1 CITY OF CERES

1.1 Purpose

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

1.2 Community Profile

1.2.1 Mitigation Planning History and 2021-2022 Process

This Annex was created during the development of the 2022 Stanislaus County MJHMP update. The City of Ceres did not participate in Stanislaus County's 2017 Local Hazard Mitigation Plan (LHMP) process. However, the City of Ceres did participate in a 2010-2011 MJHMP process with the County. This 2010 MJHMP was approved by Stanislaus County on May 24, 2011. The City of Ceres adopted the 2010 MJHMP and the 2011 City of Ceres LHMP Annex on June 27, 2011. However, the City elected not to include or report progress on any of the mitigation actions from the outdated and expired version of the MJHMP or Annex (a requirement only for plan updates following the release of FEMA's October 1, 2011 Local Mitigation Plan Review Guide). This Annex instead effectively represents a new plan for Ceres based on current development, demographics, and mitigation capabilities that addresses the City's current hazards and vulnerabilities.

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

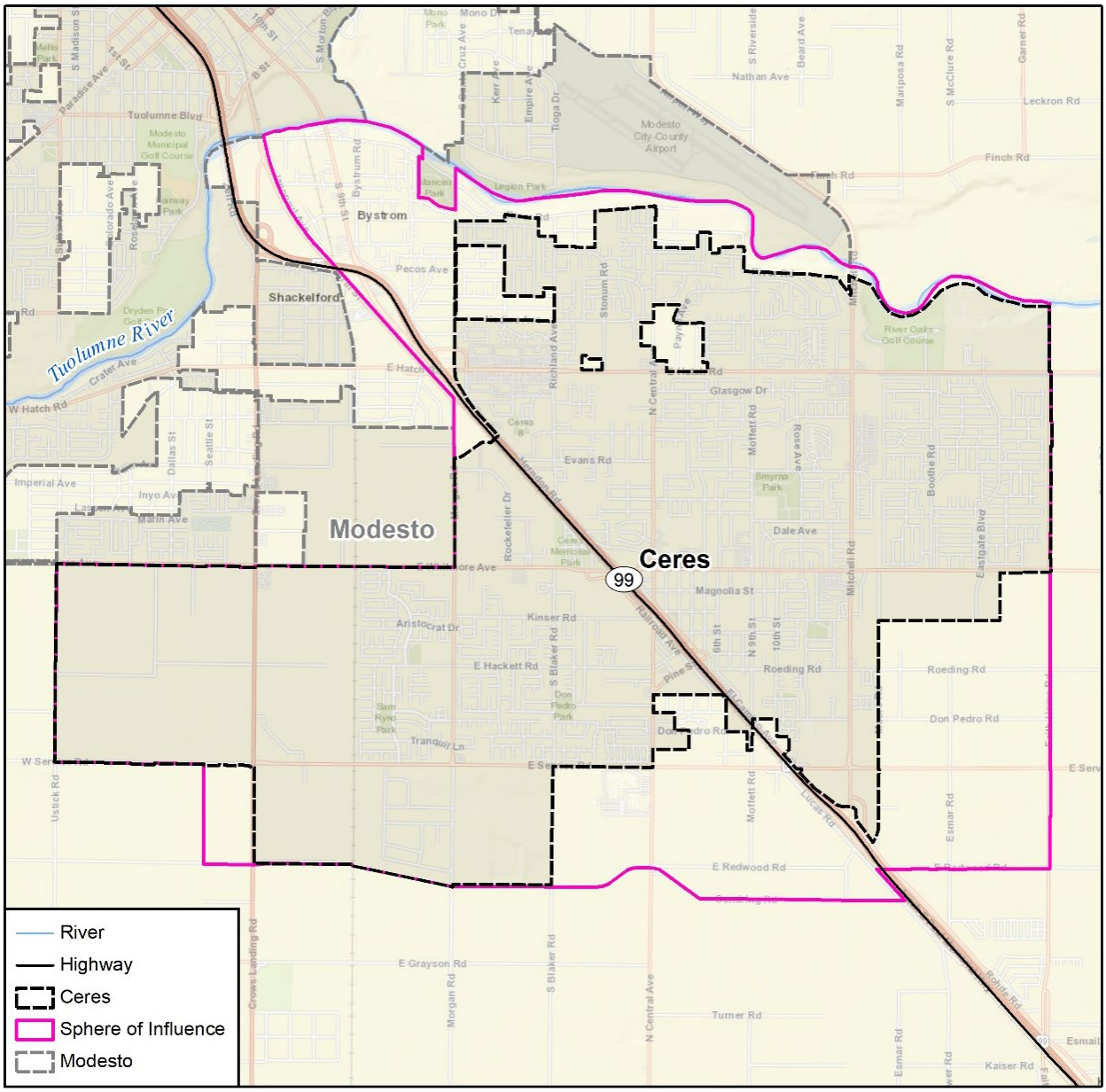
1.2.2 Geography and Climate

The City of Ceres is located in the central San Joaquin Valley, 80 miles south of Sacramento and 95 miles east of San Francisco, in the heart of Stanislaus County. The City is located to the east of the City of Modesto and south of the Tuolumne River. State Route (SR) 99 traverses the center of the City in a southeast to northwest direction and the Modesto Airport is located north of the City across the Tuolumne River. The formation of alluvial fans across the San Joaquin Valley has resulted in flat terrain and geography in the City.

The City receives an average annual precipitation of 12.21 inches and receives most of this precipitation from November through March (WRCC 2022). The City experiences its average monthly highest temperature in July (94.3 °F), and its monthly lowest temperature in January (53.8 °F). Similar to the rest of Stanislaus County, the City of Ceres has a mild Mediterranean climate.

Ceres is in one of the Central Valley's richest and most diverse agricultural areas and is the home of the new $14 million County Agriculture Center. Figure 1-1 below shows the city limits and Sphere of Influence (SOI) boundary for the City of Ceres. The City limits, or the area where the City has authority to make land-use decisions, is the City's planning area, and consists of approximately 5,120 acres, or 8.0 square miles.

Figure 1-1 City of Ceres



1.2.3 History

The Daniel C. Whitmore family was considered the first family of Ceres and, with two other founders, John Service and Cassius Warner, settled in Ceres in 1867. Mr. Whitmore built the first home in Ceres in 1870. That home still stands, fully restored by the City and the Ceres Historical Society, at 2928 Fifth Street.

The history of the City of Ceres is recounted in Arcadia Publishing Company's Images of America series entitled, "Ceres" by Jeff Benziger. By the early 20th century, an area of approximately a dozen city blocks was developed adjacent to the Southern Pacific Railroad, in what is now known as downtown Ceres. Over the next four decades until the early 1950s, the City Ceres experienced very limited growth, while in comparison, much of Modesto's southeastern neighborhoods were being built. However, in the second

half of the 20th century, Ceres greatly expanded. From the 1950s to the 1980s, the Ceres city limits stretched up to the Tuolumne River and east to Mitchell Road. This growth occurred almost entirely on the east side of SR 99. Over the next 30 years, the land area of the City roughly doubled with the annexation of the Eastgate Community and large areas of land west of SR 99, including the West Landing Specific Plan area. Unlike the City's midcentury growth, the expansion of city limits between 1987 and 2016 was concentrated in areas west of SR 99, rather than east of SR 99, with the exception of Eastgate on the City's east side.

1.2.4 Economy

According to the City of Ceres Economic Development Department, economic development can be defined as "a sustained community effort to improve both the local economy and the quality of life by building the area's capacity to adapt to economic change." Ceres is committed to improving the local economy and enhancing the quality of life for its citizens and visitors. While economic development can involve job and income growth, it also involves sustainable increases in the productivity of individuals, businesses and resources to increase the overall well-being of residents and maintain or enhance their quality of life. The focus also includes business attraction, business retention and expansion, and workforce development.

In early 2020, the City completed the initial phase of a Comprehensive Retail Recruitment and Development Plan. Through this plan, the City identified new details regarding Ceres' Primary Retail Trade Area and its socio-economic demographics, along with its retail opportunities through a detailed retail gap analysis. The City also identified development and redevelopment opportunities throughout the vibrant and growing community.

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

Table 1-1 City of Ceres Economic Characteristics, 2015-2019

Characteristic	City of Ceres
Families below Poverty Level (%)	13.4%
All People below Poverty Level (%)	15.1%
Median Family Income	$60,503
Median Household Income	$58,667
Per Capita Income	$19,913
Population in Labor Force	61.7%
Population Employed*	54.3%
Unemployment Rate**	11.9%

Source: U.S. Census Bureau, California Department of Finance, 2015-2019 American Community Survey (ACS), 5-year estimates, www.census.gov/
*Excludes armed forces. **Does not reflect unemployment numbers due to COVID-19 Pandemic

The most common industries within a five-mile radius of Ceres are educational services and health care (a combined average of 18 percent of workers). Manufacturing and retail trade industries are another two major industries, which resonates with the information regarding manufacturing being one of Stanislaus County's major industries in Chapter 2 Community Profile of the Base Plan. The tables below show the labor force breakdown by occupations and industry based on estimates from the 2015-2019 five-year American Community Survey (ACS).

Table 1-2 City of Ceres Employment by Industry, 2015-2019

Occupation	# Employed	% Employed
Educational services, and health care and social assistance	3,503	18%
Manufacturing	2,924	15%
Retail trade	2,503	13%
Construction	1,801	9%

Occupation	# Employed	% Employed
Transportation and warehousing, and utilities	1,761	9%
Professional, scientific, and management, and administrative and waste management services	1,641	9%
Arts, entertainment, and recreation, and accommodation and food services	1,559	8%
Other services, except public administration	937	5%
Agriculture, forestry, fishing and hunting, and mining	749	4%
Wholesale trade	543	3%
Finance and insurance, and real estate and rental and leasing	472	2%
Public administration	439	2%
Information	182	1%
Total	**19,014**	**100%**

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

Table 1-3 City of Ceres Employment by Occupation, 2015-2019

Occupation	# Employed	% Employed
Management, business, science, and arts occupations	4,012	21.1%
Service occupations	3,442	18.1%
Sales and office occupations	3,670	19.3%
Natural resources, construction, and maintenance occupations	2,985	15.7%
Production, transportation, and material moving occupations	4,906	25.8%
Total	**19,014**	**100%**

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

1.2.5 Population

In May 2021, the California Department of Finance (DOF) released population data for the state demographic report, According to the report the City of Ceres has a population of 48,901 persons as of January 1, 2021, and gained 15 residents from the previous year, leaving the population statically the same. Select demographic and social characteristics for the City of Ceres from the 2015-2019 ACS and the California DOF, are shown in Table 1-4.

Table 1-4 City of Ceres Demographic and Social Characteristics, 2015-2019

Characteristic	City of Ceres
Gender/Age	
Male	50.6%
Female	49.4%
Median age (years)	30.2
Under 5 years	7.6%
Under 18 years	30.9%
65 years and over	9.6%
Race/Ethnicity	
White	24.4%

Characteristic	City of Ceres
Asian	6.7%
Black or African American	3.7%
American Indian/Alaska Native	0.7%
Hispanic or Latino (of any race)	61.4%
Native Hawaiian and Other Pacific Islander	0.5%
Some other race	0.3%
Two or more races	2.3%
Education*	
% High school graduate or higher	73.5%
% with Bachelor's Degree or Higher	10.2%
Social Vulnerability	
% with Disability	12.5%
% Language other than English spoken at home	56.9%
% Speak English less than "Very Well"	22.6%
% of households with a computer	91.3%
% of households with an Internet subscription	85.5%
% of households with no vehicle available	5.2%

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

The following table with information from the ACS 5-year estimates (2015-2019) is related to housing occupancy in the City of Ceres

Table 1-5 City of Ceres Housing Occupancy and Units, 2015-2019

Housing Characteristic	Estimate	Percentage
Housing Occupancy		
Total Housing Units	13,393	100%
Units Occupied	12,975	96.9%
Vacant	418	3.1%
Housing Units		
1-unit detached	10,639	79.4%
1-unit attached	428	3.2%
2 units	145	1.1%
3 or 4 units	381	2.8%
5-9 units	440	3.3%
10-19 units	0	0%
20 or more units	591	4.4%
Mobile Home	467	3.5%
Boat, RV, van etc.	80	0.6%
Housing Tenure		
Owner Occupied	7,945	61.2%
Renter Occupied	5,030	38.8%

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

1.2.6 Disadvantaged Communities

A total of 38,906 people are potentially exposed to hazards in the City of Ceres. Among this population, those who reside in disadvantaged communities are more socially vulnerable to hazards. There are three census tracts in the northwestern, northeastern and southeastern portions of the City of Ceres that have higher housing burdens (6099002604, 6099002605 and 6099002602). Based on information from the California Office of Environmental Health Hazard Assessment (OEHHA) CalEnviroScreen tool, approximately 29%, 25% and 24% of the people residing within these census tracts respectively are housing burdened low-income households. Housing-burdened low-income households are households that are both low income and highly burdened by housing costs. California has very high housing costs relative to the rest of the country, which can make it hard for households to afford housing ("CalEnviroScreen 4.0" 2021). Households with lower incomes may spend a larger proportion of their income on housing and may suffer from housing-induced poverty ("CalEnviroScreen 4.0" 2021). These households are also more likely to be adversely affected during a hazard event and less likely to recover. In other words, in Ceres, there are approximately 4,425 housing units in the census tracts in the northwestern, northeastern, and southeastern portions of the City, and about 2,190 of them are considered low income and 1,080 are considered housing burdened.

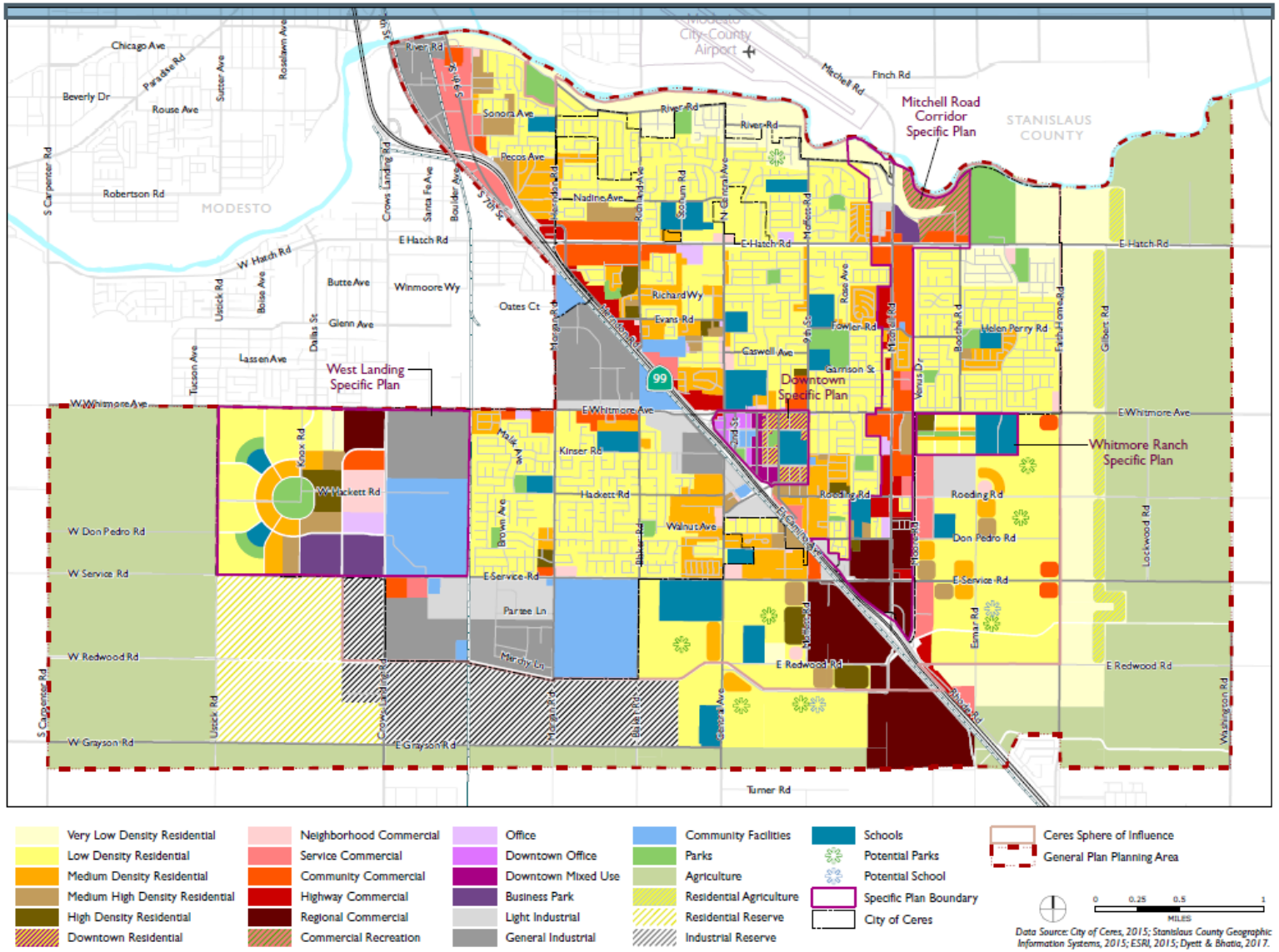
The OEHHA CalEnviroScreen tool applies a formula to generate a combined ranking score that considers 21 indicators for each census tract that cover pollution indicators, such as diesel emissions and concentrations of toxic clean-up sites and population indicators, such as poverty and unemployment rates. The census tracts with CalEnviroScreen rankings between 75 and 100 percent (i.e., a combined score in the top 25 percent of all census tracts in the State) are considered to be disadvantaged communities (DACs). The census tracts in the City of Ceres with higher housing burdens have CalEnviroScreen rankings of 88, 80 and 78, meaning the percent of housing burdened is higher than 88%, 80% and 78% of the rest of California, respectively. The City can use this 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.

1.2.7 Development Trends

Ceres is a family-friendly City in California's Central Valley. Its history and identity as a center for agriculture are closely related to the landscape. As the City has changed over time, its population has grown, and the demographics of the City have shifted. According to the General Plan 2035, the vision for the community is to have a continued connection to its agricultural heritage, a balance of housing and retail choices, ample job opportunities, an attractive Downtown, rich cultural and community events, and an abundance of recreational opportunities. In addition, underutilized, vacant, and rural parcels greater than 8,000 square feet were identified as opportunity sites during the General Plan process. Ceres has a relatively compact form that helps relieve development pressure on farmland and creates opportunities for walkable neighborhoods not present in many small towns and even some larger cities in California. The goals and policies of the General Plan aim to continue this development pattern by promoting infill development and compact, sustainable growth. One of the locations in which to focus infill development and investment is downtown Ceres. While Ceres has numerous centers of activity, the City lacks a clear community focus point. In addition, recent State legislation proposes to locate a new Altamont Corridor Express (ACE train) stop in Ceres, which the City is planning to locate adjacent to downtown, west of SR 99. The location of the ACE train in Ceres will open up new access for Ceres residents to job centers in larger cities in the San Joaquin Valley and the Bay Area. In addition, the location of the stop in downtown Ceres will provide the potential for transit-oriented development to revitalize the area.

Figure 1-2 below is the Land Use Diagram included in the General Plan 2035.

Figure 1-2 City of Ceres, Land Use Diagram, General Plan 2035



Source: Ceres General Plan 2035

Table 1-6 below demonstrates the density and intensity standards and acreage totals for the 2035 General Plan land use designations.

Table 1-6 Density and Intensity Standards for General Plan Land Use Designations

General Plan Land Use Designations	Residential Density (gross dwelling units/acre)	Maximum Non-Residential Intensity (FAR)	Acres	Percent of Planning Area
Residential			**4,883**	**34%**
Residential Agriculture	0.2 – 0.5	-	123	0.9%
Very Low Density	Up to 4.5	-	919	6.4%
Low Density	Up to 7.0	-	2,964	20.7%
Medium Density	7.0 – 12.0	-	557	3.8%
Medium High Density	12.0 – 20.0	-	187	1.3%
Downtown Residential	10 – 30.0	-	27	0.2%
High Density	20.0 – 30.0	-	104	0.7%
Mixed Use			**146**	**1.0%**
Neighborhood Commercial	12.0 – 25.0	0.8	77	0.5%
Downtown Office	5.0 – 25.0	1.0	11	0.1%
Office	5.0 – 25.0	1.0	45	0.3%
Downtown Mixed Use	10.0 – 40.0	3.0	13	0.1%
Commercial			**979**	**6.8%**
Community Commercial	-	0.5	284	2.0%
Highway Commercial	-	0.5	102	0.7%
Regional Commercial	-	0.5; 3.0 in select cases	427	3.0%
Service Commercial	-	0.5	166	1.2%
Industrial			**858**	**6.0%**
General Industrial	-	0.65	538	3.7%
Business Park	-	0.3	96	0.6%
Light Industrial	-	0.5	234	1.6%
Other			**7,501**	**52.2%**
Commercial Recreation	-	0.2	55	0.4%
Community Facilities	-	-	439	3.1%
Schools	-	-	358	2.5%
Parks	-	-	246	1.7%
Residential Reserve	-	-	507	3.5%
Industrial Reserve	-	-	585	4.1%
Agriculture	-	-	3,514	24.4%
Transportation/Right of Way/Other	-	-	1,797	12.5%
Total Acres Within Planning Area			**14,357**	**100.0%**

Source: Ceres General Plan 2035

Table 1-7 shows the potential buildout of the General Plan in terms of new development, residents, and jobs. The

	2015 (Existing)	2035 (New)	Total
Population	**55,000**	24,000	**79,000**
Jobs	10,000	20,800	30,800
Households	15,400	6,900	22,200

General Plan could accommodate approximately 24,000 new residents, 20,800 new jobs, and 6,900 new households (including the City of Ceres, its SOI, adjacent unincorporated areas, and Mancini Park in the City of Modesto) by 2035. It is expected that much of this growth will occur in the West Landing Specific Plan area and the southeast portion of the City, while most of the existing residential neighborhoods will experience less growth and change.

Table 1-7 City of Ceres Potential Planning Area Buildout by 2035

	2015 (Existing)	2035 (New)	Total
Population	**55,000**	24,000	**79,000**
Jobs	10,000	20,800	30,800
Households	15,400	6,900	22,200

Source: Ceres General Plan 2035

Moreover, the City's LPT noted that a major area of expected development is south of Service Road between Blaker Road, Highway 99, and the Turlock Irrigation District (TID) lateral. There is a pending master-planned community in this area. At full build-out, the area could increase the Ceres population by 5,000 to 11,000 people, depending on the specific densities developed throughout the area. These densities are in alignment with the existing General Plan designations and are included in the estimates shown in Table 1-7 above.

1.2.8 Future Development

The areas located in the SOI shown in Figure 1-1 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. Table 1-8 is the summary of the SOI total exposure for the City of Ceres.

Table 1-8 Sphere of Influence Total Exposure Summary

Property Type	Improved Parcel Count	Improved Value	Estimated Content Value	Total Value
Commercial	77	$23,183,460	$23,183,460	$46,366,920
Industrial	66	$35,815,114	$53,722,671	$89,537,785
Non-Assessable	4	$2,670,048	$2,670,048	$5,340,096
Residential	1,564	$162,378,283	$81,189,142	$243,567,425
Residential-Income	74	$9,577,022	$4,788,511	$14,365,533
Rural, Farm, Agricultural	103	$19,706,702	$19,706,702	$39,413,404
Unclassified	70	$15,211,901	$15,211,901	$30,423,802
Vacant Commercial	15	$164,487	$164,487	$328,974
Vacant Residential	1	$3,279	$1,640	$4,919
Total	**1,974**	**$268,710,296**	**$200,638,561**	**$469,348,857**

Source: Stanislaus County Assessor, Wood analysis

2 HAZARD IDENTIFICATION AND SUMMARY

The City of Ceres 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 2-1). There are no hazards that are unique to Ceres, 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 Ceres' hazards where different from the County and assess the City's unique vulnerabilities.

The hazards profiled in the County MJHMP Base Plan discuss the overall impacts to the County's planning area. This information is summarized in the hazard description, geographic extent, magnitude/severity, previous occurrences, and probability of future occurrences. The information in the City of Ceres' 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 2-1 summarizes the hazards profiled in the County's planning area and risk assessment to provide a way for the LPT to evaluate which hazards are addressed in their General Plan Safety Element and which hazards are relevant and priority hazards for the City. The City's General Plan Safety Element addressed climate change, seismic and geologic hazards (including earthquake), flood hazards (including dam inundation), and fire hazards as well as hazardous materials and operations. Among the hazards addressed in the City's General Plan Safety Element, dam inundation, flood hazards, landslide, and wildfire hazards are further addressed in this Annex while earthquake is addressed in the Base Plan. Climate change considerations are also addressed in the Base Plan.

Table 2-1 City of Ceres —Hazard Profiles

Hazard	Geographic Area	Probability of Future Occurrence	Magnitude/Severity (Extent)	Overall Significance	Priority Hazard?
Agriculture Pest and Disease	Extensive	Likely	Negligible	Low	No
Aquatic Invasive Species	Limited	Likely	Negligible	Low	No
Cyber Attack	Significant	Likely	NA	Medium	No
Dam Incidents	Extensive	Unlikely	Catastrophic	High	Yes
Drought	Extensive	Likely	Critical	High	Yes
Earthquake	Extensive	Occasional	Critical	Medium	No
Extreme Heat	Extensive	Highly Likely	Critical	Medium	No
Flood	Limited	Likely	Negligible	Low	No
Landslide, Mud/Debris Flow, Rockfall	Limited	Occasional	Negligible	Low	No
Pandemic/Epidemic	Extensive	Occasional	Critical	High	No
Severe Weather: Dense Fog	Extensive	Likely	Critical	Medium	No
Severe Weather: Hail, Heavy Rain, Thunderstorms, Lightning	Extensive	Highly Likely	Critical	High	No
Severe Weather: High Wind/Tornado	Extensive	Highly Likely	Critical	High	No
Wildfire	Limited	Occasional	Negligible	Low	No

Geographic Area
Limited: Less than 10% of planning area
Significant: 10-50% of planning area
Extensive: 50-100% of planning area

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.

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

Significance

Hazard	Geographic Area	Probability of Future Occurrence	Magnitude/Severity (Extent)	Overall Significance	Priority Hazard?
Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact			

2.1 Vulnerability Assessment

The intent of this section is to assess Ceres' 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 2021 update. A Data Collection Guide and associated worksheets were distributed to each participating municipality or special district to complete during the update process in 2021. 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 of Ceres' LPT input from the Data Collection 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 2-1 above reflect the hazards that could potentially affect City. The discussion of vulnerability for each of the following hazards is located in Section 2.3 Estimating Potential Losses, which includes and 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 Ceres are identified below.

- Dam Incidents
- Drought

Cyber Attack, Earthquake, Extreme Heat, Pandemic/Epidemic, and Severe Weather hazards were ranked significant hazards but are not addressed further in this vulnerability assessment as the risk and exposure are similar to the overall County risk and exposure, and the potential for losses are difficult to quantify specific to the City of Ceres. Additionally, hazards assigned a significance rating of Low and which do not differ significantly from the County ranking (e.g., Low vs. High) are not addressed further and are not assessed individually for specific vulnerabilities in this Annex. In the City of Ceres, those hazards include Agriculture Pests and Disease, Aquatic Invasive Species, Flood, Landslide (Mud/Debris Flow, Rockfall), and Wildfire. The exception is that flood, landslide, and wildfire hazards are mapped for public awareness and planning purposes, but because the City has limited vulnerability to these three hazards, specific vulnerabilities were not evaluated.

2.2 Assets

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

2.2.1 Property Exposure

The following data on property exposure is derived from the Stanislaus County 2021 Parcel and Assessor data. This data should only be used as a guideline to overall values in the City as the information has some limitations. It is also important to note that in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss and is not included in the values below. Table 2-2 shows the exposure of properties (e.g., the values at risk) broken down by property type for the City of Ceres.

Table 2-2 City of Ceres Property Exposure by Type

Property Type	Improved Parcel Count	Improved Value	Estimated Content Value	Total Value
Commercial	295	$274,772,405	$274,772,405	$549,544,810
Industrial	207	$249,762,103	$374,643,155	$624,405,258
Non-Assessable	5	$938,099	$938,099	$1,876,198
Residential	10,555	$1,721,767,451	$860,883,726	$2,582,651,177
Residential-Income	75	$29,383,391	$14,691,696	$44,075,087
Rural, Farm, Agricultural	16	$1,426,848	$1,426,848	$2,853,696
Unclassified	272	$230,204,065	$230,204,065	$460,408,130
Vacant Commercial	34	$2,726,199	$2,726,199	$5,452,398
Vacant Residential	3	$504,914	$252,457	$757,371
Total	**11,462**	**$2,511,485,475**	**$1,760,538,649**	**$4,272,024,124**

Source: Stanislaus County Assessor, Wood analysis

2.2.2 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 2-3 shows a summary of the critical facilities within the City of Ceres. Critical facilities and other community assets as important to protect in the event of a disaster.

Table 2-3 Critical Facilities within the City of Ceres

Lifeline	# of Critical Facilities
Communication	17
Energy	4
Food, Water, Shelter	2
Hazardous Materials	1
Health and Medical	9
Safety and Security	14
Transportation	14
Total	**61**

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

- Ceres Emergency Services
- Ceres Police Department building
- 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

2.2.3 Historic, Cultural and Natural Resources

The following historical resources are located in the City of Ceres:

Table 2-4 Historical Resources within the City of Ceres

Property Name	Register	Jurisdiction	Date Listed
Whitemore Daniel House	National	Ceres	4/5/1989

Source: National Registry of Historic Preservation

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. 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 California Natural Diversity Database (CNDDB) lists five special-status species that have been known to occur within and around the Planning Area, some of which are listed as Threatened by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, including Swainson's hawk and Steelhead trout. 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.

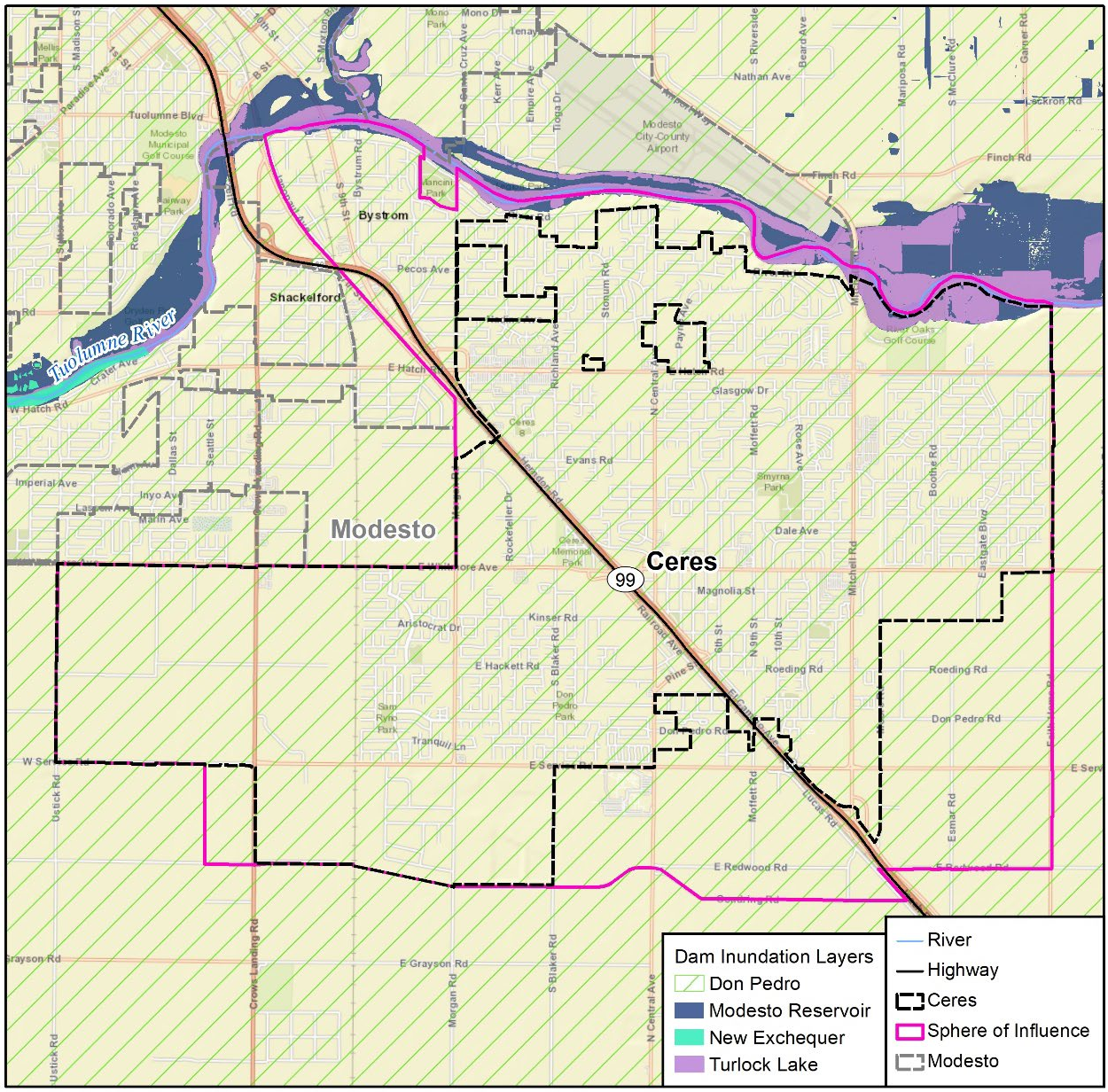
2.3 Estimating Potential Losses

2.3.1 Dam Incidents

Protection from flood hazards created by dam failures is critical to the safety and well-being of Ceres residents. A dam vulnerability assessment was completed during the 2021 update, following the methodology described in Section 4 of the Base Plan. Dam inundation areas from the Don Pedro, Modesto Reservoir and Turlock Lake that impact the City of Ceres are shown in Figure 2-1.

Table 2-5 summarizes the values at risk within Don Pedro Dam's inundation area. Don Pedro, Modesto Reservoir and Turlock Lake dams are all rated as high hazard. Don Pedro and Modesto Reservoir dams are also rated as Extremely High by the California Department of Water Resources (DWR), Division of Safety of Dams (DSOD). Extremely High rated dams are expected to cause considerable loss of human life or result in an inundation area with a population of 1,000 or more. All areas within City Limits and SOI are vulnerable to dam incidents. The City would experience catastrophic damage if Don Pedro dam were to breach. A total of 61 critical facilities are located within dam inundation areas.

Figure 2-1 City of Ceres Potential Dam Inundation Areas



wood.

Map compiled 2/2022;
Intended for planning purposes only.
Data Source: Stanislaus County,
Department of Water Resources,
Division of Safety of Dams (DSOD)

0 0.5 1 Miles

N

Table 2-5 Don Pedro Dam Inundation

Property Type	Improved Parcel Count	Population
Commercial	295	
Industrial	207	
Non-Assessable	5	
Residential	10,555	38,631
Residential-Income	75	275
Rural, Farm, Agricultural	16	
Unclassified	272	
Vacant Commercial	34	
Vacant Residential	3	
Total	**11,462**	**38,906**

Source: California DSOD, National Inventory of Dams, Stanislaus County Assessor's Office

Future Development

The results of the SOI and dam analysis are shown in Table 2-6.

Table 2-6 Sphere of Influence Areas Exposed to Don Pedro Inundation

Property Type	Improved Parcel Count	Population
Commercial	77	
Industrial	66	
Non-Assessable	4	
Residential	1,564	5,724
Residential-Income	74	271
Rural, Farm, Agricultural	103	
Unclassified	70	
Vacant Commercial	15	
Vacant Residential	1	
Total	**1,974**	**5,995**

Source: Stanislaus County Assessor, Wood analysis

2.3.2 Drought

The City's Utilities Department and Engineering Division provide water supply production, treatment, and distribution to approximately 48,430 residents through approximately 11,755 residential, commercial, industrial, and institutional service connections (City of Ceres 2020). The water supply distribution consists of 154 miles of water lines, including plans for the expansion of surface water distribution. The water supply distribution system also consists of two at-grade reservoirs with a combined storage capacity of 3.8 million gallons, one booster pump station, and 13 groundwater wells (City of Ceres 2011). The City's water supply is sourced solely from groundwater from the Turlock Groundwater Subbasin with plans to diversify the surface water supply in the future (City of Ceres 2020). The City is also part of the West Turlock Subbasin Groundwater Sustainability Agency (GSA). Other cities in the West Turlock Subbasin GSA include the cities of Hughson, Modesto, Turlock, and Waterford and various smaller water districts, Stanislaus County, Merced County, and the Turlock Irrigation District (TID).

The City is susceptible to drought and related climate change considerations. As the City grows and the demand for water increases, water demands in the City will be impacted by hotter days and a longer irrigation season, which will increase the City's landscaping and irrigation water needs. The reduced snowpack and shifting spring runoff to earlier in the season will also result in increased algal blooms in the region that can impact the City's water supply, particularly any future surface water sources. The City of Ceres already encourages the community to do their part to conserve the region's groundwater water supplies.

The City makes efforts to efficiently utilize its produced water supply through demand management measures, the implementation of conservation measures, and participation in the region's sustainable management of the groundwater basin (City of Ceres 2020). The City developed a free Water Meter Portal that allows residents to monitor their water usage, receive leak notifications, and view monthly water targets. The City also offers homeowners rebates for installing efficient appliances, such as ultra-low flow toilets, high-efficiency washing machines, energy-efficient dishwashers, and smart irrigation controllers for irrigation systems that contain Water Sense labeled irrigation controllers. The City also distributes free water conservation devices such as toilet tank banks, shower timers, and water-efficient hose nozzles. In addition, the City began the implementation of its residential water survey program in 2015. The program was developed by City staff to allow for an increased water allotment for usage targets and to gauge how efficient residents are with managing their water use. Customers and residents can identify areas of potential improvement, as well as identify potential leaks.

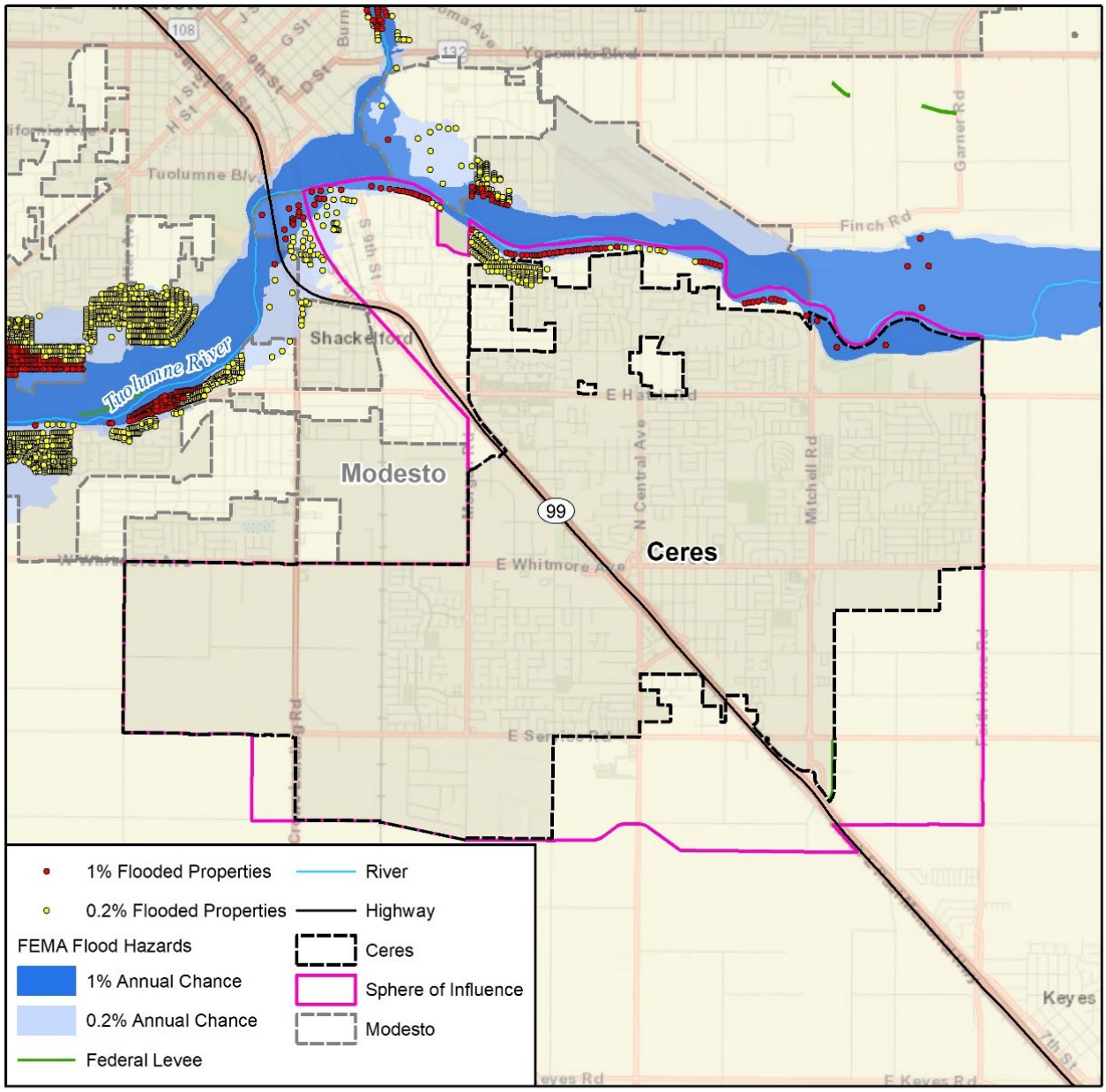
Furthermore, the City implements a Water Conservation Plan and Water Shortage Contingency Plan, which is part of their 2020 Urban Water Management Plan (UWMP) (City of Ceres 2020). Both plans provide a guide for the City to assess water supply availability and mitigate water supply shortages to maintain public health and safety. As noted in the 2020 Water Shortage Contingency Plan, it is estimated that the reliability of the City's water supply is sufficient to meet long-term and near-term demands based on positive impacts from State requirements for sustainable groundwater management and the addition of a surface water supply source starting in 2025 (City of Ceres 2020). In addition, the City has partnered at the local and state level to diversify the City's water supply portfolio to significantly increase reliability benefits while reducing the City's reliance on groundwater. The City has also partnered with the City of Turlock to form the Stanislaus Regional Water Authority (SRWA) to develop a future water supply plan/project from TID – the SRWA Regional Surface Water Supply Project. This project will be completed in 2023, which will supply drinking water to the cities of Ceres and Turlock. The amount of water delivered to the City is projected to be 15 million gallons per day at buildout (the year 2035) (City of Ceres 2020).

In summary, the City has staff and resources to better manage water resources and decrease the demand on the Turlock Groundwater Subbasin. The City also has already taken steps to conserve water and diversify its water supply portfolio. The City may benefit from developing alternative backup supplies through additional surface water storage facilities to mitigate impacts during drought events in the future. As such, various projects and policy initiatives are proposed to further develop a balanced water portfolio and 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.

2.3.3 Flood

As shown in Figure 2-2 and Figure 2-3, only a small portion along the City's northern boundary and Tuolumne River falls within floodplains. Based on Figure 2-4, the majority of the City's critical facilities are outside floodplains. Therefore, flood hazard is rated low for the City and included in this analysis for public awareness and planning purposes only.

Figure 2-2 City of Ceres FEMA 1% & 0.2% Annual Chance Floodplains



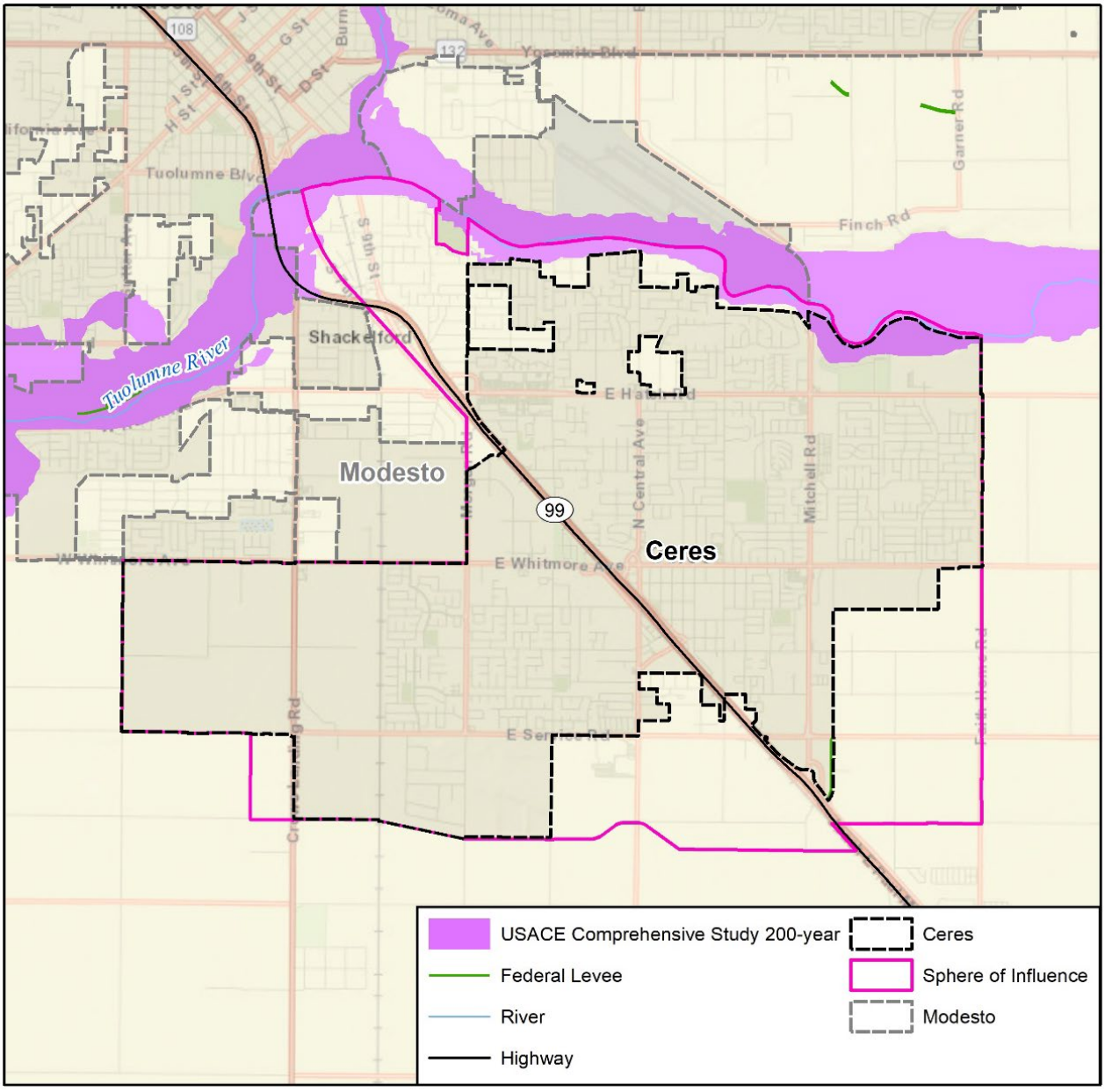
wood.

Map compiled 2/2022;
Intended for planning purposes only.
Data Source: Stanislaus County,
FEMA NFHL 8/24/2021

0 0.75 1.5 Miles

N

Figure 2-3 City of Ceres DWR Awareness 100-Year & USACE Comprehensive Study 200-Year Floodplains

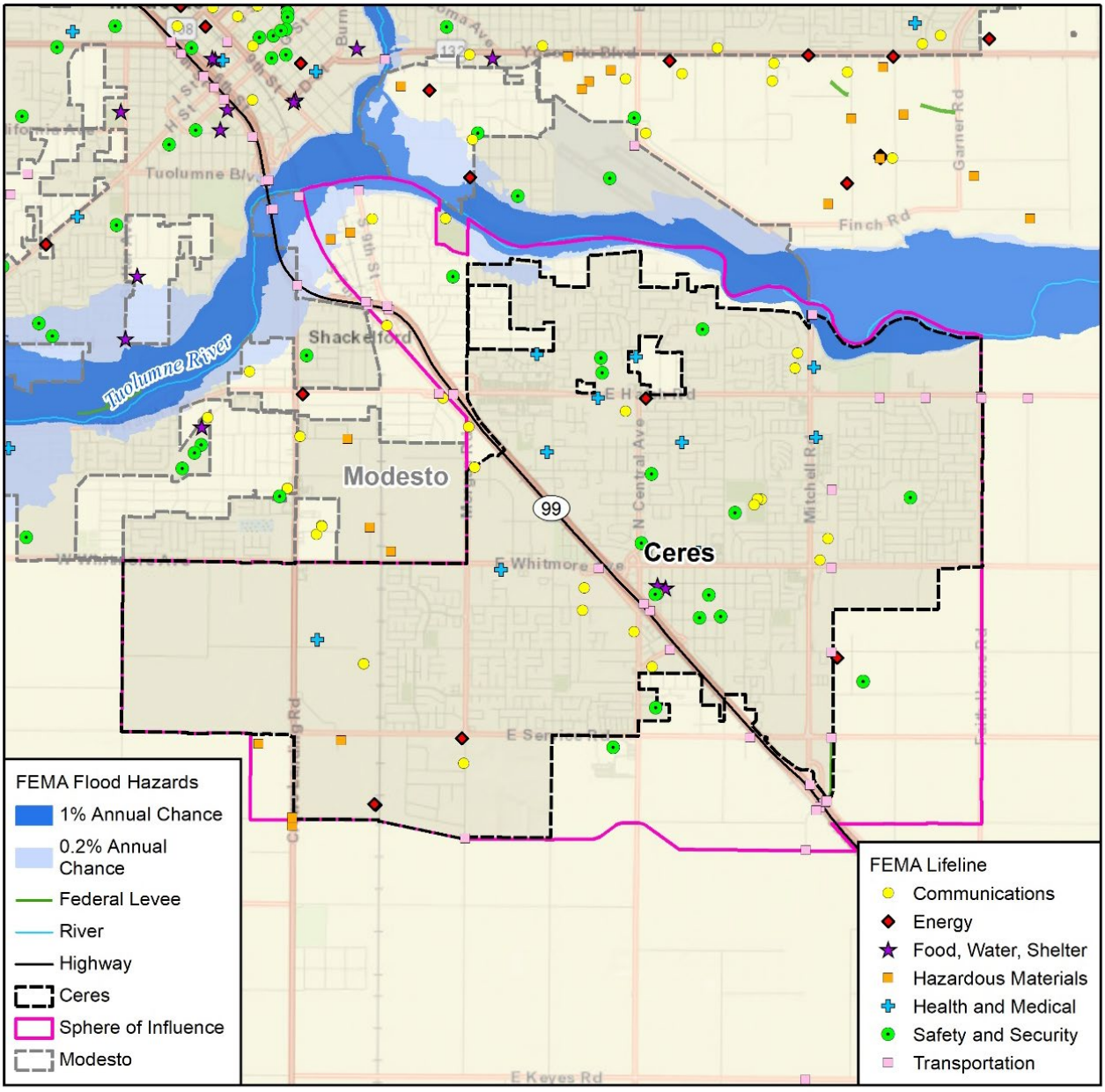


Map compiled 2/2022;
Intended for planning purposes only.
Data Source: Stanislaus County, USACE

0 0.75 1.5 Miles

N

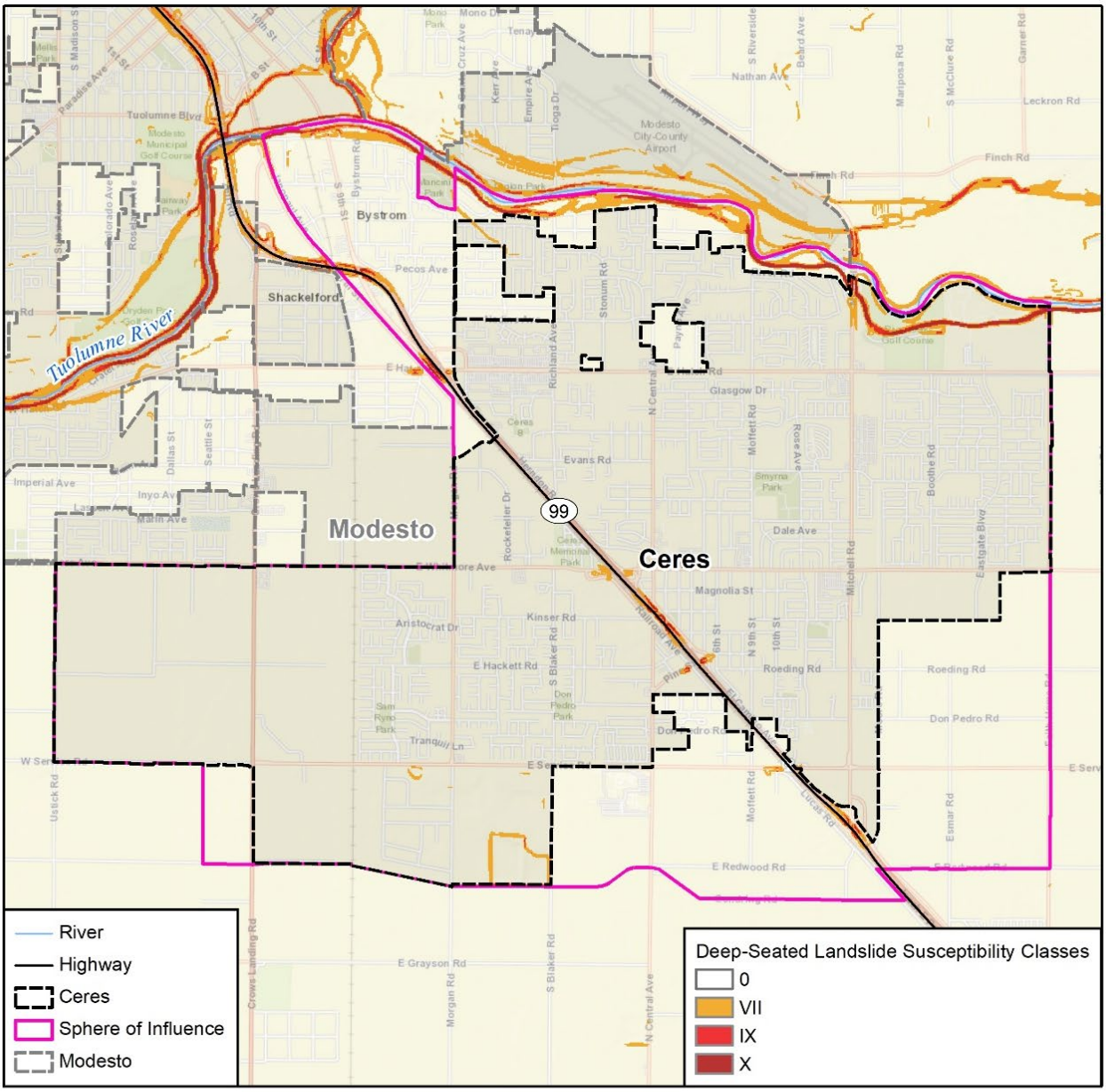
Figure 2-4 Critical Facilities at Risk of FEMA 1% & 0.2% Annual Flood Hazard



2.3.4 Landslide

As shown in Figure 2-5, only a small portion along the City's northern boundary and Tuolumne River, together with small segments along Highway 99 in the City are susceptible to deep-seated landslide hazard. Therefore, landslide hazard is rated low for the City and included in this analysis for public awareness and planning purposes only.

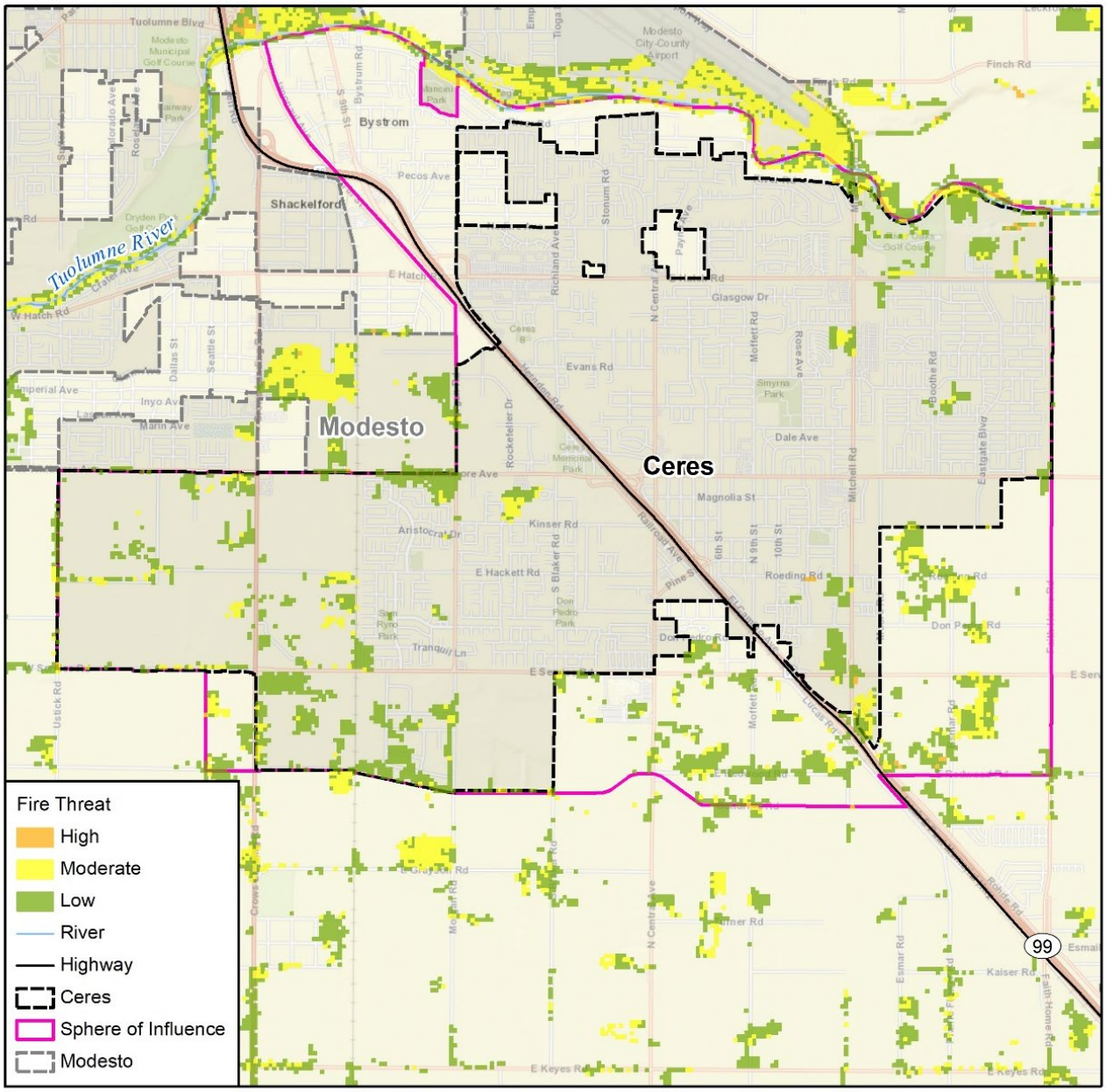
Figure 2-5 City of Ceres Deep-Seated Landslide Susceptibility



2.3.5 Wildfire

As shown in Figure 2-6, there only smaller areas within the City limits that have moderate or low wildfire threat. No area in the City has high fire threat. Therefore, wildfire is rated as low for the City and included in this analysis for public awareness and planning purposes only.

Figure 2-6 City of Ceres Wildfire Threat Areas



Map compiled 2/2022;
Intended for planning purposes only.
Data Source: Stanislaus County, CALFIRE, FRAP

3 CAPABILITY ASSESSMENT

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts. To develop this capability assessment, the jurisdictional planning representatives reviewed a matrix of common mitigation activities to inventory which of these policies or programs and shared any updates or changes through the Ceres Data Collection 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 Wood 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 Ceres's capabilities are summarized below.

3.1 Regulatory Capability

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

Table 3-1 City of Ceres —Regulatory and Planning Capabilities

Regulatory Tool (ordinances, codes, plans)	Yes/No	Comments
General Plan	Yes	Adopted May 14, 2018
Zoning ordinance	Yes	Title 18
Subdivision ordinance	Yes	Title 17
Growth management ordinance	No	
Floodplain ordinance	Yes	Chapter 40 - Floodplain Management and Flood Hazard Identification Regulations
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	Chapter 20 - Storm Water Management and Discharge Control
Building code	Yes	Chapter 02 - Building Code
Fire department ISO rating	Yes	Rating: 3
Erosion or sediment control program	No	
Stormwater management program	Yes	Yes: Stormwater Management is under the City's engineering division
Site plan review requirements	Yes	Chapter 17.12 – Zoning Ordinance, Administration and General Conditions
Capital improvements plan	No	
Economic development plan	Yes	City of Ceres Economic Development Strategic Plan, 2013 – 2020
Local emergency operations plan	No	
Other special plans	No	
Flood insurance study or other engineering study for streams	Yes	Included in the County's FIS, which was revised on August 24, 2021
Elevation certificates (for floodplain development)	Yes	Floodplain development was mentioned in Chapter 40 - Floodplain Management and Flood Hazard Identification Regulations
Other		

Ceres General Plan 2035 (2018)

The General Plan governs all City actions relating to Ceres' physical development. The Ceres General Plan is a document adopted by the City Council that serves to outline a vision for Ceres' long-term

physical and economic development and community enhancement and to provide strategies and specific implementing actions that will allow this vision to be accomplished. The Plan also establishes a basis for judging whether specific development proposals and public projects are consistent with General Plan policies and standards (such as for development density, parks, and mobility). Moreover, the General Plan provides the basis for establishing priorities for implementing plans and programs, such as the Zoning Ordinance, the Capital Improvements Program (CIP), facilities plans, and specific and area plans.

The City of Ceres Health & Safety Element does not reference incorporation of the 2017 LHMP. Integration of the 2017 LHMP was not noted in any of the other City planning mechanisms.

Ceres Economic Development Plan 2013 – 2020 (2013)

The objective of the Ceres Economic Development Strategic Plan ("CEDSP") process was to define appropriate, realistic and implementable strategic initiatives and actions that will help the City of Ceres "step up to the next level" and achieve meaningful economic development goals and objectives. The CEDSP assesses Ceres' economic outlook through its workforce characteristics, traded industry cluster networks, fiscal capacity to engage in economic development activities, and existing backbone infrastructure to serve the City's economic development needs. The CEDSP provides examples of effective economic development tools that could benefit the City in conducting economic development initiatives/programs and recommends one inclusive goal with relevant objectives and examples of workable tactics. This one goal is to implement initiatives that facilitate the retention, expansion and attraction of businesses that will retain and increase employment opportunities and more fully serve the needs of the City's residents. The Ceres City Council intended to have a new or updated strategic plan in early 2021.

Emergency Management Ordinance, Title 2 Chapter 16

The declared purposes of the Emergency Management Ordinance is to provide for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations, and affected private persons. The Ordinance establishes the Disaster Council membership, the Disaster Council powers and duties, which include overseeing the preparedness activities of the various County departments and other jurisdictions in the Stanislaus County operational area, including the preparation of emergency and disaster plans, policies, and procedures, and ensuring unity of purpose. The Ordinance also establishes the Operational Area Council. The Operational Area Council is responsible for coordinating, reviewing, and recommending for approval all emergency or disaster response policies, procedures, plans, and other influencing factors or events that would affect the Stanislaus operational area. The Operation Area Council does not have operational duties or powers during an event or emergency and is created to serve in the preparedness and planning phases only.

California Fire Code Title 15 Chapter 08

The City of Ceres adopts the California Fire Code, part 9 of title 24 California Code of Regulations, 2019 edition, including appendix chapter 4 and appendix B, BB, D, E, F, G, I, K, N, O and division 1 California Administration and division II Administration. The Fire Code regulates the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings. The Code also authorizes the City to issue permits, collect fees, and provides penalties for the violation and each and all of the regulations, provisions, penalties, conditions and terms of the California Fire Code, 2019 edition.

Floodplain Management and Flood Hazard Identification Regulations Title 18 Chapter 40 Chapter

The purpose of the City's Floodplain Management and Flood Hazard Identification Ordinance 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 and Flood Hazard Identification Ordinance is also in place to minimize damage to public facilities and utilities in Special Flood Hazard Areas (SFHAs) and help maintain a stable tax base by providing for the sound development in SFHAs. The Ordinance also ensures 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.

Storm Water Management and Discharge Control Title 13 Chapter 20

The purpose of this chapter is to protect and promote the health, safety and general welfare of the citizens of the City of Ceres by controlling non-stormwater discharges to the stormwater conveyance system from spills, dumping or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable. This chapter also intends to assist in the protection and enhancement of the water quality of watercourses, water bodies and wetlands in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C. sections 1251 et seq.) and any subsequent amendments thereto, by reducing pollutants in storm water discharges to the maximum extent practicable and by prohibiting non-storm water discharges into the storm drain system.

City of Ceres Emergency Response Plan (2021)

This Plan includes system information about the City's water utility. The Plan outlines the resilience strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system. The Plan also contains plans and procedures that can be implemented in the event of a malevolent act or natural hazard that threatens the City's utility's ability to deliver safe drinking water. These plans and procedures include Fire Emergency Response Plan and Earthquake Plan, which relate to the hazards discussed in this Annex and the Base Plan. Furthermore, the Plan includes mitigation actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water. Mitigation actions for flooding, drought, earthquake and weather hazard are all shown and explained. In addition, the Plan contains strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the utility system. Strategies for drought, cyber intrusion, inclement weather and flood are all shown and explained.

3.2 Administrative and Technical Capability

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

Table 3-2 City of Ceres —Personnel Capabilities

Personnel Resources	Yes/No	Department/Position	Comments
Planner/engineer with knowledge of land development/land management practices	Yes	City Planning Division	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	City Building Division	
Planner/engineer/scientist with an understanding of natural hazards	Yes	City Planning Division	
Personnel skilled in GIS	No		
Full time building official	Yes	Chief Building Official	
Floodplain manager	Yes	The City Engineer	
Emergency manager	Yes	City Manager's (Director of Emergency Services)	
Grant writer	Yes	Administration	
Other personnel	Yes	Multiple agencies and departments with support personnel expanding capabilities for mitigation	
GIS Data Resources	No		

Personnel Resources	Yes/No	Department/Position	Comments
(Hazard areas, critical facilities, land use, building footprints, etc.)			
Warning Systems/Services (Reverse 9-11, cable override, outdoor warning signals)	Yes	City of Ceres Alert Center	
Other			

City Council

The City has a City Council/City Manager form of local government. The Mayor is elected at large by the City for a four-year term. Council members are elected by district, by the residents within their respective district, for four-year overlapping terms. The City Council serves as the legislative policy-making body.

City Attorney

The City Attorney is appointed by the City Council to provide legal assistance concerning City operations and procedures and to represent the City in litigation. In addition, the City Attorney provides legal counsel for the City Council, Redevelopment Agency and the Planning Commission. The City Attorney's responsibilities include the review and preparation of ordinances, resolutions, contracts, leases, and related legal documents for the City.

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 elections, access to city records, 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. The City Clerk also serves as the Secretary to Redevelopment Agency.

City Manager

The City Manager is the administrative head of the municipal government. The City Manager sets goals and provides administrative direction for all City departments in accordance with the policies established by the City Council. The City Manager ensures that the City's vision and mission are accomplished.

The City Manager is the Chief Administrative Officer of the City and is responsible for carrying out City Council policy and managing the day-to-day operation of the City. The City Manager is hired by the City Council and is responsible for preparation of the City budget for Council consideration; recruiting, hiring and supervising the City's staff; and serves as the Council's Chief advisor. The City Manager also serves as the Economic Development Director.

Economic Development Department

Economic development in Ceres refers to the enhancement of economic activity in the community. The City’s focus includes business attraction, business retention and expansion, and workforce development.

Engineering Department

The primary function of the Engineering Department is to promote the orderly development of the City by providing general engineering services to regulate the construction of municipal structures, city streets, sewage disposal, water supply and storm drainage facilities. The Engineering Department is responsible for issuing encroachment and water/sewer connection permits, maintaining the City's maps, preparing the plans and specifications for most of the City's major projects, and providing drawings to help other departments. In addition, the Engineering Department provides design and inspection services for most of the City's capital improvement programs. The Department also reviews and inspects all improvements to the City's infrastructure, including all new subdivisions. Drawing and mapping services are also provided for other departments of the City. Moreover, the Department oversees traffic safety, solid waste and recycling services, and public transportation services.

Finance Department

The Finance 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 administration, general accounting, accounts payable, payroll, budget preparation, and a variety of customer service activities including business license management and utility billing administration.

Fire Department

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

Planning and Building Divisions

The Building Division's responsibilities 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.

Public Works Department

The Public Works Department has various divisions including facilities, fleet, landscape, stormwater, street, wastewater, and water services.

Planning Commission

The Planning Commission considers land use matters such as zone changes, conditional use permits, variances, subdivisions, and general plan amendments. The Commission is a permanent advisory committee of five citizens appointed by the Mayor and subject to confirmation by the City Council. Members serve four-year, staggered terms. To be eligible to serve on the commission, a citizen must be a resident within the city limits of the City of Ceres.

3.3 Fiscal Capability

The following table 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 3-3 City of Ceres —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	
Authority to levy taxes for specific purposes	Yes	No	Must be approved by voters
Fees for water, sewer, gas, or electric services, new development	Yes	No	
Incur debt through general obligation bonds	Yes	No	
Incur debt through special tax bonds	Yes	No	Requires approval by two-thirds of voters
Incur debt through private activities	Yes	No	Do not have any in place
Federal Grant Programs (Hazard Mitigation Grant Program)	Yes	No	Various Departments

3.4 Outreach and Partnerships

The City of Ceres partners with the Stanislaus County Office of Emergency Services (OES) Division. The Stanislaus County OES is responsible for the day-to-day administration of Stanislaus County's disaster preparedness, mitigation, response and recovery programs. OES develops and maintains the Stanislaus County Emergency Operations Plan and its associated annexes. OES also coordinates training, planning and exercises for first responders throughout the Stanislaus Operational Area. According to Stanislaus County OES' 2021 – Emergency Management Strategic Plan, OES listed "increase number of outreach engagements (i.e. meetings, events) as an action item to achieve one of its strategic goals, which is to build a culture of preparedness. The Stanislaus County OES will work with community partners to develop agreements for mutual aid, facilitate discussion with partners regarding preparedness planning, conduct outreach activities to engage residents, and attend emergency management trainings and conferences to stay up to date with the most current practices for disaster preparedness. The City also works in coordination with the County on the Stanislaus County MJHMP.

Moreover, the Stanislaus County OES protects the public's safety by developing and maintaining general and specific preparedness programs for the County and its nine cities. The OES educates and informs the public in the areas of emergency preparedness and fire prevention.

During the 2021-2022 planning process the following outreach efforts were identified that the City of Ceres could support related to hazard mitigation:

- Water Portal Access
- Fire Prevention School Programs
- Report a Problem Portal
- Ceres Community Center
- Alert Center (Emergency Alerts and Notifications)
- Social Media

Education and outreach efforts, as well as emergency response planning, will need to address the needs of low-income residents and the large Spanish-speaking population.

3.5 Other Mitigation Efforts

The City partners with the City of Turlock, TID, and the SRWA by tracking the implementation of future water supply plans and projects, such as the SRWA Regional Surface Water Supply Project. For example, as previously noted, this water supply project will be completed in 2023, which will diversify the drinking water supply to the cities of Ceres and Turlock (City of Ceres 2020). There are no other mitigation efforts currently in place in the City of Ceres.

3.6 Opportunities for Enhancement

Based on the capability assessment, the City of Ceres 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 Ceres General Plan Safety Element to incorporate the 2022-2027 Stanislaus County MJHMP and City of Ceres Annex by reference.

Administrative/Technical Opportunities

Other future enhancements may include providing hazard training for staff or hazard mitigation grant funding in partnership with Stanislaus 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. Once projects related to hazard mitigation are approved, the recent CIP can be shared with the community on the City's 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 should also 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 2022-2027 Stanislaus County MJHMP and the City of Ceres 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 under-represented and special-interest groups in the City. The City can also develop outreach kits for partner organizations by expanding on the information include in the MJHMP Outreach Strategy included in Appendix F.

4 MITIGATION STRATEGY

4.1 Goals and Objectives

The City of Ceres 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.

4.2 Continued Compliance with the National Flood Insurance Program (NFIP)

The City of Ceres joined the NFIP on March 7, 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 the Community Development Department and Building Division. 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 ordinance to ensure that it is clear and up to date and reflects new or revised flood hazard mapping. The City Engineering Department and Public Works Department manage the storm water programs.

4.3 Mitigation Actions

The LPT for the City identified and prioritized the following new mitigation actions based on risk assessments, goals, and objectives. 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. Because the City did not participate in the 2017 LHMP, therefore, the LPT did not have existing mitigation actions to review and did not provide 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 4-1 City of Ceres Mitigation Action Plan

ID	Goal(s) and Lifelines	Hazard(s) Mitigated	Description/Background/Benefits	Lead Agency and Partners	Cost Estimate and Potential Funding	Priority	Timeline	Status/Implementation Notes
1	Goals 1, 2, 4 and 5; Safety and Security	Dam Incidents	Develop a Public Awareness Campaign on Dam Safety – The City will organize a Social Media Campaign that will run quarterly on City of Ceres platforms to advertise and promote evacuation routes or pre-incident preparation related to dam incidents that can be done by the public.	City of Ceres Executive Team, USACE, DSOD, MID, TID	$10,000 - $100,000; General Fund	Medium	1-3 years	New in 2022
2	Goals 1, 2, and 5; Safety and Security	Dam Incidents	Prepare/Update the Emergency Action Plan, Emergency Operations Plan and Emergency Response Plan to reduce risks associated with dam failure; build partnerships and coordinate with neighboring agencies if necessary to update these plans.	City of Ceres Executive Team, USACE, DSOD, MID, TID	> $100,000; General Fund, FEMA HMA Grants, State DWR Grants	Medium	1-3 years	New in 2022
3	Goals 3, 4 and 5; Safety and Security	Drought	Further restrict outdoor water use during drought events beyond the already established requirements in the City's Urban Water Management Plan, Water Shortage Contingency Plan and Water Conservation Plan.	City of Ceres Executive Team	$10,000 - $100,000; General Fund	Medium	1-3 years	New in 2022
4	Goals 3, 4 and 5; Safety and Security	Drought	Enhance the City's Water Conservation Program and further encourage water conservation by providing additional rebate options for appliance replacement to promote water-efficient models.	City of Ceres Executive Team	$10,000 - $100,000; General Fund, State DWR Grants	Medium	1-3 years	New in 2022

5 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.

5.1 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 Engineering Department and Public Works Department may utilize the hazard information when implementing the City's capital projects and the Community Development Department Planning Division may utilize the hazard information when reviewing a site plan or other type of development applications. The City will also incorporate this MJHMP into the Health and Safety Element of their General Plan, as recommended by AB 2140.

As noted in Section 6 of the Base Plan, the City of Ceres 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.

5.2 Monitoring, Evaluation and Updating the Plan

The City will follow the procedures to monitor, review, and update this plan in accordance with Stanislaus 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 Fire Chief and Community Development Director will be responsible for representing the City in the County HMPC, and for coordination with City staff and departments during plan updates. The City realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.