime, violence, natural disasters, and hazardous materials. The element includes policies and standards to manage these risks effectively. Key areas covered include:

- Purpose of the Safety Element: The primary purpose is to identify and mitigate potential hazards in and around Corcoran, ensuring the safety of the community’s citizens, properties, and infrastructure. It also focuses on crisis management for events like earthquakes, fires, and floods, as well as the prevention of criminal activities.
- Scope and Content: The Safety Element is a mandated component of the General Plan, required by state planning law. It covers hazards such as seismic events, slope instability, flooding, fires, hazardous materials, and evacuation routes.



- Floodplain Development Regulations: These regulations are aimed at reducing flood risks in flood-prone areas based on FEMA mapping. It ensures compliance with the Central Valley Flood Protection Plan and other relevant state laws.
- State Awareness Mapping Program: This program identifies flood hazards not covered by FEMA's mapping and provides advisory information to property owners and residents.
- Emergency Planning and Response: The objectives include minimizing the loss of life and property from natural and man-made hazards and coordinating responses during disasters. Policies cover emergency preparedness procedures, building standards, joint training exercises, and coordination with neighboring communities.
- Fire Protection: Objectives focus on maintaining an effective and well-trained Fire Department and ensuring a reliable water supply system. Policies include response time goals, weed control, public education, and coordination with neighboring entities.
- Flooding: The objective is to protect lives and property from flooding hazards. Policies involve implementing FEMA regulations, updating storm drain plans, and establishing development fees for levee protection.
- Aircraft Overflight Hazards: The objective is to prevent conflicts between ground uses and airport operations. Policies involve implementing building and land use restrictions specified by the Kings County Airport Land Use Plan.
- Hazardous Materials and Waste: The objective is to minimize risks from hazardous materials. Policies require separation of hazardous areas from sensitive uses, environmental investigations for contaminated sites, and safe transport measures.
- Public Safety Standards: The objective is to adopt and implement safety standards for various hazards. Policies include requiring environmental impact reports for projects in hazard areas, maintaining water supply standards, considering fire standards in development proposals, and ensuring adequate street width and connectivity.

In summary, the Safety Element addresses a wide range of safety concerns, from natural disasters to man-made hazards, with a focus on planning, prevention, and coordination to ensure the safety and well-being of the Corcoran community.

As the City's last comprehensive update of the General Plan was done in 2012, the completion timing of the 2012 MJHMP did not coincide to integrate the plan at that time. The 2012 MJHMP was relied upon by the City in proposing annual budget, CIP, and grant related efforts. The only planning documents that have been revised since 2012 is the zoning code (2014) and an addition to the General Plan of a Community Design Element, A public Service and Facilities Element, and an Economic Development Element.

Air Quality Element

The Air Quality Element of the General Plan for the City of Corcoran addresses the significant air quality challenges faced in the San Joaquin Valley, a region covering 25,000 square miles with a population of over 3.9 million. The area consistently experiences poor air quality, particularly in terms of ozone and particulate matter, affecting the health of Corcoran residents. This element outlines the City's commitment to improving air quality, complying with state regulations, and addressing climate change issues. It emphasizes the interconnectedness of land use, transportation, and air quality and includes provisions to meet air quality standards and reduce greenhouse gas emissions. The element aligns with state laws and integrates with other General Plan elements to promote compact development, alternative transportation modes, and environmentally friendly land use practices while emphasizing the importance of clean air. It also discusses strategies to minimize vehicle trips and reduce emissions through transportation alternatives and sustainable land use planning.

Floodplain Management Regulations Title 9 Chapter 9

The purpose of the City's Floodplain Management Regulations is to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by legally enforceable regulations. These regulations are designed to protect human life and health; minimize efforts associated with flooding and generally undertaken at the expense of the general public; minimize the need for rescue and relief efforts associated with flooding; and minimize prolonged business interruptions. The Floodplain Management Regulations are also in place to minimize damage to public facilities and utilities in SFHAs identified by FEMA in the Flood Insurance Study (FIS) for the City (dated June



16, 2009) with accompanying FIRMs and flood boundary and floodway maps and help maintain a stable tax base by providing for the sound development in SFHAs. The regulations also ensure that potential buyers are notified that property is in a SFHA and ensures that those who occupy the areas of special flood hazard assume responsibility for their actions.

The regulations are maintained and administered by the City Manager and through the City's Community Development Department and reviewed on a case-by-case basis through the zoning permit review and building permit review processes. The City's municipal code section 9-9-7-2 requires the determination of substantial improvement and substantial damage to be performed through the permit review process, and that the Community Development Department have related procedures. As previously described in Section B.3.6.6, a portion of the City's western and southwestern edge is in a SHFZ. When building in a flood zone the owners are required to have the pad 12 inches above the curb or center of the street. They are also required to provide a certificate of the pad elevation and insurance.

Storm Water Management and Discharge Control Title 8 Chapter 8.2.13

The purpose of this chapter is to minimize outdoor water use and to control unnecessary consumption of the available water supply for the City. Under this chapter, the City collects storm drainage charges for new development, including single-family lots, and non-single-family lots. In general, any development or use of land producing a runoff factor greater than a .35 coefficient will pay an increased charge in direct proportion to the increase of the coefficient determined by the Public Works Director.

2009 City Code, Emergency Services Disaster Council, Chapter Four

Chapter Four of the City's Code of Ordinances outlines the purposes, definitions, and structure of its emergency management system. The primary purposes of this chapter are to establish plans for protecting residents and property during emergencies, coordinate with other public agencies, corporations, and organizations, and direct the emergency response efforts. An "emergency" is defined as any situation that poses a threat to safety or property, such as air pollution, fires, floods, epidemics, or earthquakes. The chapter also establishes a Disaster Council, consisting of various government officials, to oversee emergency planning and response efforts.

The Disaster Council's responsibilities include developing emergency plans, recommending ordinances and regulations, and coordinating resources for disaster response. The chapter also establishes the roles of the Director and Assistant Director of Emergency Services, outlining their powers and duties. The Director has the authority to request emergency proclamations, control emergency operations, and represent the city in matters related to emergencies. The Assistant Director assists in emergency planning and program management. The chapter concludes by emphasizing the importance of the emergency organization, which includes City employees and volunteers, in ensuring the safety and protection of the City's inhabitants and property during emergencies. Additionally, it notes that expenditures related to emergency activities are considered for the direct benefit of the city's residents, and violations of emergency regulations can result in misdemeanor charges.

B.4.2 Administrative and Technical Capability

Table B-17 below identifies City personnel with responsibilities for activities related to mitigation and loss prevention in the City of Corcoran. Many positions are full time and/or filled by the same person. A summary of technical resources follows.

Table B-17 City of Corcoran –Personnel Capabilities

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION	COMMENTS
Planner/engineer with knowledge of land development/land management practices	Yes	City Community Development Planning Division	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	City Community Development Building Division, Public Works Department, Public Works Director	



PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION	COMMENTS
Planner/engineer/scientist with an understanding of natural hazards	Yes	City Manager	
Personnel skilled in GIS	Yes	City Manager, City Engineer, Utilities Department	
Full time building official	Yes	City Community Development Chief Building Official	Community Development Director
Floodplain manager	Yes	City Manager	The City Manager is appointed as the Floodplain Manager by Ordinance.
Emergency manager	Yes	City Police Department	Police Chief
Grant writer	Yes	Community Development Department, City Manager or Contractor	
Other personnel	Yes	Multiple agencies and departments with support personnel expanding capabilities for mitigation	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No		County contracts GIS services with Kings County
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Yes	Police Department	Nixle
Other	Yes	Conservation Coordinator	

City Council

The City has a City Council/City Manager form of local government. The Council is elected at large by the City and four-year terms, with three elected during one election cycle and the other two on a following election cycle. The Mayor and Vice Mayor are appointed by the Council and serve two-year terms. The City Council serves as the legislative policy-making body.

City Clerk

The City Clerk is appointed by the City Manager. The City Clerk is the local Elections Official who administers democratic processes such as council agenda and minutes, the Corcoran Municipal Code, elections, records management, and all legislative actions ensuring transparency to the public. The City Clerk acts as a compliance officer for federal, state, and local statutes including the Election Code, Political Reform Act, the Brown Act, and the Public Records Act and is the Agent for Service of legal process in the City.

City Administration

The City of Corcoran is a General Law municipality operating with a Council-Manager form of government. The City Council sets and gives overall policy direction to the City Manager, who is responsible for the day-to-day operation of the City with the capable assistance of department heads and a dedicated staff. City Administration office staff include the City Manager, Assistant to the City Manager/City Clerk, Deputy City Clerk, and Transit staff. City Administration is responsible for budget oversight, policies and procedures, economic development, human resources, risk management, special projects, and other City related activities. They also provide support to the 4 City departments and programs, described below.



Transit services provide affordable quality services that enhance the safety, and environment, where citizens and employees can thrive in an atmosphere of courtesy, integrity, respect, and enhance mobility. The City provides Dial a Ride services for the community of Corcoran and its fringe area. This service is provided by the Corcoran Area Transit (CAT) division and is part of the Community Development. The CAT operates an origin to destination service and not a door-to-door or curb-to-curb service since Transit Operators are not to leave their buses unattended at any time while in service.

Community Development Department

The Community Development Department is responsible for housing, land use planning, code enforcement, and building inspection. The Building Inspection services include providing code information, inspections of new and remodeled structures, accepting plan check submissions, issuing permits, and collecting public facility fees. The Planning Division provides the planning and zoning functions for the City.

Finance Department

The Finance Department ensures prudent financial management of the City's resources. These responsibilities range from the daily administration of City fiscal resources to long-range financial planning. These responsibilities include budget and audits, accounts payable, utility billing and payments, and the issuance of business licenses.

Public Works Department

The Public Works Department has various divisions including facilities, fleet, parks & grounds, roads, street sweeping, and water/wastewater/storm drainage services. This department services nine parks and various ponding basins. The utilities division operates a 2.0 million gallons per day (MGD) wastewater treatment plant with an average daily flow of 1.2 - 1.5 MGD, located at the corner of Pueblo and King Avenue. The effluent from this plant is disposed on 338 acres located south of Plymouth Avenue and King Avenue. In addition to the treatment plant, the wastewater system includes the wastewater distribution system, which includes 18 sewer lift stations and approximately 17.7 miles of assorted transmission lines ranging from eight inch to twenty-one-inch pipes. This department has five licensed Treatment Plant Operators. There is always an operator on -call 24 hours a day to cover this operation.

Police Department

The Corcoran Police Department provides public safety and emergency services for the community. Operational services include patrol, investigations, dispatch, K-9, and other related services.

Contracted Fire Services (Kings County Fire Station #11)

In 2021, the Corcoran City Council approved a contract with the City of Corcoran for fire services. Through a joint services agreement, the Corcoran Fire Department provides fire services within the City of Corcoran.

B.4.3 Fiscal Capability

Table B-18 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 B-18 City of Corcoran – 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	Yes	No	
Capital improvements project funding	Yes	No	Impact fees
Authority to levy taxes for specific purposes	No	No	Must be approved by voters



FINANCIAL RESOURCES	ACCESSIBLE/ ELIGIBLE TO USE	HAS THIS BEEN USED FOR MITIGATION IN THE PAST?	COMMENTS
Fees for water, sewer, gas, or electric services, new development	No	No	
Incur debt through general obligation bonds	No	No	
Incur debt through special tax bonds	No	No	Requires approval by two-thirds of voters
Incur debt through private activities	No	No	Do not have any in place
Federal Grant Programs (Hazard Mitigation Grant Program)	No	No	Various Departments

B.4.4 Outreach and Partnerships

The City of Corcoran works closely with Kings County and various other agencies to implement community-based outreach initiatives, specifically those that target underserved and under-resourced populations. These collaborative efforts are designed to enhance community resilience and address the challenges posed by hazards and climate change, with a particular focus on ensuring the well-being of vulnerable communities.

The City of Corcoran has established partnerships with non-profit organizations such as the Kings Community Action Organization (KCAO) and Self-Help Enterprises. These organizations play a crucial role in providing essential services and resources during times of crisis, including the distribution of bottled water during droughts or public water system failures, access to shelter, grants for housing repairs, and various other services tailored to vulnerable populations. The City's Public Works Department actively educates the public on water conservation and responsible usage. Additionally, the Community Development Department provides residential safety information related to earthquake preparedness and disaster readiness.

During the 2022-2024 planning process the following outreach efforts were identified that the City of Corcoran could support related to hazard mitigation:

- Corcoran Journal - routinely provides the public with updates of the City Council meetings.
- Police Department - provides updates to the public through the Nixle Notification System.
- Public Works Department - provides water conservation and use education materials.
- Community Development Department - educates through the building inspection and CDBG programs that provide residential safety information related to earthquake and disaster preparedness.
- Alert Center (Nixle Notification System).
- Social Media.

Through these concerted efforts and partnerships, the City of Corcoran is taking proactive steps to safeguard its residents and foster community resilience in the face of various challenges. Education and outreach efforts, as well as emergency response planning, will also need to address the needs of DAC, and other low-income residents and Spanish-speaking populations.

B.4.5 Other Mitigation Efforts

The City also coordinates mitigation efforts with the Cross Creek Flood Control District. The Cross Creek Flood Control District's levee system protects the City of Corcoran, and the District recently completed a \$17 million levee enhancement project. Although this is not a City of Corcoran project, the District investment and assessment of property owners directly addresses flood mitigation efforts that serve to protect the residents of the City.



B.4.6 Opportunities for Enhancement

Based on the capability assessment, the City of Corcoran 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

Future opportunities for regulatory enhancement should focus on compliance with Assembly Bill 2140, including amending the City of Corcoran General Plan Safety Element to incorporate the 2023 Kings County MJHMP and City of Corcoran Annex by reference.

The Groundwater Sustainability Agencies (GSAs), such as the El Rico GSA, manages the Tulare Lake Basin area and is required to a prepare Groundwater Sustainability Plan (GSP) pursuant to the Sustainability Groundwater Management Act (SGMA) that directly aims to address groundwater overdraft. Additional requirements from the State are also necessitating the City to implement increased water efficient use, and the City is in the process of installing Citywide water meters and engages in water conservation education outreach to residents. The City will continue to participate on the El Rico GSA and partner on groundwater projects outlined in the Tulare Lake Subbasin GSP.

Extreme Temperatures: extreme heat is being addressed through additional cooling centers and community alert notifications through Nixle alert system. The City also recognizes that fog events are a regular occurrence during the winter months; however, greater flexibility of remote work opportunities now allow greater risk avoidance during intense foggy conditions.

Administrative/Technical Opportunities

Other future enhancements may include providing hazard training for staff or hazard mitigation grant funding in partnership with Kings County and Cal OES. Existing City staff are aware of the benefits of participating in training and webinars offered by Cal OES Hazard Mitigation Assistance (HMA) Team related to HMGP opportunities, HMGP Sub application Development support, and other funding programs, such as Prepare California Jumpstart. Other opportunities may be related to coordinating and educating key stakeholders in the City. Other stakeholders may be interested in aligning efforts related to hazard mitigation and also supporting HMGP Sub applications and other hazard mitigation trainings.

Fiscal Opportunities

The City can update other plans, such as their CIP to incorporate hazard information and include hazard mitigation actions and climate adaptation strategies that relate to infrastructure systems resiliency associated with the water and wastewater systems and the flood levee system (i.e., Corcoran Levee) maintained by the Cross Creek Flood Control District.

Once projects related to hazard mitigation are approved, the recent CIP can be shared with the community on the City's webpage. The City can also make sure they publicize partner efforts, for example, collaborations with the Cross Creek Flood Control District on their webpage. Capital investments and improvements related to seismic retrofits, cooling center upgrades, and WWTP upgrades should all be emphasized in the outreach materials as they are related to hazard mitigation.

The City indicated in the 2022-2023 planning process that they did not apply for FEMA mitigation grants or non-FEMA mitigation funding opportunities. Following the 2023 MJHMP update process, the City should apply for HMGP grants to fund implementation costs associated with key CIP projects, and related projects in the City's mitigation strategy. These fiscal capabilities may be supported by City staff or augmented with consultant staff.

Outreach Opportunities

The City can expand their outreach capabilities related to the implementation of the 2023-2028 Kings County MJHMP and the City of Corcoran Annex. Specific enhancements may include continued public involvement through social media posts and advertisements focused on projects successes related to the Annex Mitigation Strategy as well as focused outreach to DACs and under-represented and special-interest



groups in the City. The City should continue to conduct outreach through the Police, Public Works, and Community Development departments. They should also continue to promote the use of the Nixle Notification System. The City can also develop outreach kits for partner organizations, like the Cross Creek Flood Control District by expanding on the information included in the MJHMP Outreach Strategy included in Appendix F.

B.5 MITIGATION STRATEGY

B.5.1 Goals and Objectives

The City of Corcoran 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.

B.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 B-19 two mitigation actions were completed, and one was deleted. The remaining seven mitigation actions were carried forward into the 2023-2028 MJHMP and Lemoore Mitigation Strategy. Of these seven mitigation actions, one of them was modified and updated.

Table B-19 Completed Mitigation Actions

DESCRIPTION / BACKGROUND / BENEFITS	GOALS AND LIFELINES	HAZARD(S) MITIGATED	STATUS
Assessment of floodwater and emergency access Impacts during construction of the High-Speed Rail Project, and after completion.	Goal 1, Goal 2, Goal 3, Transportation	Drought, Earthquake, Extreme Heat, Flood, Fog, Freeze, Wildfire	Complete. The High-Speed Rail Project is approved by the State and is currently under construction. Site specific mitigation efforts are currently underway and being developed by CHSRA in coordination with the City for infrastructure enhancements. The alignment being constructed east of the City brought to light two key hazard issues: emergency access routes being blocked and rerouting of traffic during disaster events, and the elevated track platform funneling and redirecting flood water flows from the east along the Tule River channel.
Construct new Integrated Public Safety Building	Goal 1, Goal 2, Safety and Security	Dam Incidents, Earthquake, Extreme Temperatures, Flood, Severe Weather, Wildfire	Complete. The new Corcoran Police Department Headquarters was completed in 2019 and now serves to support Corcoran PD patrol, dispatch, and emergency operational center. This central facility has emergency backup, and other facilities to serve in times of emergency.
Expand the Veteran’s Memorial Building and Designate it as an Emergency Shelter	Goal 1, Goal 2, Safety and Security	Dam Incidents, Earthquake, Extreme Temperatures, Flood, Severe	Deleted. The Veteran’s Memorial Building Project as a cooling center was discontinued as the RAC gymnasium was made operational and can accommodate a greater capacity. The Corcoran Station housing is currently being evaluated to be outfitted with a



DESCRIPTION / BACKGROUND / BENEFITS	GOALS AND LIFELINES	HAZARD(S) MITIGATED	STATUS
		Weather, Wildfire	generator and directly serve some of the City's most vulnerable population with the elderly and disabled that live at that complex.

B.5.3 Continued Compliance with the NFIP

The City of Corcoran joined the NFIP on November 28, 1997. In addition to the mitigation actions identified herein the City will continue to comply with the NFIP. Floodplain management is under the purview of City Administration and Community Development Department. This includes ongoing activities such as enforcing local floodplain development regulations, 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 regulations to ensure that it is clear and up to date and reflects new or revised flood hazard mapping. The Public Works Department manages the storm water programs.

B.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 16 actions, including seven actions carried forward from the 2012 MJHMP, and 9 new actions summarized in Table B-20. These mitigation actions are based on risk assessments, goals, and objectives for the plan update. Some of the mitigation actions involve collaboration among multiple agencies, such as Kings County. 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 B-20 City of Corcoran 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
C-1	Goal 1, Goal 2, Goal 3, Safety and Security	Extreme Temperatures: Freeze and Heat	Equip and maintain the Recreational Association of Corcoran (RAC) Gymnasium Building, and Corcoran Transit Station with climate control features and designate each site as an Emergency Warming and Cooling Center for Sensitive Populations	City of Corcoran Public Works Department,	High	FEMA HMA HMGP, Other State Grants	High	Long Term	This project has been carried over from the 2007 and 2012 MJHMPs. This action has also been modified to now include the RAC Building and the Corcoran Transit Station. These facilities are already in use for this purpose and now need to be maintained for this use.
C-2	Goal 1, Goal 3, Energy	Extreme Temperatures: Extreme Heat	Emergency Power System for the Corcoran Depot Apartment complex operated by the Kings County Housing Authority. Installation of an emergency generator system would provide emergency power to a site already used for shelter, cooling, and medical device power to support the life and safety of socially vulnerable populations (senior and special needs populations) during emergencies residing at the complex	City of Corcoran Public Works, Kings County Office of Emergency Services	High,	Community Power Resiliency Allocation Program, EMPC, FEMA HMA HMGP, SHSGP Grant Program	High	Short Term	Revised Action in 2023. Use of the Veteran's Hall is no longer needed now that the RAC gymnasium is outfitted and serves a larger population. The next critically identified need area is the Corcoran Depot apartment complex as it houses a concentrated area of senior and special needs individuals.



ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C-3	Goal 1, Goal 2, Goal 3, Goal 4, Water Systems	Multi-Hazard, Earthquake, Flood, Land Subsidence	Assess the Vulnerability of Critical Facilities – Assess vulnerability of critical facilities, including police/fire stations, hospitals, schools, and others, to identify and prioritize projects for multi-hazard risk reduction.	City of Corcoran Public Works, Police Department	High	General Fund	High	Ongoing	This was carried over from the 2012 MJHMP. The Police Department building is a newly constructed building that shifted all Police Department operations to the new facility in 2019. Other City facilities are routinely reviewed through risk management authority in order to maintain current insurance.
C-4	Goal 1, Goal 2, Goal 3, Goal 4, Safety and Security, Water Systems	Drought	Assess Community Lifelines related to Water Distribution Systems – Assess vulnerability of lifeline utilities, including water distribution systems, to identify and prioritize projects for multi-hazard risk reduction.	City of Corcoran Public Works Department	High	Department of Water Resources (DWR) and Regional Water Quality Control Board (RWQCB)	High	Ongoing	This was carried over from the 2007 MJHMP. Upgrades and investments are routinely planned for the City's CIP and funding through grants, loans and other City funding. The City's Water system is monitored and upgraded to maintain reliable system services, which also pro-actively addresses challenges posed by the drought. The City's Wastewater ponds and connecting system were recently upgraded using American Rescue Plan (ARP) funding.
C-5	Goal 1, Goal 4, Safety and Security	Multi-Hazard, Earthquake, Extreme Temperatures: Extreme Heat and Freeze, Flood, Severe Weather	Develop a Program to Support Vulnerable Populations during Emergency Events	City of Corcoran Police Department	Moderate	General Fund	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.
C-6	Goal 1, Goal 2, Goal 3, Goal 4, Safety and Security	Earthquake, Flooding, Wildfire	Update the City's General Plan Safety Element and Integrate the next MJHMP	City of Corcoran Community Development Department	High	General Fund	High	Ongoing	This project was carried over from the 2007 and 2012 MJHMPs and has been revised. The City will integrate the City of Corcoran Annex during each 5-



ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
			Update and City of Corcoran Annex						year update; the last General Plan Update was in 2007 and will be next updated as part of a comprehensive update.
C-7	Goal 1, Goal 2, Goal 3, Goal 4, Safety and Security	Agricultural Pest and Disease, Drought, Earthquake, Extreme Temperatures, Flood, Subsidence, Landslide, Public Health Hazards, Fog, Heavy Rain, Thunderstorms, Hail and Lightning, Wildfire	Natural Hazards Review Criteria - Implement natural hazard review criteria for new development to improve long term loss prevention.	Kings County Community Development Department	High	General Fund	High	Ongoing	This action is carried over from the 2007 and 2012 MJHMPs. It was implemented through the adoption of the 2006 IBC and 2007 General Plan. It was implemented again through subsequent updates to the Building Code. It also involves the use of natural and manmade wind barriers and strict enforcement of all seismic D1 design category requirements.
C-8	Goal 3, Safety and Security Communications	Cyber Threat	Use antivirus solutions, malware, and firewalls to block threats	City of Corcoran, Public Works Department	Moderate	General Fund	Medium	Ongoing	New Action in 2023. The City has assessed network vulnerabilities and is currently implementing measures for cybersecurity. Monitoring and evaluation will be ongoing to evaluate changes and risks.
C-9	Goal 1, Goal 2, Goal 3, Safety and Security, Water Systems	Dam Incidents	Community Alert and Warning System	City of Corcoran, Corcoran Police Department, and Kings County OES	Moderate	Emergency Management Performance Grant (EMPG), Homeland Security Grant Program (HSGP), High Hazard Potential Dam (HHPD)	High	Ongoing	New Action in 2023. The City has implemented NIXLE Alert System, and utilizes City associated social media for community announcements. Extended Countywide alert notification system is in Progress through Kings County OES - Funding has been secured through a EMPG Grant.
C-10	Goal 1, Goal 2, Goal 3, Water Systems	Drought	Public Education Program for Water Conservation	City of Corcoran, City Public Works Department	Low	General Fund, City Water Enterprise Fund, and Department	High	Ongoing	New Action in 2023. The City is currently implementing citywide water meter installation along with public use property water use



ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
						of Water Resources funding.			application, water restriction notifications, and enhancing water utility payment information. Together, these systems are providing enhanced water conservation education to the public and is anticipated to affect greater conservation headed into 2024 summer.
C-11	Goal 1, Goal 2, Goal 3, Goal 4, Water Systems	Flooding, Drought, Subsidence	Corcoran Flood Protection – Multi-Agency Strategic Plan for Upstream Floodwater Diversion to Reduce Tulare Lake Flooding	City of Corcoran, Cross Creek Flood Control District, other Water & Irrigation Districts representing the Tulare Lake Basin, and DWR	Very High	FEMA HMA HMGP, DWR Riverine Stewardship Program and Urban Stream Restoration Program, Prop 68 Funds (Floodplain Management, Protection, and Risk Awareness Grant Program)	High	Long Term	New Action in 2023. Acknowledges that the USACE controls water releases from Pine Flat, Terminus, Schaefer, and Isabella Dams, and water and irrigation districts in Kings, Tulare, Fresno, and Kern counties. It is critical to beneficial groundwater recharge and management.
C-12	Goal 1, Goal 3, Goal 4, Safety and Security	Flooding	Enhanced Erosion Control and Protection of the Flood Control Levee	City of Corcoran, Cross Creek Flood Control District	High	FEMA HMA HMGP, DWR Urban Community Drought Relief Program	Medium	Long Term	New Action in 2023. DWR response to 2023 flooding provided erosion control measures along the Corcoran Levee for enhanced erosion control. This established a flood response measure that can be replicated in future years with flood disasters. New Action in 2023



ID	GOAL(S) AND LIFELINES	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY AND PARTNERS	COST ESTIMATE	POTENTIAL FUNDING	PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C-13	Goal 2, Goal 3, Goal 4, Water Systems	Flooding, Drought, Subsidence	Increase Reservoir Storage for Control of Floodwater	Cross Creek Flood Control District, City of Corcoran, USACE, Kings County, Other Water Districts	Very High	FEMA HMA HMGP, DWR Grants	High	Long Term	New Action in 2023.
C-14	Goal 3, Health and Medical	Public Health Hazards	Utilize trainings and exercises, epidemiology, and surveillance to control and combat public health risks	Kings County, City of Corcoran	Moderate	General Fund	Medium	Short Term	New Action in 2023. This would be a Kings County Public Health Department initiated effort that the City supports and helps to facilitate in Corcoran.
C-15	Goal 1, Goal 2, Goal 3, Water Systems	Flooding	Update the City's Storm Drain Master Plan every Few Years to include Planned Growth Areas	City of Corcoran	Low	General Fund	Low	Short Term	New Action in 2023. This is needed infrastructure for the City to diversify disbursement of stormwater drainage within the City. New Action in 2023; this was integrated from the Safety Element (Policy 4.16)
C-16	Goal 1, Goal 2, Goal 3, Water Systems, Safety and Security	Flooding	Continue to Participate with the Cross Creek Flood Control District to Ensure Levees Protecting Corcoran from Tulare Lake Flooding are Adequately Monitored	City of Corcoran, Cross Creek Flood Control District	Low	General Fund	High	Short Term	New Action in 2023. This is ongoing monitoring and maintenance efforts that are needed. New Action in 2023; this was integrated from the Safety Element (Policy 4.17)

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.



- ARP – American Rescue Plan Funds
- BRIC – Building Resilient Infrastructure and Communities Grant
- CAL FIRE Fuel Reduction Activity Funding – Funds projects in and near fire threatened communities to improve public health and safety while reducing GHG emissions.
- 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.
- EMPG – 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.
- USFS Wildland-Urban Interface (WUI) Grants – Funds to mitigate risk from wildland fire within the Wildland Urban Interface (WUI) that are awarded annually.

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



B.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.

B.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 City Manager's Office 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 Manager's Office will use this plan as a guide to seek future funding associated with upgrades, reinforcements, and improvements for the Corcoran Levee in coordination with the Cross Creek Flood Control District, in addition to other flood control and mitigation projects in the City. The City will also incorporate this MJHMP into the Safety Element of their General Plan, as recommended by AB 2140.

As noted in Section 6 of the Base Plan, the City of Corcoran LPT representatives will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual LPT plan review meeting.

B.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 City Manager, Fire Chief, and Community Development Director are also 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.



B.7 REFERENCES

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