

City of Lompoc Local Hazard Mitigation Plan



**An Annex to the Santa Barbara County
Multi-Jurisdictional Hazard Mitigation Plan**

October 2022



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Table of Content

1.0 Introduction..... 1

2.0 Plan Purpose and Authority..... 2

3.0 Planning Process..... 6

 3.1 Overview..... 6

 3.2 Mitigation Advisory Committee (MAC)..... 7

 3.3 Local Planning Team (LPT)..... 8

 3.4 Public Outreach and Engagement..... 9

4.0 Capability Assessment..... 10

 4.1 Community Profile and Demographics 10

 4.2 Key Departments..... 14

 4.2.1 Fire Department 16

 4.2.2 Police Department..... 19

 4.2.3 Economic Development/Planning Division 19

 4.2.4 Public Works Department 20

 4.2.5 Utilities Department..... 21

 4.3 Administrative and Technical Capacity 21

 4.4 Legal and Regulatory Capabilities..... 22

 4.5 GIS, Computer and Communication Technology..... 23

 4.6 Financial Resources..... 24

 4.7 Education and Outreach Capabilities..... 25

 4.8 Relevant Plans, Policies, and Ordinances..... 25

 4.8.1 General Plan..... 26

 4.8.2 Comprehensive Emergency Management Plan..... 30

 4.8.3 Storm Water Management Program..... 30

 4.8.4 Zoning and Subdivision Ordinances 31

 4.8.5 Building Codes..... 31

 4.8.6 Floodplain Management Ordinance 32

 4.8.7 National Flood Insurance Program (NFIP) and Repetitive Loss (RL) Properties 32

 4.8.8 Capital Improvement Plan..... 33

 4.9 Opportunities for Mitigation Capability Improvements 33

5.0 Hazard Assessment 34

 5.1 Overview..... 34

 5.2 Hazard Screening/Prioritization..... 34

 5.3 Hazard Profiles..... 35

 5.3.1 Wildfire 35

 5.3.2 Earthquake & Liquefaction..... 38

 5.3.3 Drought and Water Shortage..... 43

 5.3.4 Flood..... 44

 5.3.5 Dam Failure..... 48

6.0 Vulnerability Assessment..... 49

 6.1 Wildfire 52

 6.2 Earthquake & Liquefaction 55

 6.3 Flood 62

 6.4 Dam Failure..... 66

 6.5 Landslide 69

7.0 Mitigation Strategy 71

 7.1 Mitigation Goals and Objectives 71

 7.2 Mitigation Progress 72

 7.3 Mitigation Approach..... 73

 7.4 Implementation Plan..... 74

8.0	Plan Maintenance.....	77
8.1	Monitoring, Evaluating, and Updating the Plan.....	77
8.2	Implementation through Existing Plans and Programs.....	78
8.3	Ongoing Public Outreach and Engagement.....	79
8.4	Point of Contact.....	79
9.0	References.....	79

List of Figures

Figure 5-1.	Santa Barbara County Fire Hazard Severity Zones	37
Figure 5-2.	Santa Barbara County Probability of Shaking 2% in 50 Years.....	41
Figure 5-3.	Santa Barbara County Liquefaction Severity	42
Figure 5-4.	Santa Barbara County FEMA Flood Hazards.....	47
Figure 6-1.	City of Lompoc Critical Facilities within Wildfire Threat Zones.....	54
Figure 6-2.	City of Lompoc Critical Facilities and Earthquake Groundshaking Potential (San Luis Range 7.2 Magnitude ShakeMap).....	60
Figure 6-3.	City of Lompoc Critical Facilities and Liquefaction Potential.....	61
Figure 6-4.	City of Lompoc Critical Facilities in FEMA Flood Hazard Zones Need figure	65
Figure 6-5.	City of Lompoc Critical Facilities in Dam Inundation Zone.....	68
Figure 6-6.	City of Lompoc Critical Facilities within Landslide Susceptibility Zones	70

List of Tables

Table 3-1.	Mitigation Advisory Committee (MAC) Meetings Summary	7
Table 3-2.	City of Lompoc Local Planning Team 2022.....	8
Table 3-3.	Local Planning Team Activity Summary	8
Table 4-1.	City of Lompoc Administrative and Technical Capacity.....	22
Table 4-2.	City of Lompoc Legal and Regulatory Capability.....	23
Table 4-3.	City of Lompoc Fiscal Capability	24
Table 5-1.	City of Lompoc Local Priority Hazards.....	35
Table 5-2.	Richter Scale	38
Table 5-3.	Southern California Region Earthquake Likelihoods.....	40
Table 6-1.	Critical Facilities in the City of Lompoc	49
Table 6-2.	Summary of Potential Impacts on Critical Facilities.....	52
Table 6-3.	City of Lompoc at Risk of Wildfire Threat.....	53
Table 6-4.	City of Lompoc Critical Facilities Vulnerable to Wildfire	53
Table 6-5.	City of Lompoc at Risk to Liquefaction Hazard by Property Type	56
Table 6-6.	City of Lompoc Critical Facilities Vulnerable to Liquefaction	57
Table 6-7.	City of Lompoc FEMA Floodplain Exposure and Loss.....	62
Table 6-8.	City of Lompoc Critical Facilities at Risk to Flood Hazard same twice listed issue	63
Table 6-9.	City of Lompoc at Risk of Dam Inundation Hazard.....	66
Table 6-10.	City of Lompoc Critical Facilities Vulnerable to Inundation from Dam Failure	66
Table 6-11.	City of Lompoc Improved Properties at Risk to Landslide Summary	69
Table 6-12.	City of Lompoc Critical Facilities Vulnerable to Landslide	69
Table 7-1.	Status of City of Lompoc Previous Mitigation Actions	73

1.0 INTRODUCTION

Natural and human-caused disasters can lead to death, injury, property damage, and interruption of business and government services. When they occur, the time, money, and effort to respond to and recover from these disasters divert public resources and attention from other important programs and problems.

However, the impact of foreseeable yet often unpredictable natural and human-caused events can be reduced through mitigation planning. History has demonstrated that it is less expensive to mitigate against disaster damage than to repeatedly repair damage in the aftermath. A mitigation plan states the aspirations and specific courses of action jurisdictions intend to follow to reduce vulnerability and exposure to future hazard events.

The City of Lompoc (City) recognizes the consequences of disasters and the need to reduce the impacts of all hazards, natural and human-caused. This annex was prepared in 2022 as part of the update to the County of Santa Barbara (County) Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). This annex serves as the Local Hazard Mitigation Plan (LHMP) for the City.

The LHMP was last comprehensively updated in 2017 as an annex to the 2017 MJHMP. Since 2017, the City has:

- Incorporated the LHMP goals, objectives, and mitigation actions into its local plans and processes, including the General Plan Safety Element by reference and specific hazard planning efforts (e.g., Stormwater Management Plan).
- Used the LHMP's assessment of capabilities, hazards, and vulnerabilities to inform planning, capital improvements, programs, decision-makers, and the public.
- Implemented mitigation actions through the City's general plan, capital improvement program, maintenance programs, grant programming, community outreach, and budget process.
- Reviewed and evaluated mitigation actions before and after disasters, including the Canyon Fire and the multi-year drought.

This 2022 update of the LHMP builds on and refines the MJHMP's assessment of hazards and vulnerabilities countywide to develop a mitigation plan for the City. The City participated in the 2022 MJHMP Mitigation Advisory Committee (MAC) and Local Planning Team (LPT), reviewed all portions of the MJHMP pertaining to the City, and incorporated relevant components into this annex. It contains updated capability assessment information, a current vulnerability assessment, and an updated/revised mitigation strategy. The methodology and process for developing this annex build on approaches employed in the 2022 MJHMP and are explained throughout the following sections.

The 2022 MJHMP update was prepared with input and coordination from each of the county's eight incorporated cities, six special districts, the County, citizen participation, responsible officials, and support from the State of California Governor's Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). The process to update the MJHMP and this LHMP included over a year of coordination with representatives from all participating agencies within the County and County representatives who comprised the MAC (described further in Section 3.0, *Planning Process* below). The City is a participating agency in the County's MJHMP update.

The City's LHMP is used by local emergency management teams, decision-makers, and agency staff to implement needed mitigation to address known hazards. The MJHMP and this annex can also be used as a tool for all stakeholders to increase community awareness of local hazards and risks and provide information about options and resources available to reduce those risks. Informing and educating the public about potential hazards helps all county residents and visitors protect themselves against their effects.

Risk assessments were performed that identified and evaluated priority hazards that could impact the City. Vulnerability assessments summarize the identified hazards' impact on the City. Estimates of potential dollar losses to vulnerable structures are presented. The risk and vulnerability assessments were used to determine mitigation goals and objectives to minimize near-term and long-term vulnerabilities to the identified hazards. These goals and objectives are the foundation for a comprehensive range of specific attainable mitigation actions (see Section 7.0, *Mitigation Strategy*).

2.0 PLAN PURPOSE AND AUTHORITY

Federal legislation historically provided funding for disaster preparedness, response, recovery, and mitigation. The Disaster Mitigation Act (DMA) of 2000, also commonly known as "The 2000 Stafford Act Amendments" (the Act), constitutes an effort by the federal government to reduce the rising cost of disasters. The legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur.

Section 322 of the DMA requires local governments to develop and submit mitigation plans to qualify for the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) funds. The 2022 MJHMP meets the statutory requirements of DMA 2000 (P.L. 106-390), enacted October 30, 2000, and 44 CFR Part 201 – Mitigation Planning, Interim Final Rule, published February 26, 2002. The HMA grants include the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) program, and the Flood Mitigation Assistance (FMA) program. Additional FEMA mitigation funds include the HMGP Post Fire funding associated with Fire Management Assistance Grant (FMAG) declarations and the Building Resilient Infrastructure and Communities (BRIC) funding associated with the 2018 Disaster Recovery Reform Act (DRRA).

DMA 2000 specifically addresses mitigation planning at the state and local levels. It identifies requirements that allow HMGP funds to be used for planning activities and increases the amount of HMGP funds available to states that have developed a comprehensive, enhanced mitigation plan before a disaster. State, county, and local jurisdictions must have an approved mitigation plan in place before receiving post-disaster HMGP funds. These mitigation plans must demonstrate that their proposed projects are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities.

Local governments have certain responsibilities for implementing Section 322, including:

- Preparing and submitting a local mitigation plan;
- Reviewing and updating the plan every five years; and
- Monitoring mitigation actions and projects.

To facilitate implementation of the DMA 2000, FEMA created an Interim Final Rule (the Rule), published in the Federal Register in February of 2002 in section 201 of 44 CFR. The Rule spells out the mitigation planning criteria for states and local communities. Specific requirements for local mitigation planning efforts are outlined in section §201.6 of the Rule.

In March 2013, FEMA released The Local Mitigation Planning Handbook (Handbook) as the official guide for local governments to develop, update and implement local mitigation plans. The Handbook complements and references the October 2011 FEMA Local Mitigation Plan Review Guide (Guide) to help “Federal and State officials assess Local Mitigation Plans in a fair and consistent manner.” Local jurisdictions must demonstrate that proposed mitigation actions are based upon a sound planning process that accounts for the inherent risk and capabilities of the individual communities as stated in section 201.5 of the Rule. The Handbook and Guide were consulted to ensure thoroughness, diligence, and compliance with the DMA 2000 planning requirements.

DMA 2000 is intended to facilitate cooperation between state and local authorities, prompting them to work together. It encourages and rewards local and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network is intended to enable local and state governments to articulate accurate needs for mitigation, resulting in a faster allocation of funding and more effective risk reduction projects.

This LHMP was prepared as an annex to the County’s MJHMP in compliance with DMA 2000 and applicable FEMA guidance. The following pages show the resolutions that adopt the City’s 2022 LHMP.

[INSERT CITY RESOLUTION(S) ADOPTING PLAN UPDATE]

[INSERT CITY RESOLUTION(S) ADOPTING PLAN UPDATE]

3.0 PLANNING PROCESS

3.1 OVERVIEW

The planning process implemented for the County's 2022 MJHMP update, including the City's LHMP update, utilized two different planning teams to review progress, inform and guide the update, and directly review and prepare portions of the plan, including each jurisdictional annex. The first team is the Mitigation Advisory Committee (MAC) and the second is the Local Planning Team (LPT).

All eight incorporated cities and the six special districts joined the County as participating agencies in the preparation of the MJHMP update, including the cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang; and special districts Cachuma Operation and Maintenance Board (COMB), Carpinteria Valley Water District (CVWD), Goleta Water District (GWD), Montecito Fire Protection District (MFPD), Montecito Water District (MWD), and Santa Maria Valley Water Conservation District (SMVWCD). Each of the participating agencies had representation on the MAC and was responsible for the administration of their own LPT. In addition, the MAC included representatives from other state and local agencies with an interest in hazard mitigation in Santa Barbara County, including local non-profit organizations, special districts, and state and federal agencies. This composition ensures diverse input from an array of voices representing all communities within Santa Barbara County.

Both the MAC and the LPTs focused on these underlining philosophies, adopted from the FEMA Local Mitigation Plan Review Guide:

- **Focus on the mitigation strategy**

The mitigation strategy is the plan's primary purpose. All other sections contribute to and inform the mitigation strategy and specific hazard mitigation actions.

- **Process is as important as the plan itself**

In mitigation planning, as with most other planning efforts, the plan is only as good as the process and people involved in its development. The plan should also serve as the written record, or documentation, of the planning process.

- **This is the community's plan**

To have value; the plan must represent the current needs and values of the community and be useful for local officials and stakeholders. Develop the mitigation plan in a way that best serves your community's purpose and people.

- **Intent is as important as Compliance**

Plan reviews will focus on whether the mitigation plan meets the intent of the law and regulation; and ultimately that the plan will make the community safer from hazards.

As a result, the planning process incorporated the following steps:

- **Plan Preparation**
 - Form/validate planning team members
 - Establish common project goals
 - Set expectations and timelines
- **Plan Development**
 - Validate and revise the existing conditions/situation within the planning area;
 - Develop and review the risk to hazards (exposure and vulnerability) within the planning area;
 - Review and identify mitigation actions and projects within the planning area;
- **Finalize the Plan**
 - Review and revise the plan
 - Approve the plan locally and with state and federal reviewers
 - Adopt and disseminate the plan

3.2 MITIGATION ADVISORY COMMITTEE (MAC)

The City participated as a MAC member to prepare this LHMP as an annex to the 2022 MJHMP. The City was represented by Steve Terrones, Battalion Chief, on the MAC.

The MAC meetings were designed to discuss each component of the MJHMP with MAC members and coordinate annex updates. Table 3-1 below provides a list and the main purpose and topics of each MAC meeting.

Table 3-1. Mitigation Advisory Committee (MAC) Meetings Summary

Date	Purpose
March 2021	<p>MAC Meeting #1 (virtual) Provided an overview of the project and why the plan is being revised Reviewed FEMA guidance and processes Discussed roles and responsibilities of the participating jurisdictions</p>
September 2021	<p>MAC Meeting #2 (virtual) Reviewed goals of the project, role of the MAC Summarized public outreach results Presented hazards assessment and displayed select draft hazard maps Conducted interactive exercise to rank hazards</p>
October 2021	<p>MAC Meeting #3 (virtual) Provided results of hazard ranking methodology Presented vulnerabilities assessment Discussed mitigation goals, objectives, and strategies Reviewed County goals from 2017 and compared them to new goals Conducted interactive exercise on potential mitigation goals and strategies</p>

Date	Purpose
October 2021	<p>MAC Meeting #4 (virtual) Collected feedback on 2017 mitigation strategies Conducted interactive exercise on mitigation strategies for key hazards unaddressed in previous MJHMP Discussed annex updates</p>
January 2022	<p>MAC Meeting #5 (virtual) Presented draft plan Discussed key MAC/LPT review needs and key issues Discussed annex updates to dovetail with plan update</p>
March 2022	<p>MAC Meeting #6 (virtual) Review and discuss public comments received on the draft plan Recommend a revised draft plan to decision-makers Review annex updates for review and approval</p>

3.3 LOCAL PLANNING TEAM (LPT)

Table 3-2 lists the City’s LPT. These individuals collaborated to identify the City’s critical facilities, provide relevant plans, report on the progress of City mitigation actions, and provide suggestions for new mitigation actions.

Table 3-2. City of Lompoc Local Planning Team 2022

Department	Name	Title
Fire Department	Brian Fallon	Fire Chief
Administration	Dean Albro	City Manager
Administration	Erin Keller	Senior Administrative Analyst
Police Department	Kevin Martin	Chief of Police
Fire Department	Scott Nunez and Cody Lee	Battalion Chiefs
Water	Jose Valdez	Water Distribution Supervisor

The Lompoc LPT members worked directly with the Santa Barbara County Office of Emergency Management (OEM), the consultant team, and each other to provide data, recommended changes, and continually work on the MJHMP and LHMP updates throughout the planning process. The City LPT met virtually as needed during the planning process to discuss data needs and organize data collection. Table 3-3 below outlines a timeline of the LPT's activities throughout the planning process.

Table 3-3. Local Planning Team Activity Summary

Meeting Dates	Summary of Activity
February 2020	LPT kickoff meeting to discuss stakeholder and public involvement and refine the scope of hazard analysis
April 2021 to January 2022	Collated data to share with hazard mitigation planning team, including hazard identification, refreshed data layers for maps, and geographic settings.

Meeting Dates	Summary of Activity
	Completed Plan Update Guides to directly inform hazard priorities and mitigation capabilities Met with County OEM and consultant staff (12/15/22) to discuss LHMP priorities and mitigation approaches.
January and March 2022	Reviewed new maps and local vulnerabilities. Provided input on the status of 2017 LHMP mitigation strategies. Reviewed draft mitigation strategies and provide feedback. Reviewed and finalized 2022 LHMP

3.4 PUBLIC OUTREACH AND ENGAGEMENT

As a participating agency in the 2022 MJHMP update, the City was directly involved in the outreach program undertaken by the County for the 2022 MJHMP update, which involved extensive outreach during 2021 and early 2022. The City's MAC and LPT members participated in public outreach efforts for the MJHMP and LHMP update planning process by distributing notices for the 6-month-long community hazards survey (refer to Section 3.4.1 of the 2022 MJHMP) and three public workshops (refer to Section 3.4.4 of the MJHMP). The Public Outreach Plan (POP) employed a diversity of tools to maximize notification and participation. The POP was responsive to limitations presented by the Coronavirus (COVID-19) pandemic and focused on direct bilingual outreach using a variety of digital tools, including a fact sheet, social media posts, emails, and press releases. Multiple platforms and tools were used to publicize opportunities to participate. All public and stakeholder meetings were hosted virtually through Microsoft Teams, and all outreach completed for the project was conducted via electronic communications. Many of the meetings used an interactive tool called Slido to collect feedback during meetings. Slido allows audience members to answer questions during presentations, helping the County collect direct detailed feedback and facilitate discussion. All written notices were made available in English and Spanish.

Emergency preparedness information is also regularly distributed to the residents and businesses via the City's website.

In May 2022, the LHMP was completed and made available for public review, concurrent with review by FEMA and CalOES. In addition, the opportunity for the community to be heard was permitted during the City Council meeting before the adoption of this plan.

The City utilizes several platforms to educate the public about hazards in the community, relevant programs to safeguard and protect themselves from disaster, and actions they can take to prepare themselves for events. The relevant programs are also identified in Section 4.7. Below is a list of the different platforms used and a summary of some of the programs:

- Ready SBC
- Disaster Preparedness
- Emergency Management
- Wildfire Action Plans
- Ready-Set-Go

- Disaster Preparedness for Pets
- Earthquake
- Smoke Alarm Facts
- Hot Weather Safety
- LISTOS
- Social Media
- Public Events
- Public Service Announcements (Radio and Television)
- Drought Education
- Flood emergency awareness
- C.E.R.T. Program
- Aware & Prepare

4.0 CAPABILITY ASSESSMENT

The City LPT identified current capabilities and mechanisms available for implementing hazard mitigation activities. This section presents a discussion of the roles of key departments, administrative and technical capacity, fiscal resources, and summaries of relevant planning mechanisms, codes, and ordinances.

4.1 COMMUNITY PROFILE AND DEMOGRAPHICS

Physical Features

Lompoc is part of California's Central Coast. Rolling hills surround the Valley on the north, south, and east. The Valley is open at its western end to the Pacific Ocean on the undeveloped Gaviota Coast. The Pacific Ocean is 8 miles from downtown Lompoc. The Santa Ynez River runs east to west through the Valley while Burton Mesa, a chaparral forest with sandy soil, lies to the north. The hills to the south are mined for diatomaceous (fossil) earth.

Lompoc is 98 feet above mean sea level and has a mild climate. A northwest breeze is common (average hourly wind speed: (6.1 m.p.h.). There is moderate rainfall, daily fog, and no snow.

Lompoc is located in the mid-western portion of the county, adjacent to Vandenberg Space Force Base (VSFB), and is separated from the rest of the county by the Purisima, Santa Rita, Santa Rosa, and White hills. The Santa Ynez River also traverses the Lompoc Valley in a westerly direction and eventually drains into the Pacific Ocean. This area includes the City of Lompoc and the communities of Vandenberg Village and Mission Hills. Vandenberg Village is located in the Lompoc Valley at the westerly end of the Santa Ynez River Basin and is bordered by VSFB to the west and the City of Lompoc to the south. Vandenberg Village has a population of approximately 6,988 (2019) and is 5.2 square miles. The low to the medium-density residential core is surrounded primarily by agriculture and open space.

History Snapshot

The first settlers in the Lompoc Valley were the Chumash Indians. The Chumash and their predecessors lived in the Lompoc Valley for nearly 10,000 years before European contact. The establishment of La Purisima Mission in 1787 marked the earliest European settlement in the Lompoc Valley. The original mission, located at what is now the foot of F Street in downtown Lompoc, was destroyed by an earthquake in 1812. Remnants of the mission can be seen at this site which has been preserved as a State Historical Landmark. The mission was rebuilt over several years beginning in 1813 at its current location on the north side of the Valley. The Mission, the most authentically restored in the mission system, is now a State Park.

The Lompoc Land Company was formed and incorporated in August of 1874 to purchase almost 43,000 acres to establish a temperance colony. The City of Lompoc was incorporated on August 13, 1888. Several wharves were constructed during this period serving as shipping points for incoming supplies and outgoing agricultural produce until the turn of the century when the railroad replaced shipping as the primary means of commercial transportation.

The completion of the coastal railroad between San Francisco and Los Angeles in 1901, and the subsequent extension of a spur into Lompoc, provided the impetus for growth in the Valley. Fields were cleared and leveled for agricultural production of specialized crops including flower seeds. The flower seed industry so dominated agricultural production that the area was dubbed the "Valley of Flowers." The Johns-Manville Corporation and others began the mining of diatomaceous earth in the southern hills. The mining industry continues to be a major employer.

In 1941, Camp Cooke was established as an Army training base which was renamed Vandenberg Air Force Base in 1958; the base is currently named Vandenberg Space Force Base (VSFB). VSFB was the first missile base of the United States Air Force. The Space Shuttle program was slated to begin launches in the late 1980s. However, when the Challenger exploded during take-off in 1986, the West Coast Shuttle Program was terminated, leaving Lompoc in a severe recession.

The Lompoc Valley responded to the Shuttle disaster by focusing on tourism as a means of fighting its way through the recession. By focusing on the natural beauty of the Valley, its flower industry, the pristine Central Coast, and by developing a successful downtown mural program, the City has built an excellent tourism industry that is to this day a primary component of the Lompoc economy. Today, the City is dubbed "The City of Arts and Flowers."

Economy and Employment

Lompoc Valley enjoys a healthy and diversified economy. Home to VSFB, which contributes \$1.7 billion to the regional economy and is the largest employer in Lompoc and is the powerhouse driving the county's economy. A study from 2004 evaluated the impact of VSFB in terms of population, output, jobs, labor income, and taxes generated using data from fiscal year 2004. The report accounted for both direct impacts created by the base and additional impacts that occurred concerning base activity with a multiplier effect of 1.92, which means every dollar spent by VSFB generates another 92 cents in business.

Located on nearly 100,000 acres outside of Lompoc, VSFB's impact is stable due to its role as a classified military installation for rocket and missile launches. As of 2019, VSFB had 5,441 residents and supports over 18,000 military members, family members, contractors, and civilian employees.

Allan Hancock College fire, police, and emergency services training academies are located in Lompoc. The \$46 million Public Safety Training Center project includes a City donation of 39 acres of land adjacent to the college for a total of almost 100 acres that will be dedicated to the academies, a high-speed driving course, and further expansion. It should be noted Allan Hancock College is the alternate seat of government and alternate EOC for the City in the event City Hall and the EOC are unable to be used.

Major employers in Lompoc Valley include:

- VSFB
- Lompoc Unified School District
- Lockheed Martin Corporation
- U.S. Department of Justice (Lompoc Federal Correctional Complex)
- City of Lompoc
- Lompoc Valley Medical Center
- Boeing
- World Minerals
- Retail operators: Wal-Mart, Home Depot, etc.
- Entrepreneurs, especially boutique winemakers

Lompoc Valley's agricultural roots have shifted to value-added products such as flower seed research and development, and wine production. Over the past decade, Lompoc's affectionately termed "Wine Ghetto" has become a production center for some of the finest wines in the country. In less than five years, the number of Lompoc's premium artisanal wines grew from five to 30 labels. There are now 34 labels produced in 15 wineries across town. Local winemaker camaraderie continues to spawn innovation and de facto winery incubators continue to launch new wine labels.

As Lompoc's boutique wineries grow, they move into larger facilities and hire more employees. A few years ago, Brewer-Clifton moved into a new 12,000 square-foot production facility. Loring Winery and Pali Winery constructed a 30,000 square-foot wine facility for processing, operational offices, case good storage, barrel rooms, and fermentation rooms. More recently, Flying Goat Cellars purchased a 3,600 square-foot industrial condo for wine production at JM Development's new industrial condos on West Laurel. Several other wine facilities in the works will create more growth opportunities with more available production space.

Other targeted industries for the city include the Internet, entertainment technology, and multimedia. Citywide broadband service has positioned Lompoc to develop as a media and communications center with at least three competitors offering service. The city seeks to attract production talent, digital production companies, and pre-and post-production operations.

On the local level, Allan Hancock College Film & Video Production Program, with a 30+ year history, and the City's state-of-the-art [TAP TV](#) media studio provide training grounds for an emerging technology workforce. City sponsorship of the Santa Barbara International Film Festival also enhances student opportunities through the festival screenwriting and filmmaking contests and field trips to the movies. The City partners with the Santa Barbara County Film Commission to promote the area for film locations. The production of commercials and films such as "Sideways"

contributes to the community's economic vitality. Film location managers increasingly take an interest in business-friendly Lompoc and the surrounding area. Most recently, "There Will Be Blood" and "Grindhouse" were filmed on Jalama Road and used Lompoc facilities.

On the manufacturing side, Goleta-based Far West Technology recently expanded into Lompoc and created six new full-time jobs for the packaging of dosimetry products. Raytheon Vision Systems opened a manufacturing division in Lompoc rather than expand its Goleta headquarters. The 55,600 square foot facility in Lompoc employs 30 workers who develop and manufacture infrared sensors for scientific, commercial, and government applications. Expansion of the Raytheon facility in Lompoc is now underway.

In 2013, DenMat, a leading manufacturer of high-quality dental products, moved its world headquarters from Santa Maria into an 81,000 square-foot building near the Lompoc airport. A privately held company, DenMat supplies dental products and equipment to dental professionals across the nation and in more than 60 countries around the world. They also offer a full-service Dental Laboratory featuring the popular Lumineers and Snap-On Smile brands. As an accredited continuing education provider, DenMat offers educational courses for dentists and their staff in locations nationwide. DenMat has a workforce of 400 employees.

Lompoc is seeing significant growth in cannabis-related development, including retail, delivery, cultivation, manufacturing, processing, distribution, and testing. Some of the manufacturing businesses utilize volatile solvents.

The recent housing boom attracted many young professionals from Los Angeles and Santa Barbara. Non-residential investment is now paving the way for job opportunities with industrial, commercial, and public infrastructure growth. Lompoc's comparative advantage in housing prices, information technology, and overall quality of life will continue to attract a young, edgy technology workforce. Additionally, the City continues to develop a wide spectrum of workforce training opportunities in the valley.

Population & Growth

According to 2019 U.S. Census Bureau data, the City is home to 44,188 residents. This population is projected to grow to 50,720 residents by 2050 (SBCAG 2018). The average household size in the City is 2.91 and the median household income is \$53,309. Approximately 56.3 percent of City of Lompoc residents identify as Hispanic, 31.6 percent identify as White, and 12.1 percent identify as Asian, Black, Mixed, or Other(US Census Bureau 2019).

Development and Redevelopment are occurring at a fast pace throughout Lompoc. Annexation of unincorporated territory into the city limits occurs on occasion, usually when a property owner wishes to develop land in a manner that requires urban services. Current development and expansion areas include:

- Eastern Boundary River Terrace – wildland interface
- Western Boundary Bailey Avenue Specific Plan Area – potential for agricultural drift and residual soil contamination
- Northern Boundary Burton Ranch – wildland interface

As described further in Section 4.8, *Relevant Plans, Policies, and Ordinances*, urban growth in Lompoc is restricted by the Sphere of Influence and Urban Limit Line, which delineates the City's future boundaries and service area. To ensure that residents of Lompoc have access to basic needs, the City will only allow development in areas where adequate public facilities and services, such as water, utilities, and fire/police protection, are available at the time of development. This approach to population growth ensures that the City's hazard mitigation capabilities serve both existing and future residents.

Infrastructure

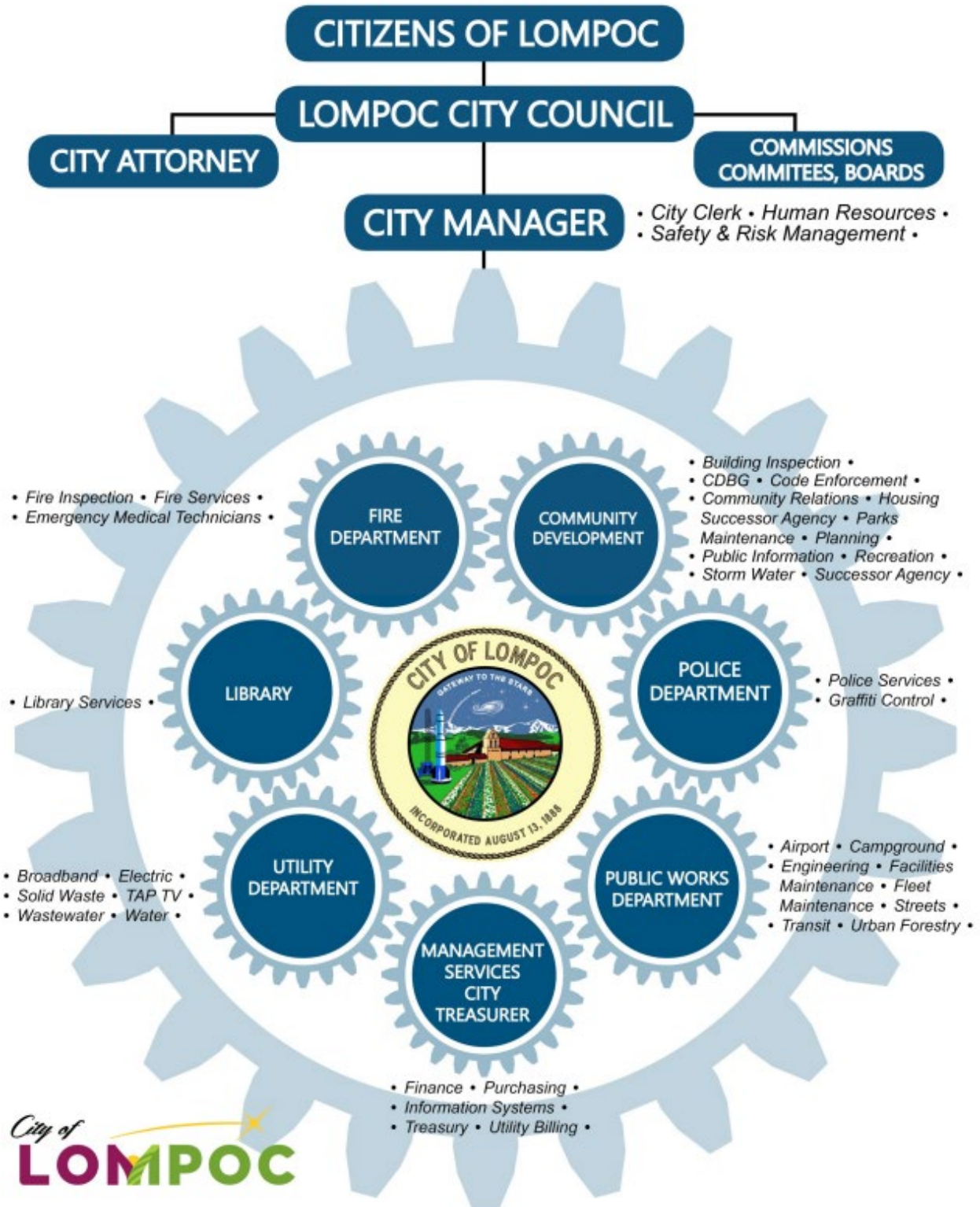
The infrastructure of the City of Lompoc supports the industries and the residents of the City. The Public Works Department maintains major roads and local streets. The City's Airport is a General Aviation airport located within the city limits. Groundwater is the primary source of potable water for City residents. The City has experienced excessive drought conditions over the last 5 years and is severely taxing its water resources. The City distributes electricity to the citizens and industries in the City.

4.2 KEY DEPARTMENTS

The City utilizes the Council-Manager form of local governance, which includes an elected Mayor and four Council Members, and an appointed City Manager. The Mayor is elected every two years and the four Council Members are elected every four years.

The City Council is Lompoc's legislative body, setting policy, approving budgets, and setting tax rates. Council Members also hire the City Manager, who is responsible for the day-to-day administration of the City and serves as the Council's chief advisor. The City Manager prepares a recommended budget, recruits and hires most of the City's staff, and carries out the Council's policies. While the City Manager may recommend policy decisions, he is ultimately bound by the actions of the Council. The Council Members also appoint the City Attorney. The City's organizational chart is provided below:

CITY OF LOMPOC ORGANIZATIONAL CHART



The following is a summary of the City's departments and their responsibilities related to hazard mitigation planning and implementation. Many of the programs and plans of these departments have a direct relationship to loss reduction, community resiliency, and hazard mitigation.

4.2.1 Fire Department

Mission Statement: The Lompoc Fire Department is dedicated to professionalism and a commitment to excellence, providing the citizens of Lompoc with the highest level of service possible, safeguarding life, property, and the environment.

Vision Statement: Our Team is a dynamic, innovative response force comprised of members who value and respect one another and the people we serve in the Lompoc Valley. Our vision is to improve the lives of our citizens through a legacy of skilled, compassionate, and resourceful public service.

Core Values:

- **TEAMWORK:** Applying the strengths of our team members collectively to achieving organizational goals and objectives.
- **FAMILY:** Considering our citizens and each other as family members.
- **CUSTOMER FOCUS:** Developing and delivering services based on our citizens' needs.
- **RESPECT:** Treating our citizens and each other with honor and decency.
- **PROFESSIONALISM:** Performing every task with excellence and skill.
- **HUMILITY:** Performing our jobs with pride and a sense of gratitude for the opportunity we have to serve.

FIRE, EMS, Building, and other Services Coordinated and or Provided by the Fire Department

- Administers automatic aid agreements, mutual aid agreements, and contracts.
- Life Safety Division: oversees the Building and Safety Services and Prevention, Community Risk Reduction sections, coordinates adoption of codes and ordinances, reviews site and building plans to confirm compliance with fire, building, and other related codes, develops and presents public education programs and manages the City's weed abatement program.
- The Training Division's mission is to ensure that all department personnel maintain all knowledge, skills, and abilities essential to fulfilling our duty to the community. Per our Training and Succession Plans, the department funds attendance to training classes, seminars, conferences, and other avenues that meet or exceed training mandates, continuing education requirements, in-service skill competency, and that provide opportunities to develop new, innovative skill sets needed to meet our evolving service demands. Personnel is encouraged to engage in training that enhances their capabilities, prepares them for promotion, and which ensures that every service we provide is carried out with skill and excellence.
- Emergency Medical Services: Manages the department's EMT program, responds to medical emergencies and other calls for service, and participates with other community and regional health care providers to reduce public illness and injury.

- **Operations Division:** Maintains the department's personnel, apparatus, equipment, and fire stations in a state of readiness to respond to the community's needs, develops and implements standard operating procedures for various types of emergency responses, responds to all types of emergencies, and trains and interacts with neighboring jurisdictions and regional agencies.
- **Emergency Management:** Coordinates the City's Disaster Preparedness Program, liaison with all City departments and divisions, as well as other public and private organizations, develops, coordinates and implements hazard-specific response plans, and maintains the operational readiness of the City's Emergency Management Team, the Emergency Operations Center, and other key elements.

City of Lompoc Emergency Operations Center

The purpose of the Emergency Operations Center (EOC) is to provide a facility from which the City's response to an emergency can be effectively coordinated. The primary role of the EOC is to bring together all relevant information about the emergency to one location, organize that information in a useful format for the City's decision-making body, and facilitate the coordination of resources needed to mitigate the effects of the emergency. Concisely, the EOC processes emergency resources, policy, and priority setting. The EOC, however, doesn't provide tactical direction to the various field incident commands.

The City's EOC manages and provides mitigation planning for large-scale emergencies or disasters. It is organized into two distinct functional areas: 1) EOC Management Staff, who are comprised of the City Manager or designee, Public Information Officer, Legal Officer, and the Policy Decision Group; and 2) EOC General Staff, headed by the EOC Director and includes the Operations Section, Plans/Intelligence, Logistics, and Finance Section. The document discusses extensively the role of each staff member, describing how collaboration and coordination would occur, as well as the expected duties and procedures required during the event of an emergency. The EOC's hierarchy is also delineated in this section.

The City Manager, Director of Emergency Services, serves as EOC Director with the responsibility detailed in Lompoc Municipal Code Section 1306. In contrast, City Management is responsible for the overall emergency policies and coordination through the joint efforts of governmental agencies and private organizations. Under the direction of the EOC Director, General Staff is responsible for the call-out and release of emergency response personnel and providing for appropriate shift coverage during emergency conditions. EOC management is responsible for setting overall objectives and the City's priorities. An EOC management priority is the development and implementation of an EOC Action Plan for each operational period.

At the start of an incident, each position (grouped in sections shown below) is handled by the first arriving director; as key personnel arrive, they are assigned EOC positions according to the Operations manual.

The *Operations Section Coordinator* (General Staff) is responsible for the receipt and coordination of information and requests related to the City's response to an incident. The Operations Coordinator reviews and makes changes to the Incident Action Plan as necessary and reports such changes to the EOC Director. Furthermore, he or she is assigned to primary response-oriented functions, such as Law enforcement, Fire Department, Utilities Director, Public Works Director, etc.

The *Planning/Intelligence Section* is responsible for the collection, evaluation, dissemination, and use of information regarding the incident, and the preparation and documentation of EOC Action Plans. This section also conducts planning meetings and summarizes the written incident action plan for incidents requiring extended operations. Intelligence collection and Resources Status are examples of the kinds of units, which may be formed within this section.

The *Logistics Section* is responsible for ensuring the logistical needs of the disaster are met. This section provides service and support, supplies, equipment, and medical support to the incident assigned personnel, and deals with transportation requirements of the incident. In addition, Logistics registers and coordinates the use of volunteers during an incident and receives and manages donations/services of individuals, private sector organizations, and others not included in the formal response structure.

The *Finance/Administration Section* is responsible for monitoring costs, procurements, contracts, and other financial considerations. Logistics is required to maintain records on personnel and equipment time, provide payments to vendors, and provide other support to incident personnel.

Following an incident, it may be necessary to convene a Multi-agency or Interagency Coordination Group as designated by County Resolution No. 97-346, to develop consensus on priorities, resource allocation, and response strategies. It will be responsible for interagency coordination, including 1) establishing overall priorities, 2) allocating scarce resources, 3) developing strategies for handling Multi-Agency and Multi-Jurisdictional response problems, 4) sharing information, and 5) facilitating communications.

In summary through the establishment of the Emergency Operations Center, the City expects to have a coordinated plan that details the procedures, duties, and hierarchy in response to an extraordinary hazardous event. As a result, they aim to reduce losses of life and property, as well as promote the resiliency and recovery efforts needed to minimize the threat of any [hazardous] incident in the area.

Volunteer Organizations: American Red Cross, Amateur Radio Emergency Services (ARES), Equine Evacuation, CERT, LISTOS, Voluntary Organizations Active in Disasters (VOAD), and area Faith-Based Organizations.

The Fire Department has a very robust Public Education and Emergency Preparedness program. The Fire Department web page provides the following information for the public:

- Ready SBC
- Disaster Preparedness on its website
- Emergency Management
- Wildfire Action Plans
- Ready-Set-Go
- Disaster Preparedness for Pets on its website
- Earthquake
- Smoke Alarm Facts
- Hot Weather Safety
- LISTOS

- Social Media
- Public Events
- Public Service Announcements (Radio and Television)
- Drought Education
- Flood emergency awareness
- C.E.R.T Program
- Aware & Prepare
- All others are not on the FD site

The City's Fire Department is responsible for Emergency Preparedness and Emergency Management and will use this LHMP in conjunction with the Comprehensive Emergency Management Plan (CEMP) to implement strategies, projects, and policies which lead to a more resilient and safer City.

4.2.2 Police Department

- Responds to safety concerns involving threats and/or damage to life or property. Acts as the enforcement entity for violations of State and local laws and ordinances.
- Primary emergency responders to acts of civil disobedience and public disorders. Support personnel for emergency rescue and management.
- Investigative services for criminal acts that result in personal injury/death and the destruction of property.
- Develops and implements emergency response plans and policies, focusing on evacuation procedures and traffic control.
- Primary responders to acts of terrorism, focusing on suspect intervention and facility and staff protection.
- Provides public safety communications center for both police and fire.
- Provides EOC facility.

4.2.3 Economic Development/Planning Division

- Develops and maintains the City's General Plan, zoning ordinances, and development standards.
- Provides oversight of the City's development process assuring compliance with zoning and General Plan, including environmental impact reports, design review, historic preservation, landscape review, habitat conservation, floodway prohibitions, and floodplain development standards.

The Planning and Economic Development Department plays an instrumental role in the Mitigation Advisory Committee ensuring this Local Hazard Mitigation Plan is consistent with other long-term and comprehensive planning efforts throughout the County. The Planning and Economic Development Department identifies development policies already in place which help reduce future damage to

structures from natural hazards and would play a crucial role in creating new development policies as necessary to implement the identified mitigation strategies.

Economic Development/Planning wants to ensure the development it promotes is safely constructed and well-sited relative to the risk of the identified natural hazards.

4.2.4 Public Works Department

The Public Works Department and its various divisions are responsible for the construction/physical aspects of implementing structural mitigation projects throughout the City. Mitigation measures minimize the damage to the infrastructure in the event of a natural or man-made disaster. The Public Works Department comprises divisions performing functions that are directly related to hazard mitigation. The Public Works Department is organized into the following divisions: Aviation, Engineering, Facilities Maintenance, Fleet Maintenance, Park Maintenance, Streets, Transit, Urban Forestry, and Campground.

- Maintains certain City infrastructure and facilities (assets) including general aviation airport, streets, buildings, parks, and vehicle fleet but excluding City utility infrastructure and treatment plants. City utility infrastructure and treatment plants are maintained by the Utility Department.
- Responds to City emergencies, including EOC response in disasters. Assists Solid Waste, Police, and Fire Departments with hazardous materials response. Implements traffic and perimeter control efforts through the Streets Division. Deploys heavy equipment assets for debris removal. Provides buses and drivers during evacuations

Engineering

- The Engineering Division is organized under the Public Works Department.
- Reviews design and construction for all City facilities within the public right of way including public grading, floodways, retention basins, storm drains, sewer lines, water lines, streets, and bridges to assure compliance with Federal, State, and local ordinances on seismic and structural stability.
- Develops engineering ordinances and policies that help protect and preserve City infrastructure.
- Develops and implements mitigation strategies to avoid further damage to critical facilities or to reduce/avoid damage during future hazard events.
- Evaluates all circulation elements for projected traffic impacts to determine needed street infrastructure improvements.
- Provides response personnel for evaluation of damaged infrastructure
- Responds as part of the City's EOC Team.
- Coordinates other response agencies assisting with damage assessment.

Aviation

- Maintains the Airport in a state of readiness in the event the Airport is required to receive materials and supplies to mitigate the disaster.
- Develops strategies for use of the Airport for evacuation if required.

Public Transit

- Ensures Public Transit Fleet is available for evacuation if needed during a disaster.

Streets

- Maintains streets to ensure they are open and passable to citizens during and in the aftermath of a disaster.

Fleet Maintenance

- Maintains and ensures the Fleet of City vehicles and equipment is operational in the event of a need during and after a disaster.

Facilities Maintenance

- Maintains all City facilities should they be required for evacuation or other purposes during and after a disaster.

Parks Maintenance

- Maintain Parks for the use of a gathering and potential living space for residents in the event of a disaster.

Urban Forestry

- Forestry maintenance in the City to minimize damage in the event of a disaster.

Campground

- Ensures campgrounds are maintained to receive evacuees in the event of a disaster.

4.2.5 Utilities Department

- Maintains City's Water, Wastewater, and Electrical supply and distribution.
- Responds as part of the City's EOC Team.

4.3 ADMINISTRATIVE AND TECHNICAL CAPACITY

The administrative and technical capabilities of the City, as shown in Table 4-1, include staff, personnel, and department resources available to implement the actions identified in Section 7.0, *Mitigation Strategy* of this LHMP. Specific resources reviewed include those involving technical personnel such as planners/engineers with knowledge of land development and land management practices, engineers trained in construction practices related to building and infrastructure, planners and engineers with an understanding of natural or manmade hazards, floodplain managers, surveyors, personnel with GIS skills and scientists familiar with hazards in the community. Equipment and supplies are maintained by the Public Works Director.

Table 4-1. City of Lompoc Administrative and Technical Capacity

Personnel Resources	Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	Yes	Planning Manager Principal Planner Senior Environmental Coordinator
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	
Planner/engineer/scientist with an understanding of natural hazards	Yes	Senior Environmental Coordinator
Personnel skilled in GIS	Yes	
Full-time building official	Yes	
Floodplain manager	Yes	
Emergency manager	Yes	
Grant writer		
Other personnel		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	
Warning Systems/Services (Reverse 9-1 1, cable override, outdoor warning signals)	Yes	
Other		

4.4 LEGAL AND REGULATORY CAPABILITIES

The legal and regulatory capabilities of the City are shown in Table 4-2, including existing ordinances and codes that affect the physical or built environment of Lompoc. Examples of legal and/or regulatory capabilities can include the City's building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, growth management ordinances, site plan review, general plans, capital improvement plans, economic development plans, emergency response plans, and real estate disclosure plans.

Table 4-2. City of Lompoc Legal and Regulatory Capability

Regulatory Tool (ordinances, codes, plans)	Yes/No
General Plan	Yes
Zoning Ordinance	Yes
Subdivision Ordinance	Yes
Growth Management Ordinance	No
Floodplain Ordinance	Yes
Other special-purpose ordinances (stormwater, steep slope, wildfire)	Yes
Building Code	Yes
Fire Code	Yes
Fire Department ISO rating	Class 3
Erosion or sediment control program	Yes
Stormwater management program	Yes
Site plan review requirements	Yes
Capital improvements plan	Yes
Economic development plan	No, but City has economic development goals and policies
Local emergency operations plan	Yes
Other special plans	
Flood insurance study or other engineering studies for streams	
Elevation certificates (for floodplain development)	

4.5 GIS, COMPUTER AND COMMUNICATION TECHNOLOGY

Lompoc has a comprehensive GIS system maintained by the Information Systems Department. Currently, parcels, zoning, and flood hazards have been mapped, including water, sewer, and storm drain. Hazard layers created for this plan will be incorporated into that system for future planning and updates. The City's GIS system is fully functional and can be used to provide the State of California Office of Emergency Services with preliminary damage assessments.

Through the Lompoc Police Department, the City has a fully functional 911 emergency telephone system, dispatch capabilities, and a reverse 911 system (Installed in April 2005) to issue warnings in advance of disasters.

The City has a website, which will be used to assist with communication necessary for the implementation and future updates of this plan.

4.6 FINANCIAL RESOURCES

The General Fund’s fund balance is an important element that can show the City’s financial strengths or weaknesses. The City operates under a biennial budget as is the custom for many Central Coast municipalities. The adopted Biennial Budget for FYs 2021-23 General Fund reflects a surplus of \$2 million. The projected surplus is vital to restoring the General Fund’s depleted unassigned fund balance. As of June 30, 2020, the City’s unassigned fund balance was negative \$0.2 million. The City Council’s adopted General Fund Reserve Policy target is 25% of annual expenditures of approximately \$11 million. While the surplus is a positive achievement for Lompoc, the General Fund will require an additional \$9 million to follow the City’s funding policy and restore the General Fund’s Reserve Fund to the target of \$11 million. Each budget for the next four budget cycles will attempt to restore full reserves.

Revenues in the General Fund are estimated to increase by \$15.6 million or 20.9%, mainly attributed to the passing of the I2020 ballot measure, which added 1% to sales tax, and the continued growth of tax revenues paid by the Cannabis industry. The City’s major economic drivers for its revenue base are service charges, sales tax, transient occupancy tax, population growth, employment, construction, property values, and commercial activities.

Lompoc’s long-term financial and programmatic policies demonstrate the City’s commitment to providing for the protection of the community from unreasonable risks.

Overall, the City has indirectly referenced mitigation and hazard reduction principles throughout many of the City’s aforementioned documents, plans, and policies. Integrating more direct language referencing mitigation and hazard reduction will help to reinforce the City’s commitment to these principles. The indirect references can also indicate that the responsibility for hazard reduction is shared among numerous departments within the City, making it a challenge to identify a particular department to take the lead in these efforts. To address this potential issue and increase community capabilities globally, continued participation in the MAC is recommended.

Table 4-3 shows specific financial and budgetary tools available to the City such as community development block grants; capital improvements project funding; authority to levy taxes for specific purposes; fees for water, sewer, gas, or electric services; ability to incur debt through general obligations bonds; and withholding spending in hazard-prone areas.

Table 4-3. City of Lompoc Fiscal Capability

Financial Resources	Accessible or Eligible to Use (Yes/No)	Has This Been Used for Mitigation in the Past?	Comments
Community Development Block Grants (CDBG)	Yes		
Capital improvements project funding	Yes		
Authority to levy taxes for specific purposes	Yes		Vote Required
Fees for water and sewer service	Yes		
Incur debt through general obligation bonds	Yes		Vote Required

Financial Resources	Accessible or Eligible to Use (Yes/No)	Has This Been Used for Mitigation in the Past?	Comments
Incur debt through special tax bonds	Yes		Vote Required
Incur debt through private activity bonds	No		
Federal Grant Programs (Hazard Mitigation Grant Program)	Yes		

4.7 EDUCATION AND OUTREACH CAPABILITIES

This type of local capability refers to education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information. Examples include natural disaster or safety-related school programs; participation in community programs such as Firewise or StormReady; and activities conducted as part of hazard awareness campaigns such as an Earthquake Awareness Month (February each year), National Preparedness Month (September), or the Great California ShakeOut (a statewide earthquake drill that happens annually on the third Thursday of October). The City can capitalize on its existing educational capacities, even non-hazard related such as school partnerships, and build new capabilities to educate the larger community on hazard risk and mitigation options.

In addition to the countywide resources described in Section 4.2.5, *County Education and Outreach Capabilities*, this section describes several existing outreach programs that are used to promote community awareness and readiness for natural disasters and hazards in the City. The City participates in numerous community outreach programs to educate and inform the public prior to an emergency, disaster or hazardous event. The Fire Department educates every third grader within the City annually using the Fire Safety Trailer that incorporates home Escape Plans, Stay Low and Go, and general home fire safety practices. In conjunction with American Red Cross, the Fire Department participated in the “Sound the Alarm” program to install smoke detectors within the underserved communities in the City. Annually with the assistance of the Lompoc Valley School District, the “Every 15 Minutes – Anti-Drunk Driving” campaign is given to high school students prior to graduation and summer vacation. The C.E.R.T. is very successful in training community member to assist City staff in the event of an emergency and this group, along with the Fire Department, actively recruits during weekly Farmers Markets and the summer Olde Town Markets. Both the Water and the Electric Divisions provide conservation and emergency messages in the monthly billing cycles. The City Water Division also provides a “Low Water Use Garden” open to the public to educate the community on drought resistant plants.

4.8 RELEVANT PLANS, POLICIES, AND ORDINANCES

The City has a range of guidance documents and plans for each of its departments that help govern the City. These include a General Plan, with a Housing Element, Public Works and Public Utilities Plans, Public Facilities Master Plan, Capital Improvement Plans, Storm Water Management Program, Parks & Recreation Master Plan, Redevelopment Project Guidelines, and Standardized Emergency Management Plan. The City uses building codes, zoning ordinances, subdivision

ordinances, and various planning strategies to address how and where development occurs. One of the essential ways the City guides its future is through policies laid out in the General Plan. The LHMP directly informs these plans and is used to evaluate the need for adjustments or updates to existing plans and programs. The City considers the LHMP's assessment of capabilities, hazards, and vulnerabilities to inform planning, capital improvements, programs, decision-makers, and the public. The City also implements mitigation actions through the City's General Plan, capital improvement program, maintenance programs, grant programming, community outreach, and budget process.

The purpose of this section is to present pertinent plans, programs, codes, and policies that support risk education and reduction and/or help to implement mitigation measures. It is important to note that these plans, programs, codes, and policies were not only used to update the LHMP but were also evaluated to determine their effectiveness in risk education and reduction efforts. Additionally, information gleaned through the City's LHMP update process will be used in the plans; programs, codes, and policies update process. The plans, programs, codes, and policies will continue to provide the foundation and in some cases be a vehicle for the implementation of mitigation strategies. Below is a summary of the more significant relevant plans, programs, codes, and policies:

4.8.1 General Plan

The General Plan is a comprehensive statement of goals and policies relating to the development of the community, the management of potential hazards, and the protection of natural and cultural resources within its study area. The General Plan directs Lompoc's future by expressing community desires and by providing the basis for regulations to protect and enhance the community's quality of life for future generations. The summary below will document the portions of Lompoc's General Plan that are applicable to hazard mitigation.

Land Use Element

The Land Use Element of the General Plan establishes Lompoc's vision and fundamental land use philosophy, including directing development to the most suitable locations, and maintaining the environmental, social, physical, economic, and public health and vitality of the area. The element therefore focuses on the organization of the community's physical environment into logical, functional, and visually pleasing patterns that are consistent with local social values. Of primary concern are the type, intensity, location, and character of land uses that will be permitted in the future.

Urban growth in Lompoc is restricted by the Sphere of Influence and Urban Limit Line, which delineates the City's future boundaries and service area. Growth is important to the future of Lompoc. The City encourages the development of undeveloped and vacant land within City boundaries. The City has also moved its Urban Limit Line in the 2030 General Plan indicating intent for modest growth. Additionally, in 2016 LAFCO approved the annexation of 10 acres to the north of the City. To ensure that residents of Lompoc have access to basic needs, the City will only allow development in areas where adequate public facilities and services, such as water, utilities, and fire/police protection, are available at the time of development. To maintain an adequate supply of clean water, the City will designate groundwater recharge areas as Open Space and protect those areas from incompatible uses. Other areas may be maintained as Open Space if they are

used to protect public health and safety and against natural and man-made hazards. Such areas may include regions in which topographic, geologic, or soil conditions indicate a significant danger to future occupants.

Since the previous update of the LHMP in 2017, new residential development has occurred consistent with the adopted Land Use Element and existing regulations and development standards. Growth in the City consists of infill development, some buildout of areas at the outer portion of the urban boundary (e.g., Bailey Avenue Sphere of Influence and Annexation Proposal), minor extension of rural residential development, and additional recreational land uses at the edge of the urban area. Residential land uses and development are generally limited to areas adequately serviced by the County, including utilities, services, and emergency response capabilities. Some development has included changes to land use and zoning (e.g., Summit View Homes Residential Development) and the City considers the adequacy of services for projected growth. Since new urban development generally lies within existing hazard mitigation capabilities and contributes to planned growth in the City's existing and planned urban service areas, vulnerability for new residents has not substantially changed since 2017.

Circulation Element

Policy 2.2 of the City's 2030 General Plan encourages regulatory agencies to designate routes away from urban and environmentally sensitive areas for the transportation of hazardous and explosive materials. Such a policy would help mitigate the negative effects on Lompoc's residents from future hazardous materials incidents.

Housing Element

Dilapidated residences and those that do not comply with the City's Uniform Building Code requirements are more likely to be negatively affected by natural hazards. Therefore, the City will provide funding for housing rehabilitation programs that encourage private and public capital participation, preserve the existing housing stock, and provide more housing opportunities within the City. The City has also funded a comprehensive Code Enforcement program with a full-time Code Enforcement Officer. Through this program, the City has compelled owners of dilapidated housing to improve their homes. When evaluating sites for housing, the City avoids environmental hazards or sensitive resource areas. The Housing Element for the 2014 – 2022 planning cycle was updated and adopted by the City Council on December 15, 2015. The California State Department of Housing and Community Development found the Housing Element in full compliance on December 29, 2015.

Public Services Element

To avoid a power outage in Lompoc, the City requires the undergrounding of existing overhead utility distribution lines in association with new development projects. To ensure that residents have access to basic needs, the City will only allow development in areas where adequate public facilities and services, such as water, utilities, and fire/police protection, are available at the time of development.

To minimize street flooding, the City will ensure that the storm drain system has the adequate capacity to handle runoff from a design standard storm and, where feasible, will expand the capacity of the system to control storm flows. New development will be required to minimize the

amount of off-site drainage by retaining storm waters for on-site percolation, providing adequate drainage facilities for remaining off-site flows, maintaining natural drainage channels, and avoiding alteration of off-site drainage courses.

The City participates in an automatic aid agreement with the Santa Barbara County Fire Department and in mutual aid agreements with VSFB, and the State of California. The City is concerned with promoting fire mitigation through its encouragement of public education regarding fire prevention, as well as safety and first aid medical procedure exercises. Fire mitigation is also performed by the City in that it amended the Municipal Code to require the installation of automatic fire protection systems in all new buildings that exceed the fire protection and on-scene response capabilities of the Fire Department. The Fire Department is responsible for reviewing all development projects to determine if they adhere to fire safety requirements.

Safety Element

Lompoc is aware of the hazards that can affect the City. These hazards include flooding, liquefaction, steep slopes, seismic hazards, wildland fires, and hazardous material incidents. To mitigate the damages caused by those hazards, the City aims to avoid placing critical facilities in hazardous areas. Several hazard maps included in this Plan detail where these hazardous areas are located within the City. The City's Zoning Ordinance will incorporate specific standards for location, designing, and reviewing critical facilities. The City will also amend the Zoning Ordinance to require all publicly owned critical facilities to provide and maintain emergency electrical generating capability. An emergency warning system will be implemented in the City and, for event-specific risks brought to the City's attention, the City shall develop event-specific plans, procedures, or programs to manage the risk and maximize public safety. The LHMP is incorporated by reference in the Safety Element.

Flood

To mitigate damage that can result from floods, the City will designate the land within floodways for open space land uses. Development may be permitted on boundaries of the floodway provided that building setback requirements from the Santa Ynez River and other streams are met and finished floor elevations are at least two feet above the 100-year flood elevations. Any development that impairs the ability of the floodway to convey floods or compounds potential flooding will be prohibited. The City will also amend the Floodplain Management Ordinance to maintain consistency with Federal and State requirements, establish a regulatory floodway, regulate grading and filling activities that diminish the carrying capacity of the floodway, and establish building setbacks from the Santa Ynez River and other water bodies. Lompoc will coordinate with the Santa Barbara County Flood Control and Water Conservation District in mitigating flood impacts from new construction, and also with FEMA and the USDA Soil Conservation Service in flood protection activities. The City will create public awareness programs to educate residents on flood hazards and procedures to minimize injury and property damage before, during, and after a flooding event.

Wildfire

To help reduce the damage caused to development from wildfires, the City will determine the suitability and design of development in wildland fire hazard areas. Uses that increase the danger

of wildland fires will be restricted. Implementation Measure 14 requires the Zoning Ordinance to be amended to establish the minimum distance between buildings and wildland fire risk areas to be no less than 60 feet, unless the following conditions are met: properly built access roads; available water supply; construction with materials that are more fire-resistant than standard requirements; and construction and maintenance of fuel breaks. Implementation Measure 17 requires the Fire Protection Ordinance should also be amended to allow the Fire Chief to require that developments located in areas beyond the four (4) minute response time meet more stringent construction code requirements to provide necessary fire protection. The City will also require and review landscape plans for all development projects in wildland fire hazard areas for consistency with fire-resistant and drought-tolerant landscaping concepts.

Many of these policies and development standards are designed to reduce the risk of wildfire damage. They provide a foundation for implementing the identified wildfire mitigation strategies within this LHMP. Through participation in the Lompoc LPT, the Lompoc Fire Department will use this foundation to help implement the identified wildfire mitigation strategies as resources are available.

Seismicity

Lompoc lies in a seismically active region and the potential for future earthquakes to cause structural damage is high, particularly for unreinforced masonry buildings. Unreinforced masonry buildings have inherent brittleness because they lack anchorage and continuity ties that would hold the structural components together during an earthquake. Seismic strengthening of unreinforced masonry buildings promotes public safety by reducing the potential for building damage and collapse. However, sometimes seismic retrofitting is infeasible and demolition becomes the appropriate course of action. For example, the Ruskowski building in Old Town Lompoc was demolished in 2019 after being deemed unsafe due to unreinforced masonry. Additional known unreinforced masonry buildings remain downtown, primarily in the Old Town District on H Street, and Ocean Avenue. All seismically vulnerable buildings, including critical facilities and City-owned properties, will continue to be identified by the City and those buildings will be required to be reinforced to minimize the risk of personal injury during an earthquake such as renovations to Station 51 downtown. The City regards seismic retrofitting as a way to mitigate the damages caused by earthquakes. For City-owned facilities, the City can apply for funding under the Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990. All new buildings are constructed per current seismic safety design standards. Another earthquake mitigation action that the City promotes is public awareness programs, designed to create awareness of seismic hazards and procedures to minimize injury and property damage before, during, and after an earthquake.

Steep slopes are also a concern in Lompoc because development built on steep grades can be more susceptible to being impacted by an earthquake, landslides, and liquefaction. Therefore, the City may permit development on hillsides only where it can be demonstrated that geologic conditions are sound for construction purposes. Before development is allowed to be constructed on slopes, a Certified Engineering Geologist must prepare a report which includes recommendations for remedial measures to ensure the stability of natural and manufactured slopes within the area affected by the development. For areas with 20 percent slopes or greater, the stability of the slopes must be addressed by a Registered Soils Engineer. Liquefaction potential must also be evaluated by a Registered Soils Engineer for development in liquefaction hazard areas. The Zoning Ordinance

will be amended to require developers proposing structures on or adjacent to steep slopes to develop and implement hillside drainage plans to reduce the risk of further movement by existing landslides, to site new structures away from steep hillsides and the toes of existing landslide surfaces, and to perform site-specific slope stability investigations and analyses by a Registered Geotechnical Engineer. Critical facilities will not be permitted within areas prone to slope instability or liquefaction during an earthquake.

Hazardous Materials

To prevent hazardous material transportation incidents from affecting residential areas, open space buffers will be created between hazardous materials routes and residential neighborhoods. Also, residents within a quarter mile of new hazardous materials handling facilities will be notified immediately by the City emergency response organizations of any accidental occurrences such as spills, leaks, or eruptions that may affect the health, safety, and welfare of the public. The City will ensure that businesses and industries that use, store, and handle hazardous materials do so in compliance with applicable City policies as well as State and local laws, guidelines, and regulations, including permitted uses within manufacturing and industrial zones.

4.8.2 Comprehensive Emergency Management Plan

The City's Comprehensive Emergency Management Plan. meets all SEMS and NIMS requirements. The Plan discusses mitigation in the form of training and exercises, which are essential at all levels of government to make emergency operations personnel operationally ready. All emergency plans should include provisions for training. The objective is to train and educate public officials, emergency response personnel, and the public. The Lompoc Fire Department provides EOC training for all employees at the Awareness and Field Level. In addition to the training, exercises should be conducted regularly to maintain the readiness of operational procedures. Exercises provide personnel with an opportunity to become thoroughly familiar with the procedures, facilities, and systems that will be used in emergencies. There are several forms of exercises:

- Tabletop exercises provide a convenient and low-cost method designed to evaluate policy, plans, and procedures, and resolve coordination and responsibilities. Such exercises are a good way to see if policies and procedures exist to handle certain issues.
- Functional exercises are designed to test and evaluate the capability of an individual function such as evacuation, medical, communications, or public information.
- Full-scale exercises simulate an actual emergency. They typically involve complete emergency management staff and are designed to evaluate the operational capability of the emergency management system.

4.8.3 Storm Water Management Program

The City maintains an approved Storm Water Management Program (SWMP), under the National Pollutant Discharge Elimination System (NPDES) Phase II Small Municipal Separate Storm Sewer System (MS4) program. The City's SWMP was approved on October 17, 2008, by the Central Coast Regional Water Quality Control Board.

The SWMP can be found on the City's website and addresses the six minimum control measures: Public Involvement / Participation; Public Education and Outreach; Illicit Connection and Discharge Detection and Elimination; Municipal Operations Control; Construction Site Control; and New Development / Redevelopment Control). The SWMP and its related Storm Water Management Ordinance apply to all property within the City limits and property owned by the City, wherever it is located.

4.8.4 Zoning and Subdivision Ordinances

The State of California has empowered all cities and counties to adopt zoning ordinances. The City's original Zoning Ordinance was adopted in 1974. Local land use controls include the Zoning Ordinance, which shapes the form and intensity of land use and residential development. Consistent with the General Plan, the City's Zoning Ordinance allows a range of zones and dwelling unit densities. Zoning ordinance regulations related to hazard mitigation relate to the risk assessment for hazards within the City, including flooding.

The City has a five-member Planning Commission, which is an advisory body to the City Council. The Commission was established under State law to provide relief in special cases where the exact application of the terms of the ordinance would be unduly restrictive and cause hardship, in addition to generally reviewing zoning and subdivision proposals. The Planning Commission hears and decides upon the interpretation and the application of the provisions of the Zoning and Subdivision Ordinances. Although the Commission has certain discretionary powers in making its decisions, the Commission must always abide by and comply with the powers granted to it by the local Zoning and Subdivision Ordinances and the State's enabling acts. Additionally, the Planning Commission may recommend actions to the City Council, and the Planning Commission's actions may be appealed to the City Council.

4.8.5 Building Codes

The State of California has adopted the current California Building Codes, which are enforced in the City. The California Uniform Statewide Building Code is based on the 2013 International Building Code with State amendments.

The City provides a full-service Building and Safety Division, which is responsible for enforcing State, City, and County Codes for building residential and commercial structures, enforcing environmental codes and guidelines for maintaining existing structures. In 1999, the City received the highest rating for its building code effectiveness in residential and commercial construction from the Insurance Services Office (ISO).

The ISO is an insurer-supported organization that provides advisory insurance underwriting and rating information to insurers. The ISO uses a rating scale of 1 to 10 with 1 being the highest rating given. The City's evaluation can be used as a basis for providing rating credits to individual property insurance policies.

The City's Potentially Hazardous Building Earthquake Safety Mitigation Program (Section 15.40.020 of the Lompoc Municipal Code) allows the City Building Official to continue to identify potentially hazardous buildings, including unreinforced masonry, within the City and notify the legal owner(s) of every identified potentially hazardous building that the building is considered to be a

structure of the general type that historically has exhibited little resistance to earthquake motion. Owners of potentially hazardous buildings must comply with all State and local regulations and laws, including but not limited to the obligation to post a conspicuous sign at the entrance to the building.

4.8.6 Floodplain Management Ordinance

The City has an enforced Floodplain Ordinance requiring that all habitable floors must be built a minimum of two feet above the 100-year floodplain and the special flood hazard areas. It is important to note, however, that many parts of the City flood due to stormwater infrastructure – not because of their proximity to the 100-year floodplain.

Floodplain districts identified in the Flood Insurance Rate Maps FIRMs include the following flood hazard zones and definitions:

- **Zone A** is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analysis is not performed for such areas, no Base Flood Elevations or flood hazard factors are determined.
- **Zone AO** is the flood insurance rate zone that corresponds to areas of 100- year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
- **Zone A1-A30** is the flood insurance rate zone that corresponds to areas of 100-year flood; base flood elevations and flood hazard factors are determined.
- **Zone B** is the flood insurance rate zone that corresponds to areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood.
- **Zone C** is the flood insurance rate zone that corresponds to areas of minimal flooding.

All potential development projects located within floodplains must follow an established development review process. Developments involving drainage ditches or watercourses in floodplains must receive Federal, State, and Local review and permits as required by the Floodplain Administrator and the Lompoc Municipal Code.

4.8.7 National Flood Insurance Program (NFIP) and Repetitive Loss (RL) Properties

The City is part of the National Flood Insurance Program (NFIP). The NFIP aims to reduce the impact of flooding on private and public structures. It does so by providing affordable insurance to property owners and by encouraging communities to adopt and enforce floodplain management regulations. These efforts help mitigate the effects of flooding on new and improved structures. Repetitive loss properties are defined as property that is insured under the NFIP that has filed two or more claims above \$1,000 each within any consecutive 10-year period since 1978. There are currently no repetitive loss properties in Lompoc.

The City's Flood Insurance Rate Map (FIRM) numbers are 060334-720F, 736F, 737F, 738F, 739F, 743F. The FIRMs were revised in September 2005 and are used by both the public and private sectors to determine flood insurance requirements and rates and to administer the City's Flood Zone Management Ordinance.

4.8.8 Capital Improvement Plan

The City systematically plans, schedules, and finances capital projects to ensure cost-effectiveness and conformance with established policies and longer-term plans through a Capital Improvement Plan (CIP). This CIP is a six-year plan for maintaining and improving the City's infrastructure over the next three budget cycles. Although the CIP covers a six-year planning horizon, it will be updated every two years in conjunction with the budget process to reflect ongoing changes as new projects are added, existing projects are modified, and completed projects are removed from the program document. The first two years of the CIP generally form the basis of funding decisions for capital projects based on City Council priorities for Public Safety, Economic Development, Parks, Infrastructure, and Code Enforcement.

The City's need for a Capital Improvement Program has increased following the economically challenging years since 2008. The backlog of maintenance projects amounts to \$123,815,014 over the life of the CIP and continues to grow as funding sources are not able to keep up with the demand. There are also new capital needs by our community to keep up adequate service levels within our City and Impact Fees will need to be studied and adjusted according to those needs. The next steps will include developing an ongoing strategy for planning, funding, and scheduling necessary maintenance and/or replacement of all capital assets.

4.9 OPPORTUNITIES FOR MITIGATION CAPABILITY IMPROVEMENTS

The City continuously strives to mitigate the adverse effects of potential hazards through its existing capabilities while also evaluating the opportunities for improvements. Based on the capability assessment, the City has existing regulatory, administrative/technical, education/outreach, and 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:

- **Regulatory Opportunities:** As part of this update, the City will comply with AB 2140 by amending its Safety Element to incorporate the LHMP by reference. The City will consider the LHMP in policy, land use plans, and programs, including flood management. For example, the City seeks to undertake wildfire scenario planning to identify and resolve wildfire vulnerabilities in Lompoc.
- **Administrative/Technical Opportunities:** The City continues to improve its resilience to ensure emergency response operations are sustained during a hazardous event, including seismic upgrades and improvements to public safety facilities and planning. Enhancements to hazard training for staff in partnership with the County and other agencies or stakeholders would improve the City's ability to mitigate hazards with the latest knowledge and resources. The City aims to address hydrologic issues through flood risk attenuation along the Santa Ynez River.

- **Outreach Opportunities:** Enhanced community outreach, emergency notifications, and trainings would further enhance the City’s capabilities to respond to and recover from hazards. The City could expand outreach through digital tools such as social media, participate in the Great California ShakeOut, and increase FireWise outreach events and media coverage.
- **Fiscal Opportunities:** The City can update its CIP to include hazard mitigation actions from the LHMP. The City will continue to seek grants (e.g., HMGP, BRIC) to fund these CIP projects and related projects in the City’s mitigation strategy. The City can seek opportunities to partner with the County and/or other stakeholder agencies in grant applications to address regional hazards more effectively. The City could also consider expanding its fiscal capabilities through its annual budget process and other revenue measures (e.g., raising taxes, property assessments, bonds).

5.0 HAZARD ASSESSMENT

5.1 OVERVIEW

The purpose of this section is to review, update, and/or validate the hazards identified for the 2022 City of Lompoc LHMP. The intent is to confirm and update the description, location and extent, and history of hazards facing the City now and in the future. This assessment also considers the potential exacerbating effects of climate change. The importance of this review is to ensure that decisions and mitigating actions are based on the most up-to-date information available.

Another purpose of this section is to screen the hazards to determine their relative probability and severity to inform the risk posed to various communities and resources. This assessment will provide an understanding of the significance by ranking hazards by their priority in the City.

In 2021, the MAC reviewed and revised 1) the list of hazards by community or geographic area; 2) the information and material presented for each hazard; and 3) the prioritization of the hazards. The City LPT refined the list of hazards applicable to the City and confirmed the hazard prioritization. The following sections provide the results of that effort.

5.2 HAZARD SCREENING/PRIORITIZATION

The Hazard Assessment presented here reflects the City’s 2022 review and modifications to the updated risk assessment presented in Chapter 5.0, *Hazard Assessment*, and Chapter 6.0, *Vulnerability Assessment* of the 2022 MJHMP. Applicable hazard information from the City’s 2017 LHMP was incorporated during the development of this section. A comprehensive treatment of hazards and their descriptions may be found in Chapter 5.0 of the Santa Barbara County 2022 MJHMP.

The potential extent, probability, frequency, and magnitude of future occurrences were all used to identify and prioritize the list of hazards most relevant in the City. The City LPT completed the Plan Update Guide to rank the hazards and identify key hazards to help inform this assessment (Appendix A). As summarized in Table 5-1, the local priority hazards in the City are based on the screening of frequency/probability of occurrence, geographic extent, potential magnitude/severity

of the hazard, and overall significance. Local experience, MAC/LPT input, and community feedback also informed the assessment of local priority hazards. After reviewing the localized hazard maps and exposure/loss assessment provided in the 2022 MJHMP, the following hazards were identified by the Lompoc LPT as their top priorities (Appendix A). A brief rationale for each hazard is included below. This assessment and description of key hazards in the City are provided in addition to the 2022 MJHMP's comprehensive assessment of regional hazards that may affect the City.

Table 5-1. City of Lompoc Local Priority Hazards

Hazard Type and Ranking	Score	Planning Consideration Based on Hazard Level
Wildfire	12	Significant
Earthquake	11	Significant
Drought and Water Shortage	11	Significant
Flood	8	Moderate
Dam Failure	8	Moderate

To continue compliance with the DMA of 2000, the City accepts the County's natural hazard profiles presented in Chapter 5.0, *Hazard Assessment* with the following notes and refinements or elaborations provided specifically for the City in subsections below. The City's LPT acknowledged other hazards are either not a threat, are highly unlikely within the City limits, or are adequately addressed by the 2022 MJHMP and do not require additional information to be relevant to the City's hazard setting; therefore, these hazards are not addressed further in the City's LHMP. These additional hazards are being addressed in the more comprehensive 2022 MJHMP.

5.3 HAZARD PROFILES

The following sections represent work done by the MAC and confirmed by the Lompoc LPT. The following material is intended to be an overview of the hazards; more information may be found in the State of California Multi-Hazard Mitigation Plan, the Lompoc General Plan, Safety Element, Seismic, and other documents.

5.3.1 Wildfire

Description of Hazard

Wildfires can be classified as either wildland fires or wildland-urban interface (WUI) fires. The former involves situations where wildfire occurs in an area that is relatively undeveloped except for the possible existence of basic infrastructure such as roads and power lines. A WUI fire includes situations in which a wildfire enters an area that is developed with structures and other human developments. In WUI fires, the fire is fueled by both naturally occurring vegetation and the urban structural elements themselves. According to the National Fire Plan issued by the U.S. Departments of Agriculture and Interior, the wildland-urban interface is defined as "...the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels."

Certain conditions must be present for a wildfire hazard to occur; a large source of fuel must be present, the weather must be conducive (generally hot, dry, and windy), and fire suppression sources must not be able to easily suppress and control the fire. The cause of a majority of wildfires is human-induced or lightning; however, once burning, wildfire behavior is based on three primary factors: fuel, topography, and weather. Fuel will affect the potential size and behavior of a wildfire depending on the amount present, its burning qualities (e.g., level of moisture), and its horizontal and vertical continuity. Topography affects the movement of air, and thus the fire, over the ground surface. The terrain can also change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Temperature, humidity, and wind (both short and long term) affect the probability, severity, and duration of wildfires.

Location and Extent of Hazard in Lompoc

The climate, topography, and vegetation in Santa Barbara County are conducive to wildfires. California Department of Forestry and Fire Protection, Fire and Resource Assessment Program (CDF-FRAP) was mandated to map areas of significant fire hazards based on fuels (vegetation), terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, define the application of various mitigation strategies to reduce the risk associated with wildland fires. The most current mapping efforts by CDF-FRAP were conducted in 2007. Figure 5-1 below shows the Fire Hazard Severity Zones located in Santa Barbara County.

History of Hazard in Lompoc

There have been no significant wildfires within the City (refer to Figure 5-4 of the MJHMP). There have been only 2 recent wildfires adjacent to Lompoc within the past 10 years, including the Miguelito Fire in 2015 and the Canyon Fire in 2016. The Miguelito Fire burned over 632 acres in the hills above the City of Lompoc. The Canyon Fire burned 12,742 acres on Vandenberg Space Force Base. The fires did not directly threaten Lompoc; however, the smoke and ash produced created air quality issues for hundreds of miles.

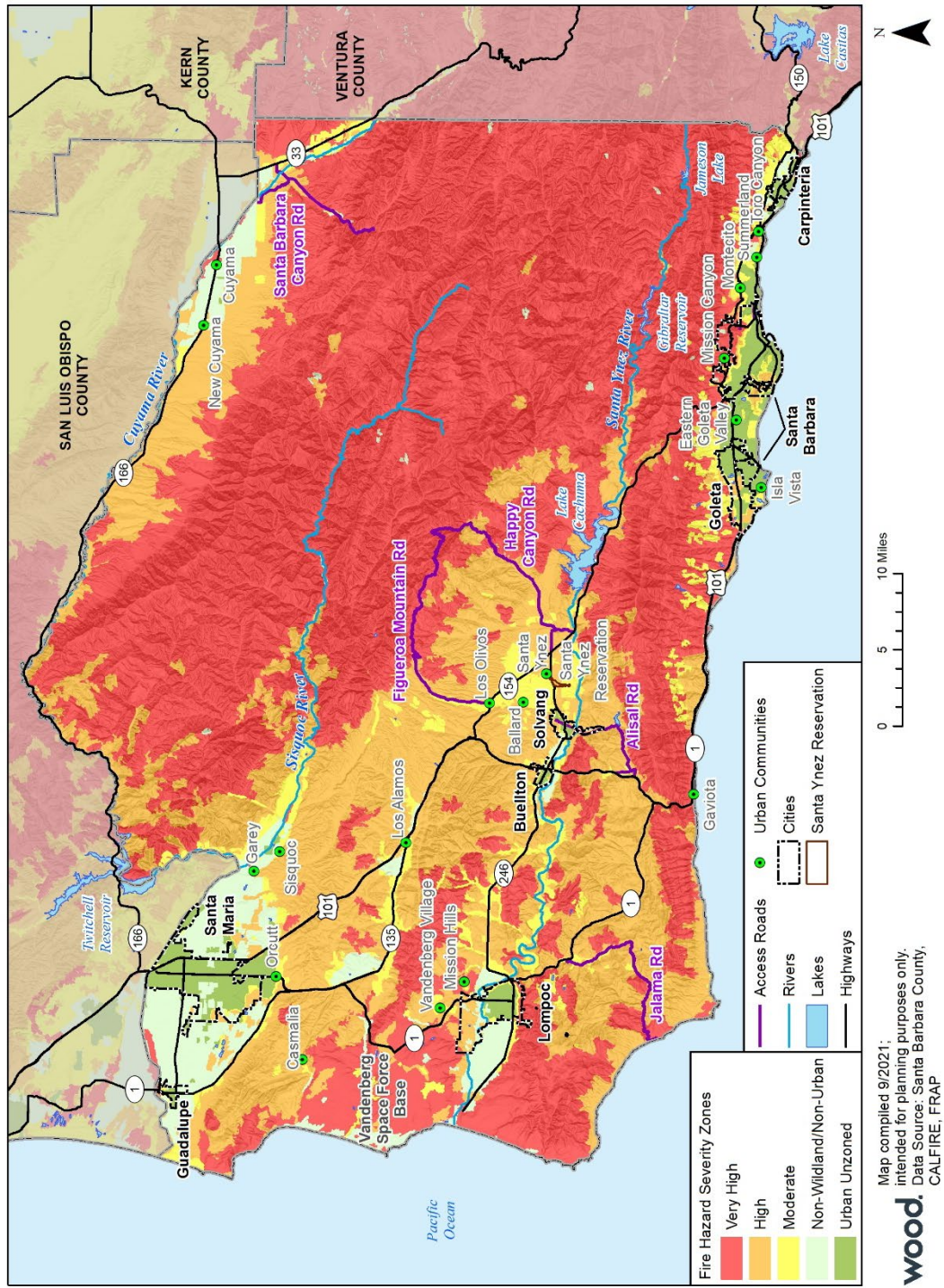
Probability of Occurrence

Vegetation and topography were significant elements in the identification of the fire threat zones. A substantial amount of the vegetation in Lompoc is commonly called chaparral; it is a dense and scrubby bush that has evolved to persist in a fire-prone habitat. Chaparral plants will eventually age and die; however, they will not be replaced by new growth until a fire rejuvenates the area. Chamise, Manzanita, and ceanothus are all examples of chaparral which are quite common in Lompoc.

Climate Change Considerations

Climate change plays a significant role in wildfire hazards. The changing conditions from wet to dry can create more fuel; the increased possibility of high winds increase risk and present a challenge, and drought conditions could hinder the ability to contain fires. Large wildfires also have several indirect effects beyond those of a smaller, local fire. These may include air quality and health issues, road closures, business closures, and other forms of loss. Furthermore, large wildfires increase the threat of other disasters such as landslides and flooding.

Figure 5-1. Santa Barbara County Fire Hazard Severity Zones



5.3.2 Earthquake & Liquefaction

Description of Hazard

An earthquake is caused by a release of strain within or along the edge of the Earth's tectonic plates producing ground motion and shaking, surface fault rupture, and secondary hazards, such as ground failure. The severity of the motion increases with the amount of energy released, decreases with distance from the causative fault or epicenter, and is amplified by soft soils. After just a few seconds, earthquakes can cause massive damage and extensive casualties.

Most people are familiar with the Richter scale, a method of rating earthquakes based on strength using an indirect measure of released energy. The Richter scale is logarithmic. Each one-point increase corresponds to a 10-fold increase in the amplitude of the seismic shock waves and a 32-fold increase in energy released. For example, an earthquake registering 7.0 on the Richter scale releases over 1,000 times more energy than an earthquake registering 5.0.

Table 5-2. Richter Scale

Richter Magnitudes	Earthquake Effects
Less than 3.5	Generally not felt but recorded.
3.5-5.4	Often felt, but rarely causes damage.
Under 6.0	Slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1-6.9	Can be destructive in areas up to about 100 kilometers across residential areas.
7.0-7.9	Can cause serious damage to larger areas.
8 or greater	Can cause serious damage in areas several hundred kilometers across.

Peak ground acceleration (PGA) is a measure of the strength of ground shaking. Larger peak ground accelerations result in greater damage to structures. PGA is used to depict the risk of damage from future earthquakes by showing earthquake ground motions that have a specified probability (10%, 5%, or 2%) of being exceeded in 50-year return period. These values are often used for reference in construction design, and in assessing relative hazards when making economic and safety decisions.

Liquefaction is the phenomenon that occurs when ground shaking causes loose, saturated soils to lose strength and act as a viscous fluid. Liquefaction causes two types of ground failure: lateral spread and loss of bearing strength. Lateral spreads develop on gentle slopes and entail the sidelong movement of large masses of soil as an underlying layer liquefies. Loss of bearing strength occurs when the soil supporting structures liquefy, causing the structures to settle; resulting in potential damage.

Location and Extent of Hazard in the City of Lompoc

The City, like the rest of Santa Barbara County, is located in a high seismic activity zone. The City is located in the Transverse Range geologic province. The movement of continental plates manifests primarily along the San Andreas Fault system. The San Andreas fault is situated 7 miles northeast of Lompoc; active faults in the San Andreas Fault system that fall within Lompoc include the Nacimiento, Ozena, Suey, and Little Pine faults. Other active faults in the region include the Big Pine, Mesa, Santa Ynez, Graveyard-Turkey Trap, More Ranch, Pacifico, Santa Ynez, and Santa Rose Island faults. Additionally, the Santa Ynez River Fault runs through the southern portion of the City. A map of faults in the Santa Barbara County region is located below (Figure 5-2).

The City has areas of liquefaction that would cause severe damage in the downtown and lower eastside areas (Figure 5-3). The northern portion of the City is considered to have a low liquefaction potential and the southern portion of the City is considered to have a low to high liquefaction potential. After earthquakes, some regions may be prone to liquefaction. On level ground, liquefaction results in water rising to the ground surface. On sloping ground, liquefaction will usually result in slope failure.

History of Hazard in the City of Lompoc

Given that the City is located in a high seismic activity zone, it has a long history of earthquakes. Although most seismic activity in California occurs along the San Andreas Fault system, most historic seismic events in the Lompoc region have been centered offshore on an east-west trending fault. Refer to Figure 5-10 of the MJHMP for a depiction of historical epicenters of earthquakes located in the County.

On October 26, 2017, at 1:38 p.m., a magnitude 4.3 earthquake struck 19 miles off the coast of Lompoc. The quake was centered two miles deep in the Pacific Ocean. Some Lompoc residents reported a sharp jolt and a few seconds of shaking, but no damage was reported. Lompoc Valley Middle School (the only multistory school campus in the City) was evacuated because it has two stories (Lompoc Record 2017).

There is no historic evidence of liquefaction due to ground shaking in Santa Barbara County (Santa Barbara County Planning and Development Department 2015)

Probability of Occurrence

The United States Geological Survey (USGS) and their partners, as part of the latest Uniform California Earthquake Rupture Forecast Version 3 (USGS 2015), have estimated the chances of having large earthquakes throughout California over the next 30 years. Statewide, the rate of earthquakes around magnitude 6.7 (the size of the 1994 Northridge earthquake) has been estimated to be one per 6.3 years (more than 99 percent likelihood in the next 30 years); in southern California, the rate is one per 12 years (93 percent likelihood in the next 30 years). Southern California's rates are given in Table 5-3.

Table 5-3. Southern California Region Earthquake Likelihoods

Magnitude (greater than or equal to)	Average Repeat Time (years)	30-year likelihood of one or more events
5	0.24	100%
6	2.3	100%
6.7	12	93%
7	25	75%
7.5	87	36%
8	522	7%

Source: USGS 2015.

Climate Change Considerations

To date, no credible evidence has been provided that links climate to earthquakes; however, climate and weather do play a significant role in the response and recovery from earthquakes. Effects from climate change could create cascading complications and impacts.

Figure 5-2. Santa Barbara County Probability of Shaking 2% in 50 Years

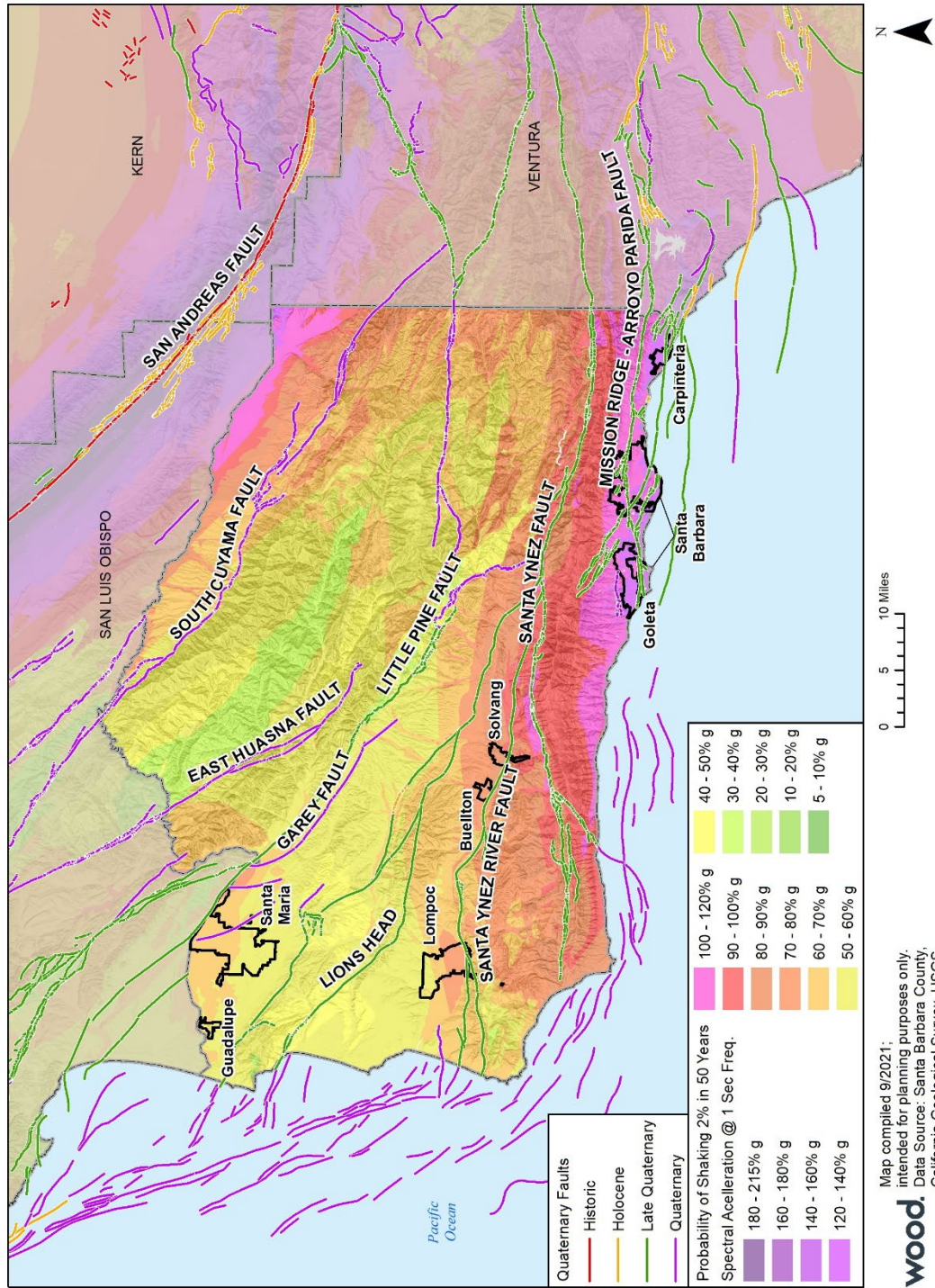
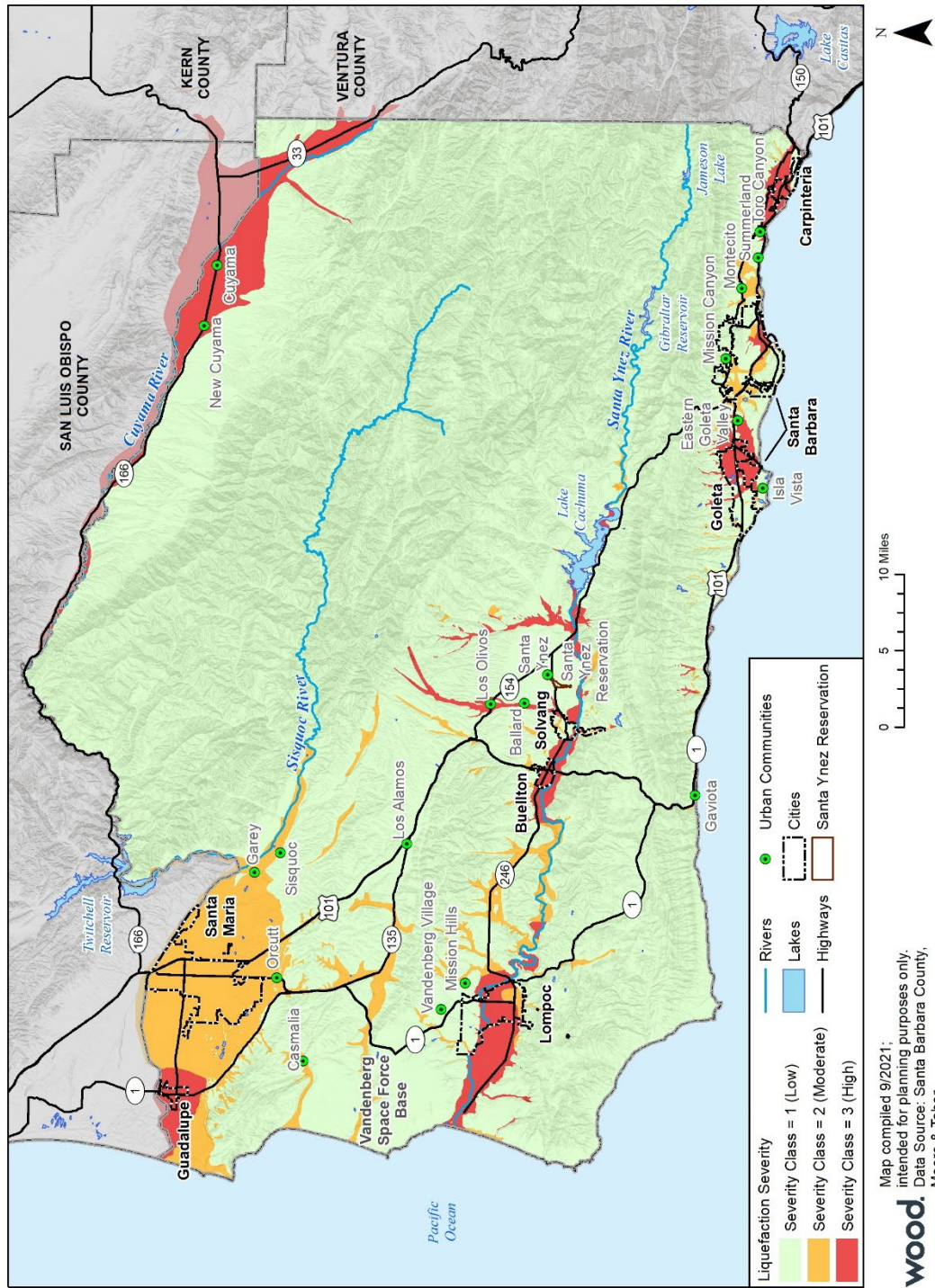


Figure 5-3. Santa Barbara County Liquefaction Severity



5.3.3 Drought and Water Shortage

Description of Hazard

Drought and water shortages are a gradual phenomenon and generally are not signified by one or two dry years. California's and the county's extensive system of water supply infrastructure (reservoirs, groundwater basins, and interregional conveyance facilities) generally mitigates the effects of short-term dry periods for most water users. However, drought conditions are present when a region receives below-average precipitation, resulting in prolonged shortages in its water supply, whether atmospheric, surface, or groundwater. A drought can last for months or years or may be declared after as few as 15 days. Drought can have secondary impacts. For example, drought is a major determinant of wildfire hazard, in that it creates a greater propensity for fire starts and larger, more prolonged conflagrations fueled by excessively dry vegetation, along with reduced water supply for firefighting purposes.

Location and Extent of Hazard in the City of Lompoc

The entire county is subject to drought conditions and water shortages. The effects of the drought are most visible in the Lompoc when looking at the current capacity and maximum storage of the two main water reservoirs in the county, Lake Cachuma and Twitchell. Experience with Lompoc droughts tells us that drought impacts are felt first by those most dependent on or affected by annual rainfall – fire departments, farmers engaged in agriculture, residents relying on wells, or other small water systems lacking reliable water sources. Drought and water shortages can happen and have significant impacts on the population and the economy. Significant economic impacts on Lompoc's agriculture industry can occur as a result of short- and long-term drought conditions; these include hardships to farmers, farmworkers, packers, and shippers of agricultural products. In some cases, droughts can also cause significant increases in food prices to the consumer due to shortages. Drought can also result in a lack of water and subsequent feed available to grazing livestock, potentially leading to a risk of livestock death and resulting in losses to Lompoc Valley's agricultural economy.

History of Hazard in the City of Lompoc

Three 20th-century droughts were of particular importance from a water supply standpoint—the droughts of 1929–1934, 1976–1977, and 1987–1992. More recent multiyear droughts occurred in 2007–2009 and 2012–2017 (DWR 2021). California's most recent multi-year drought occurred from 2012–2017. In January 2014, Santa Barbara County joined the State of California in declaring a local drought emergency, which was the first local emergency declaration of drought in the county's history (County of Santa Barbara 2014). This was the first time the state-imposed mandatory urban water use reduction requirements on water suppliers, and all of California's 58 counties declared local emergencies. Refer to Section 5.3.2 of the MJHMP for a detailed discussion of multi-year droughts that were identified as having significant impacts on the county.

Since August 2020, the period between 2012 and 2016 was one of the documented driest consecutive water years in the county with 50.83 inches in cumulative rainfall (County of Santa Barbara 2021 a). Effects of the drought have lowered water storage at Lake Cachuma, one of the county's largest surface water reservoirs, with water storage at 48.4 percent of capacity in late 2021 (County Flood Control District 2021). Although the statewide drought of 2012–2016 was

ended by a wet Water Year in 2017, localized drought conditions persisted in the Central Coast region and were not ended until a wet Water Year in 2019 (DWR 2021). For example, the average rainfall in Lompoc is 17.6 inches; however, since 2016, the City has experienced significantly less than normal rainfall.

Probability of Occurrence

Droughts are a regularly recurring feature of Santa Barbara County weather that can be affected by overall regional or worldwide climactic patterns. El Niño and La Niña events are natural climate patterns over the Pacific Ocean often with global effects, with influence over the weather of the U.S. southwest that on average occur every two to seven years. The state recently experienced the 5-year significant drought event of 2012-2017; other notable historical droughts included 2007-09, 1987-92, 1976-77, and off-and-on dry conditions spanning more than a decade in the 1920s and 1930s. In any given year, the City can be subject to drought conditions and water shortages. However, out of the last 10 years, the county has been under a locally declared drought emergency for five years; therefore, it is likely drought and associated water shortages will continue and may increase due to climate change considerations, as described further below.

Climate Change Considerations

Climate change has the potential to make drought events more common in the county and City. Extreme heat creates conditions more conducive for the evaporation of moisture from the ground, thereby increasing the possibility of drought. A warming planet could lead to earlier melting of winter snowpacks, leaving lower stream flows and drier conditions in the late spring and summer. Snowpacks are important in terms of providing water storage and ensuring adequate supply in the summer when water is most needed. Changing precipitation distribution and intensity has the potential to cause more of the precipitation that does fall to run-off rather than being stored. The result of these processes is an increased potential for more frequent and more severe periods of drought.

5.3.4 Flood

Description of Hazard

A flood is a general and temporary condition of partial or complete inundation on land that is normally dry. Several factors determine the severity of floods, including rainfall intensity and duration, antecedent moisture conditions, surface permeability, and geographic characteristics of the watershed such as shape and slope. Other causes can include a ruptured dam or levee, rapid ice or snow melting in the mountains, under-engineered infrastructure, or even a poorly placed beaver dam that can overwhelm a river or channel and send water spreading over adjacent land or floodplains.

A large amount of rainfall in a short time can result in flash flood conditions, as can a dam failure or other sudden spill. The National Weather Service's definition of a flash flood is a flood occurring in a watershed where the time of travel of the peak of flow from one end of the watershed to the other is less than six hours. The City historically has been vulnerable to flooding during severe rainfall.

The City's Floodplain Ordinance requires all new construction to be built at least 200 feet from the top of the bank of the Santa Ynez River and all new buildings are constructed 2 feet above the flood zone. When new projects go through the City's approval process, the Planning Commission, City Council, and City Engineer ensure the wastewater treatment plant is protected from flooding inundation.

Erosion of the banks of the Santa Ynez River has become a significant concern within the City. The continual progression of bank erosion poses potential threats to adjacent residences, properties, and public streets. Additionally, continued bank erosion is anticipated to damage the Riverbend Park bikeway within the next one to two large (10-year recurrence interval) storms.

To address the concern of this progressing bank erosion, the City has engaged a consulting team specializing in riverbank stabilization, to evaluate the feasibility, cost, and other considerations for stabilizing this reach of the riverbank. The City's consulting team has prepared concept-level designs, construction cost estimates, and Feasibility Studies that discuss project alternatives, environmental concerns, and design considerations. The City is currently seeking funding opportunities to complete the design and construction of this project.

Location and Extent of Hazard in the City of Lompoc

The geographical location, climate, and topography of Lompoc make the City prone to flooding (Figure 5-4). In the City, without extended periods of below-freezing temperatures, floods usually occur during the season of highest precipitations or during heavy rainfalls after long dry spells. Additionally, due to the Mediterranean climate and the variability of rainfall, streamflow throughout the City is highly variable and directly impacted by rainfall. Watercourses can experience a high amount of sedimentation during wet years and high amounts of vegetative growth during dry and moderate years.

The drainages in the northern part of the City are characterized by high-intensity, short-duration runoff events. Runoff from high intensity, short-duration storm events can cause inundation of overbank areas, debris including sediment, rock, downed trees in the water that can plug culverts and bridges, erosion and sloughing of banks, and loss of channel capacity due to sedimentation.

History of Hazard in the City of Lompoc

Flooding has been a major problem throughout the City's history. The City has several hydrologic basins that have different types of flooding problems, including overbank riverine flooding, flash floods, tidal flooding/tsunamis, and dam failure. The most common flooding in the City is due to riverine flooding and flash flood events.

Between 1995 and 2014, Lompoc experienced five significant floods. Two of those floods received Presidential Disaster Declarations. These floods, as well as information concerning the nature of the flooding and the extent of the damage, are summarized below. It should be noted there may have been significant flooding before 1995; documentation of flooding before 1995 is not available.

- **1995** –The storms of 1995 brought widespread flooding to Lompoc. The most severe flooding occurred on the South Coast while the rest of the county was largely spared from serious damage. Estimated public and private damages were around \$100 million and the area was declared a federal disaster area. (County Flood Control 1995). Many structures were reported

flooded and/or damaged. Transportation in and out of Lompoc was cut off for several hours; some modes of transportation were not restored for several days.

- **2005** – A powerful Pacific storm tapped into a subtropical moisture source to produce heavy rain and flash flooding across Southwestern California. Overall, rainfall totals ranged from 4 to 8 inches over coastal areas to between 10 and 20 inches in the mountains. In Lompoc, flash flooding and mudslides closed down Highway 101 at Bates Road. With such heavy rainfall, both the Santa Clara River and the Santa Ynez River exceeded their respective flood stages (NOAA 2005). In Lompoc, damages were estimated at \$2 million.
- **March 2011** – A severe winter storm occurred on March 19-21, 2011, that included flooding, debris flows, and mudflows throughout Santa Barbara County, including the City of Lompoc. The rainfall intensity maximum was 1.64 inches per hour at San Marcos Pass on March 20. The 2-day storm produced up to 11.5 inches of rainfall. The storm extremes were primarily located in the south county, especially Gibraltar and Cachuma. With all three primary Santa Ynez River-related county reservoirs full (as of March), the necessary water releases from Lake Cachuma added to the storm runoff to create relatively high discharge rates in the lower Santa Ynez River. This storm event resulted in moderate agricultural land flooding (approximately 200 acres) downstream of Lake Cachuma. Several County Flood Control debris basins, including the Bradley Basin in Santa Maria, were filled and sustained some damage (County Flood Control 2011). According to County Insurance Claims, the storm cost approximately \$1.7 million in damages. Isolated flooding occurred on agricultural land in the Lower Santa Ynez River, and moderate damage occurred at some County-maintained Flood Control District debris basins (County Flood Control 2011).
- **March 2014** – A strong winter storm caused significant damage to coastal properties on the south coast of Lompoc.
- **December 2014** – A brief but intense rainfall, portions of which covered a limited area that exceeded a 200-year return period, caused damages county-wide, mostly in the form of downed trees, bank erosion, and sediment and debris deposition.

Probability of Occurrence

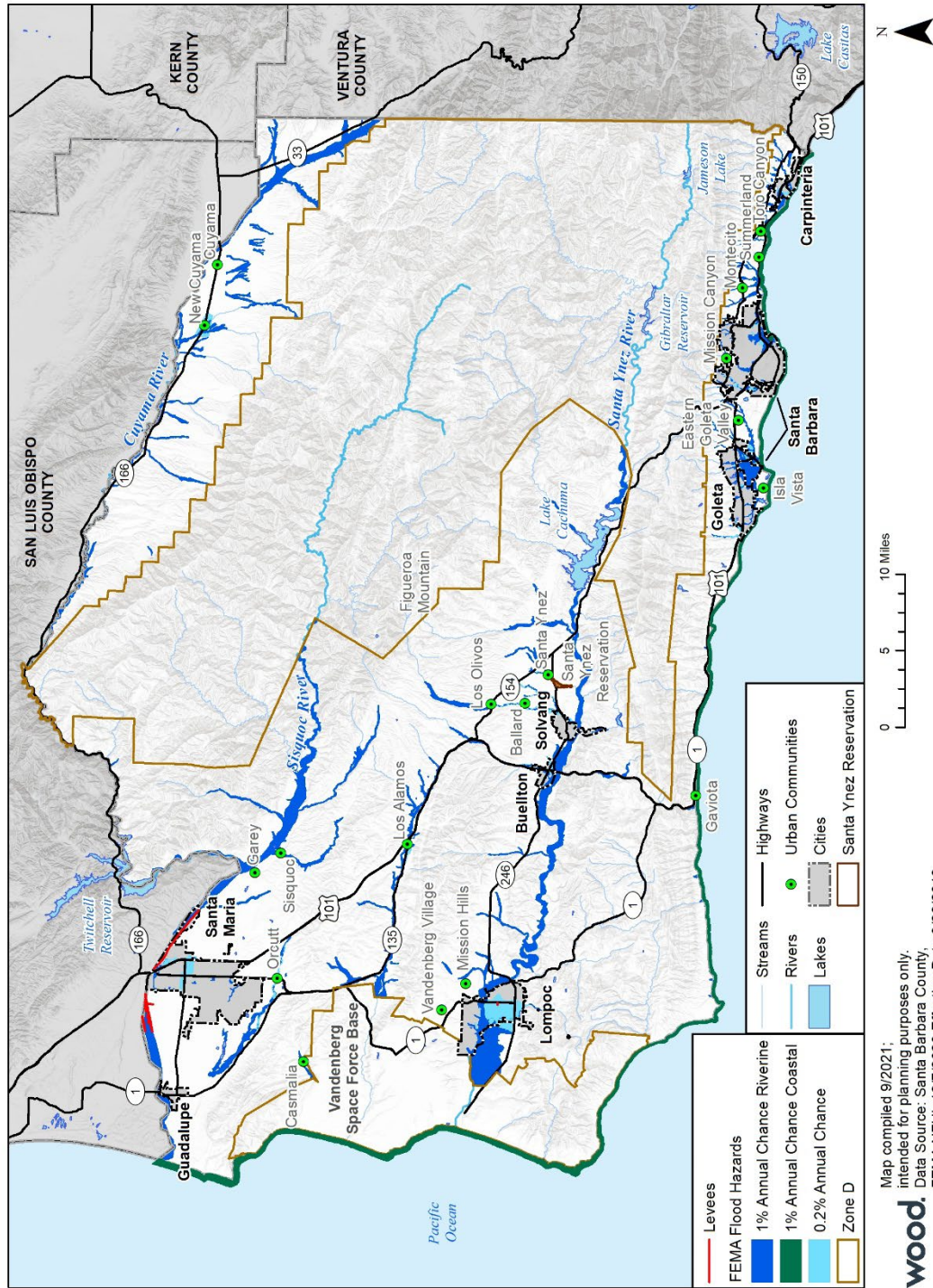
The 100-year flood is a flood that has a one percent chance in any given year of being equaled or exceeded. The 500-year flood is the flood that has a 0.2 percent chance of being equaled or exceeded in any given year.

Climate Change Consideration

Climate change is both a present threat and a slow-onset disaster. It acts as an amplifier of existing hazards. Extreme weather events have become more frequent over the past 40 to 50 years and this trend is projected to continue. Rising sea levels, changes in rainfall distribution, and intensity are expected to have a significant impact on coastal communities, including portions of Lompoc. This section presents a discussion of how climate change might impact the frequency, intensity, and distribution of flood hazards.

Figure 5-4. Santa Barbara County FEMA Flood Hazards

Santa Barbara County FEMA Flood Hazards



5.3.5 Dam Failure

Description of Hazard

Dams fail due to old age, poor design, structural damage, improper siting, landslides flowing into a reservoir, or terrorist actions. Structural damage is often a result of a flood, erosion, or earthquake. A catastrophic dam failure could inundate the area downstream. The force of the water is large enough to carry boulders, trees, automobiles, and even houses along a destructive path downstream. The potential for casualties, environmental damage, and economic loss is great. Damage to electric generating facilities and transmission lines could impact life support systems in communities outside the immediate hazard area.

Location and Extent of Hazard in the City of Lompoc

The Santa Ynez River travels through the northern portion of the City. Lompoc lies approximately 33 miles west of the Bradbury Dam. Failure of any of the dams along the Santa Ynez River, including the Juncal, Gibraltar, and Bradbury dams, could result in substantial inundation and flooding within the City via the Santa Ynez River.

History of Hazard in the City of Lompoc

As described in Section 5.6.3 of the 2022 MJHMP, the county has experienced one incident of catastrophic dam failure, which occurred in the community of Mission Canyon. No historical dam failures have occurred within or in the vicinity of Lompoc.

The DWR Division of Safety of Dams (DSOD) provides oversight of the design, construction, and maintenance of jurisdictional-sized and non-Federal dams. With DWR DSOD oversight, many potential dam issues have been addressed and/or resolved in the county (DWR DSOD 2021). Additionally, the USBR, responsible for oversight of federal dams in the county, has improved systems to ensure that peak releases during heavy inflows do not result in excessive downstream flows, which reduces the possibility of inundation from overflows (Santa Barbara County Planning and Development Department 2015).

Probability of Occurrence

Dam failure events are infrequent and usually coincide with the events that cause them, such as earthquakes, landslides, excessive rainfall, and snowmelt. There is a “residual risk” associated with dams; residual risk is the risk that remains after safeguards have been implemented. For dams, the residual risk is associated with events beyond those that the facility was designed to withstand. However, the probability of occurrence of any type of dam failure event is considered to be low in today’s regulatory and dam safety oversight environment.

Climate Change Considerations

The potential for climate change to affect the likelihood of dam failure is not fully understood at this point. There is potential for increased precipitation events as a result of climate change conditions to present a future increased risk of dam failure if large inflows to reservoirs occur. However, this could be offset by generally lower reservoir levels if storage water resources become more limited or stretched in the future due to climate change, drought, and/or population growth.

6.0 VULNERABILITY ASSESSMENT

The vulnerability assessment builds on the hazard assessment provided in Section 5.0 of the LHMP and Chapter 5.0 of the 2022 MJHMP to estimate losses where data is available and consider a specific list of critical facilities identified within Lompoc. This list of critical facilities presents the buildings and structures that are the City's primary concern for ensuring resiliency; they include both City-owned or operated facilities as well as some privately owned and operated facilities. Information for City-owned or operated facilities (building replacement cost and building content costs) were reviewed and updated as needed; where available the same information was reviewed and updated for the privately owned or operated facilities. The City identified 87 critical facilities, which primarily included utilities, government, and educational structures. Of the available data, it was shown that these buildings are worth approximately \$16,866,163 in total building value (i.e., structural and content value) (Table 6-1). No values were able to be obtained for many major facilities, so the actual value is much more than this amount. Note that Fire Stations 51 & 52 are tracked as both EMS Stations and Fire Stations.

Table 6-1. Critical Facilities in the City of Lompoc

Type	Name	Address	Total Building Value
Government	Tap TV	700 North H Street	-
Utilities	GTE	205 West Pine Avenue	-
Government	City Electrical Receiving Station	1100 North D Street	-
Sub Station	PG & E Substation	1701 Industrial Way	-
Shelter	Good Samaritan Recovery	604 W Ocean Avenue	-
Water Treatment Plant	Water Treatment Plant	501 East North Avenue	-
Hazmat	Household Hazardous Waste Collection Facility	1585 V Street	-
RMP Facilities	Lompoc Water Treatment Plant	601 East North Avenue	-
Clinic	Lompoc Community Health Services	301 North R Street	\$2,571,730
Clinic	Lompoc Wellness Center	1109 Chestnut Avenue	\$1,318,376
Clinic	Lompoc Mental Health Misc. Office	117 North B Street	\$1,287,253
Clinic	Lompoc County Health Maintenance Bldg.	301 North R Street	\$81,984
Clinic	Lompoc County Health Serv Furnace Bldg.	301 North R Street	\$43,476
Clinic	Lompoc Skilled and Rehabilitation Center	1428 West North Avenue	-
Clinic	PHD Lompoc Clinic	301 North R Street	-
Clinic	Community Health Centers of the Central Coast- Lompoc	425 West Central Avenue	-
Clinic	Lompoc Artificial Kidney Center	127 West Pine Avenue	-
Clinic	Sansum Clinic-Lompoc	1225 North H Street	-
Clinic	Lompoc Valley Medical Center	508 East Hickory Street	-
Clinic	Valley Medical Group	136 N. Third Street	-
Clinic	Lompoc Comprehensive Care Center	216 North Third Street	-

6.0. Vulnerability Assessment

Type	Name	Address	Total Building Value
Clinic	Lompoc Skilled & Rehab Center	1428 West North Avenue	-
Clinic	Lompoc Community Health Center	1300 West Ocean Avenue	-
Clinic	SB County Health Care Services	301 North R Street	-
Clinic	H Street Lompoc Valley Medical	1307 North H Street	-
Clinic	3rd Street Lompoc Valley Medical	136 N Third Street	-
Clinic	Lompoc Convalescent Home	216 North Third Street	-
Clinic	Lompoc District Hospital	1515 East Ocean Avenue	-
Clinic	Sansum Clinic	1225 North H Street	-
EMS Station	Lompoc Fire Department Station 52	1100 North D Street	-
EMS Station	Lompoc Fire Department Station 51	115 South G Street	-
EMS Station	American Medical Response Station 7	701 East North Avenue	-
Nursing Home	Lompoc Skilled Nursing & Rehabilitation Center	1428 W North Avenue	-
Nursing Home	Lompoc Valley Medical Center Comprehensive Care Center D/P SNF	216 N 3rd Street	-
Nursing Home	Fountain Square of Lompoc	1420 West North Avenue	-
Senior Center	Dick DeWees Community and Senior Center	1120 W Ocean Avenue	-
Veteran Services	Veterans Memorial Building	100 E. Locust Avenue	\$2,561,254
Veteran Services	Lompoc Veterans Services Office	108 E. Locust Avenue	\$122,380
Construction	V & J Rock Transport	1655 V Street	-
Construction	Valley Rock Ready Mix Concrete	1217 W Laurel Avenue	-
Construction	CalPortland Lompoc Ready Mix Plant	316 North A Street	-
Child Center	United Boys & Girls Clubs of Santa Barbara County - Lompoc Unit	1025 W Ocean Avenue	-
Child Center	Bright Beginnings Pre-School	500 E North Avenue	-
Child Center	A Caring Place	813 E North Avenue	-
Corrections	United States Penitentiary	3901 Klein Boulevard	-
Corrections	Federal Correctional Institution	3600 Guard Road	-
Corrections	Lompoc City Jail	107 Civic Center Plaza	-
Court	Lompoc Court Complex	115 Civic Center Plaza	\$3,897,416
Education	Clarence Ruth Elementary	501 North W Street	-
Education	Miguelito Elementary	1600 West Olive Avenue	-
Education	La Canada Elementary	620 West North Avenue	-
Education	Lompoc High School	515 West College Avenue	-
Education	Lompoc Valley Middle School	203 South L Street	-
Education	La Purisima Catholic School	219 West Olive Avenue	-
Education	Alan Hancock College	1 Hancock Drive	-
Education	El Camino School	320 North H Street	-
Education	Lompoc Schools Admin Office	1301 North A Street	-

Type	Name	Address	Total Building Value
Education	Arthur Hapgood Elementary	324 South A Street	-
Education	Leonora Fillmore Elementary	1211 East Pine Avenue	-
Education	Mission Valley	1301 N. A Street	-
Education	La Honda Steam Academy	1213 N. A Street	-
Fire Station	Lompoc Fire Station 51	115 South G Street	-
Fire Station	Lompoc Fire Station 52	1100 North D Street	-
Flood Control	Flood Control Office And Shop	597 George Miller Drive	\$80,848
Government	Lompoc Dept of Social Services Bldg.	1100 W. Laurel Avenue	\$2,682,917
Government	Lompoc Admin. Bldg.	401 E. Cypress Street	\$2,004,532
Government	V Street Purchasing Yard		-
Government	Lompoc City Corporate Yard	1300 West Laurel Avenue	-
Government	Lompoc Civic Auditorium	203 South L Street	-
Government	Lompoc City Hall	100 Civic Center Plaza	-
Government	D Street Transit Yard		-
Government	ADMHS OFFICES	648 North H Street	\$213,997
Historic Site	Mission Vieja de la Purisima Site – F Street		-
Library	Lompoc Library	501 East North Avenue	-
Museum	Carnegie Library/ Lompoc Museum		-
Police	Police Station	107 Civic Center Plaza	-
Solid Waste	Lompoc City Landfill	700 Avalon Street	-
Solid Waste	Solid Waste Yard		-
Airport	Lompoc City Airport	1801 North H Street	-
Bridge	Bridge	State Route 1 SB / Santa Ynez River	-
Bridge	Bridge	State Route 1 NB / Santa Ynez River	-
Bridge	Bridge	North Avenue / San Miguelito Channel	-
Bridge	Bridge	College Ave / San Miguelito Channel	-
Bridge	Bridge	Pine Avenue / San Miguelito Channel	-
Bridge	Bridge	Central Ave / San Miguelito Channel	-
Bridge	Bridge	Floradale Ave / Santa Ynez River	-
Government	Lompoc City Bus Yard	1300 West Laurel Avenue	-

Using GIS and the mapped extents of the hazards affecting the City, it was determined which critical facilities are exposed to which hazards depending on whether they fall within the mapped hazard area. The results of the exposure analysis are included in this section. A further description of the threats and methodologies used in this analysis is provided in Chapter 6.0, *Vulnerability*

Assessment of the 2022 MJHMP. As the City continues to assess its vulnerability, the collection of better and more complete data will help to improve the risk assessment process to direct planning and mitigation decisions.

Table 6-2. Summary of Potential Impacts on Critical Facilities

Hazard Type	Specific Risk	Count	% of Critical Facilities Impacted	Exposure (\$)
Wildfire	Low	1	1%	-
	Moderate Wildfire Threat	2	2%	-
	Very High Wildfire Threat	1	1%	-
Earthquake	Regional Groundshaking	87	100%	\$16,866,163
	High Liquefaction Potential	58	67%	\$6,993,328
	Moderate Liquefaction Potential	24	28%	\$9,872,835
	Low Liquefaction Potential	5	6%	-
Flood	1% Chance FEMA Flood Zone	6	7%	-
	0.2% Chance FEMA Flood Zone	48	55%	\$6,912,480
Dam Failure	Bradbury Dam Failure	47	54%	\$294,845
Landslide	Class 7 and 10	11	13%	\$2,683,634

6.1 WILDFIRE

The county has extensive areas within mapped Fire Hazard Severity Zones and Wildland-Urban Interface (WUI) areas. These hazard areas generate vulnerability for life and structures, including critical facilities, throughout the county, but most severely within rural foothills areas where dry vegetation, steep slopes, and difficult access combine to create a high probability of wildfire. The City has 684 acres (9.13 percent) within High Wildfire Threat areas, 1,666 acres (22.25 percent) within Moderate Wildfire Threat areas, and 919 acres (12.28 percent) within Low Wildfire Threat areas. Most of these areas are residential with limited vulnerabilities in agricultural, and industrial areas.

Based on the GIS analysis conducted for the 2022 MJHMP, in Lompoc, 182 improved properties with a total value of over \$84 million are vulnerable to wildfire. Approximately 498 residents live in high, moderate, or low wildfire threat areas. This information is summarized in Table 6-3 below (see also, Section 6.3.1, *Wildfire* of the 2022 MJHMP). Figure 6-1 shows the fire threat in the City. Fire threat is a combination of two factors: 1) fire frequency or the likelihood of a given area burning, and 2) potential fire behavior. These two factors are combined to create four threat classes ranging from Moderate to Extreme.

Table 6-3. City of Lompoc at Risk of Wildfire Threat

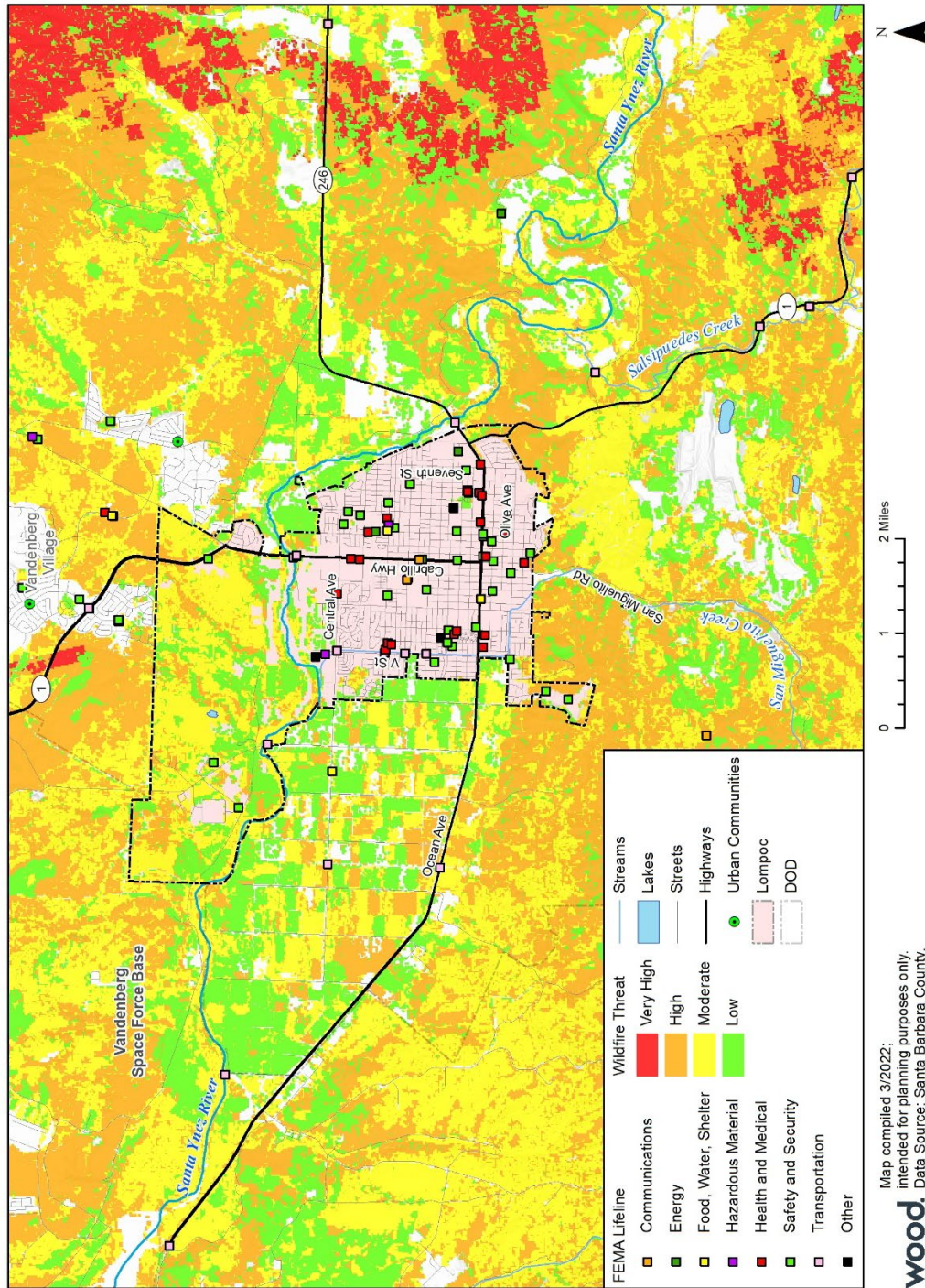
Property Type	Improved Parcel Count by Wildfire Threat Level						Total Value	Population
	Extreme	Very High	High	Moderate	Low	Total		
Agricultural	0	0	0	0	1	1	\$4,214	
Commercial	0	0	0	0	0	0	\$0	
Exempt	0	0	1	1	1	3	\$4,206,432	
Industrial	0	0	0	0	3	3	\$17,281,255	
Mixed Use	0	0	0	0	0	0	\$0	0
Residential	0	0	59	49	63	171	\$62,617,740	498
Improved Vacant	0	0	0	0	4	4	\$100,000	
Total	0	0	60	50	72	182	\$84,209,641	498

Four of the City's critical facilities with an unknown total value fall within low, moderate, or high wildfire threat areas, as listed in Table 6-4 (see also, Section 6.3.1, *Wildfire* of the 2022 MJHMP). The Federal Correctional Institution includes all associated facilities.

Table 6-4. City of Lompoc Critical Facilities Vulnerable to Wildfire

Type	Critical Facility	Hazard Source/Type	Total Building Value
Corrections	Federal Correctional Institution	Moderate Wildfire Threat	-
Bridge	Bridge	Low Wildfire Threat	-
Bridge	Bridge	High Wildfire Threat	-
Bridge	Bridge	Moderate Wildfire Threat	-

Figure 6-1. City of Lompoc Critical Facilities within Wildfire Threat Zones



6.2 EARTHQUAKE & LIQUEFACTION

Chapter 6.0, *Vulnerabilities Assessment* of the 2022 MJHMP addresses regional seismicity under two scenarios that include the City of Lompoc. The 2,500-year scenario considers general seismicity from multiple faults in the region and a 7.0 magnitude event. The methodology utilizes probabilistic seismic hazard contour maps developed by the U.S. Geological Survey (USGS) for the 2018 update of the National Seismic Hazard Maps that are included with Hazus-MH. A deterministic scenario was also prepared to predict the outcome of a specific earthquake event. The deterministic scenarios used USGS provided ShakeMap datasets to model a Magnitude 7.2 earthquake of the San Luis Range would generate in terms of damages and losses for the chosen area of interest (i.e., northern Santa Barbara County, including the City). Figure 6-2 is the ShakeMap produced for this scenario where is figure 6.2?

As described in the MJHMP, regional losses to people and property would include Lompoc. As shown in the San Luis Range ShakeMap scenario, the north and central parts of the county would perceive much stronger shaking and would likely receive the most severe damage when compared to the rest of the county. The entire City would perceive severe to extreme shaking and would likely receive moderate/heavy to very heavy damage. Direct effects of ground shaking could damage buildings and create dangerous debris and unstable structures. Displaced residents would likely seek shelter in the City, including residents from outside the City. Further, fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control.

Unreinforced masonry building type structures consist of buildings made of unreinforced concrete and brick, hollow concrete blocks, clay tiles, and adobe. Buildings constructed of these materials are heavy and brittle and typically provide little earthquake resistance. In small earthquakes, unreinforced buildings can crack, and in strong earthquakes, they tend to collapse. In 2019, the vacant Ruskowski Building in Downtown Lompoc was demolished. The two-story, 1903 unreinforced masonry building at 113 and 115 South H Street was last occupied in 1999. The building had been deemed uninhabitable since at least 1999 due to its deteriorated state and would have been prohibitively expensive to restore safely. Additional buildings in Old Town Lompoc on H Street and Ocean Avenue are known to be constructed of unreinforced masonry as well.

The City's Potentially Hazardous Building Earthquake Safety Mitigation Program (Section 15.40.020 of the Lompoc Municipal Code) allows the City Building Official to continue to identify potentially hazardous buildings, including unreinforced masonry, within the City and notify the legal owner(s) of every identified a potentially hazardous building that the building is considered to be a structure of the general type that historically has exhibited little resistance to earthquake motion. Owners of potentially hazardous buildings must comply with all State and local regulations and laws, including but not limited to the obligation to post a conspicuous sign at the entrance to the building.

The City lies in an area with high, moderate, and low liquefaction severity classes. Regional earthquakes could cause liquefaction in the City, which could damage buildings and utilities when soils become unstable. Based on the GIS analysis conducted for the 2022 MJHMP, the City has 9,623 improved parcels valued at over \$3 billion in liquefaction severity zones. Based on this analysis, which accounts for residents only and not workers, 26,231 residents are living in this

hazard zone within the City. While liquefaction would not likely affect all areas uniformly during an earthquake, this analysis indicates the extent and scale of vulnerabilities to liquefaction during a large earthquake.

Table 6-5. City of Lompoc at Risk to Liquefaction Hazard by Property Type

Property Type	Improved Parcel Count	Total Value	Population
<i>High Liquefaction Hazard</i>			
Agricultural	2	\$255,282	
Commercial	150	\$387,911,646	
Exempt	32	\$63,390,150	
Industrial	113	\$214,347,913	
Mixed Use	1	\$363,728	3
Residential	5,582	\$1,774,330,961	16,244
Improved Vacant	2	\$617,442	
Total High Liquefaction	5,882	\$2,441,217,121	16,247
<i>Moderate Liquefaction Hazard</i>			
Agricultural	0	\$0	
Commercial	217	\$131,773,392	
Exempt	35	\$22,017,994	
Industrial	48	\$33,101,940	
Mixed Use	3	\$2,440,364	9
Residential	2,803	\$666,935,552	8,157
Improved Vacant	3	\$459,000	
Total Moderate Liquefaction	3,109	\$856,728,242	8,165
<i>Low Liquefaction Hazard</i>			
Agricultural	0	\$0	
Commercial	0	\$0	
Exempt	2	\$5,629,164	
Industrial	1	\$72,620	
Mixed Use	0	\$0	0
Residential	625	\$219,709,787	1,819
Improved Vacant	4	\$100,000	
Total Low Liquefaction	632	\$225,511,571	1,819
Total Liquefaction Hazard	9,623	\$3,523,456,933	26,231

As listed in Table 6-6, all critical facilities in the City with a known value of \$16,866,163 would be vulnerable to damage or destruction from ground shaking and liquefaction during a significant regional earthquake (Figure 6-3; see also, Section 6.2.1, *Earthquake (Groundshaking)* and Section 6.3.3, *Liquefaction (Earthquake)* of the 2022 MJHMP).

Table 6-6. City of Lompoc Critical Facilities Vulnerable to Liquefaction

Type	Name	Address	Total Building Value
Government	Tap TV	700 North H Street	-
Utilities	GTE	205 West Pine Avenue	-
Government	City Electrical Receiving Station	1100 North D Street	-
Sub Station	PG & E Substation	1701 Industrial Way	-
Shelter	Good Samaritan Recovery	604 W Ocean Avenue	-
Water Treatment Plant	Water Treatment Plant	501 East North Avenue	-
Hazmat	Household Hazardous Waste Collection Facility	1585 V Street	-
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Clinic	Community Health Centers of the Central Coast- Lompoc	425 West Central Avenue	-
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Clinic	Sansum Clinic-Lompoc	1225 North H Street	-
Clinic	Lompoc Valley Medical Center	508 East Hickory Street	-
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Nursing Home	Lompoc Skilled Nursing & Rehabilitation Center	1428 W North Avenue	-
Nursing Home	Lompoc Valley Medical Center Comprehensive Care Center D/P SNF	216 N 3rd Street	-

6.0. Vulnerability Assessment

Type	Name	Address	Total Building Value
Nursing Home	Fountain Square of Lompoc	1420 West North Avenue	-
Senior Center	Dick DeWees Community and Senior Center	1120 W Ocean Aveue	-
Veteran Services	Veterans Memorial Building	100 E. Locust Avenue	\$2,561,254
Veteran Services	Lompoc Veterans Services Office	108 E. Locust Avenue	\$122,380
Construction	V & J Rock Transport	1655 V Street	-
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Government	V Street Purchasing Yard		-
Government	Lompoc City Corporate Yard	1300 West Laurel Avenue	-
Government	Lompoc Civic Auditorium	203 South L Street	-
Government	Lompoc City Hall	100 Civic Center Plaza	-
Government	D Street Transit Yard		-

Type	Name	Address	Total Building Value
Government	ADMHS OFFICES	648 North H Street	\$213,997
Historic Site	Mission Vieja de la Purisima Site – F Street		-
Library	Lompoc Library	501 East North Avenue	-
Museum	Carnegie Library/ Lompoc Museum		-
Police	Police Station	107 Civic Center Plaza	-
Solid Waste	Lompoc City Landfill	700 Avalon Street	-
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Bridge	Bridge	State Route 1 SB / Santa Ynez River	-
Bridge	Bridge	State Route 1 NB / Santa Ynez River	-
Bridge	Bridge	North Avenue / San Miguelito Channel	-
Bridge	Bridge	College Ave / San Miguelito Channel	-
Bridge	Bridge	Pine Avenue / San Miguelito Channel	-
Bridge	Bridge	Central Ave / San Miguelito Channel	-
Bridge	Bridge	Floradale Ave / Santa Ynez River	-
Government	Lompoc City Bus Yard	1300 West Laurel Avenue	-

Figure 6-2. City of Lompoc Critical Facilities and Earthquake Groundshaking Potential (San Luis Range 7.2 Magnitude ShakeMap)

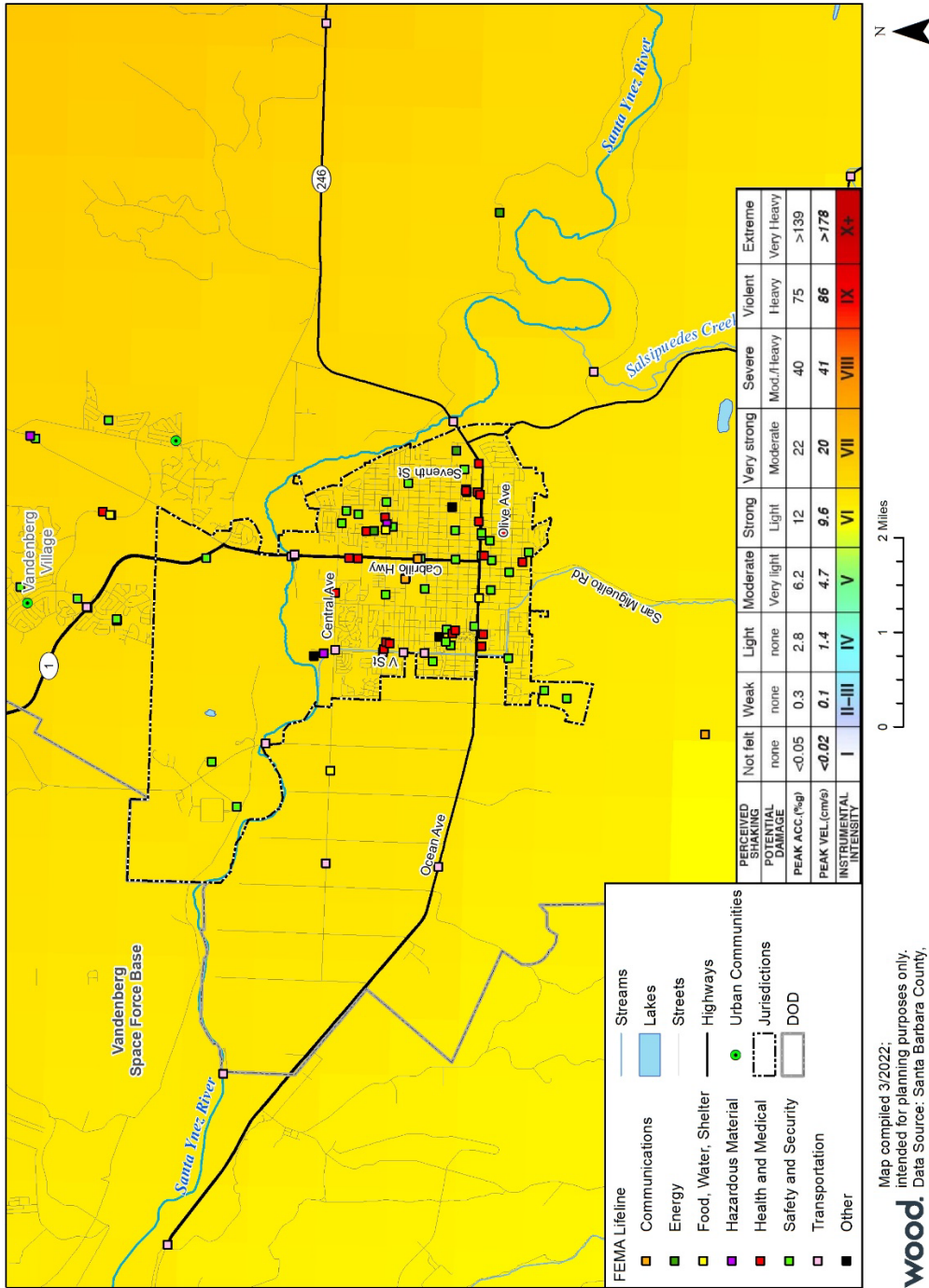
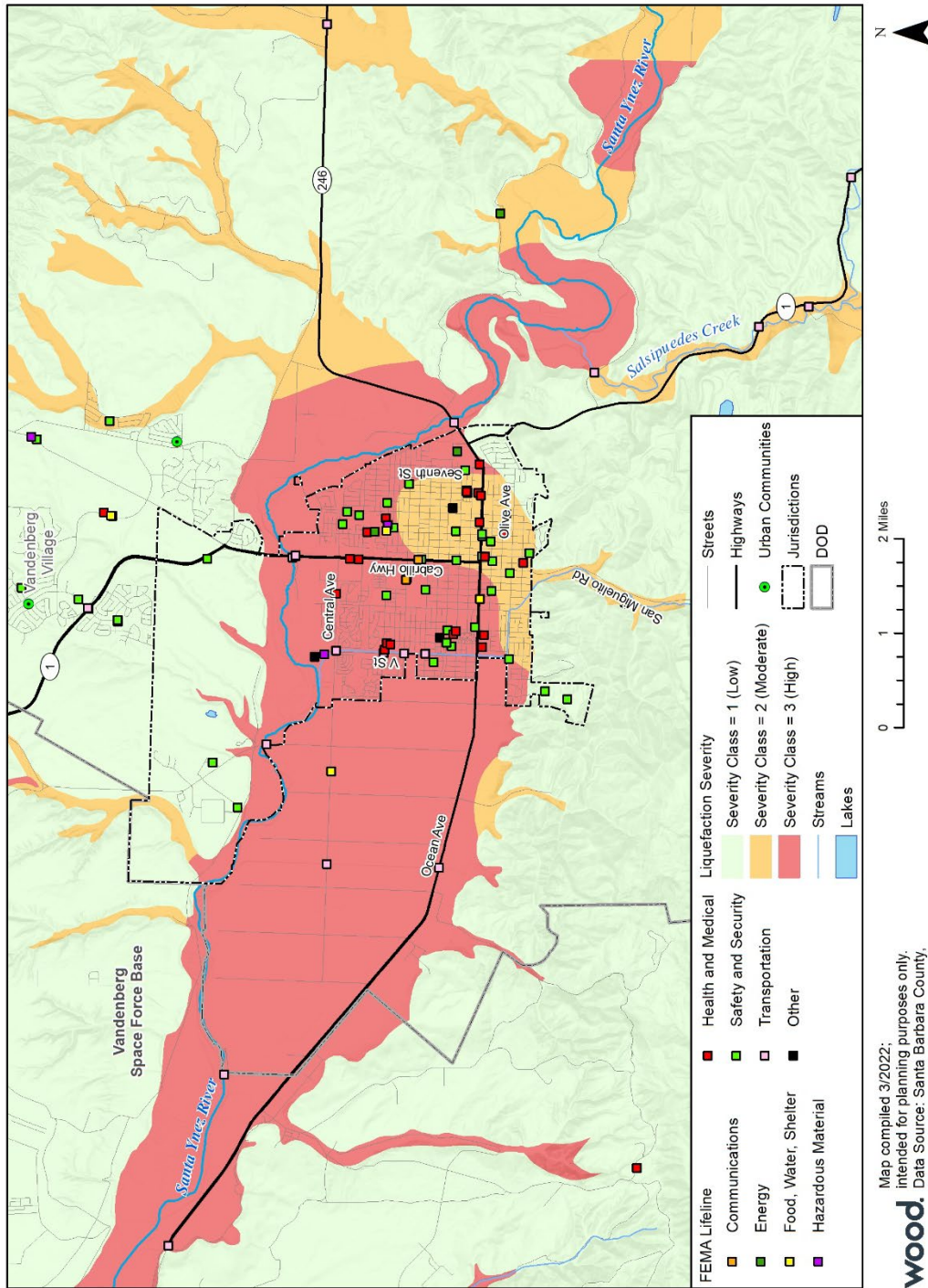


Figure 6-3. City of Lompoc Critical Facilities and Liquefaction Potential



6.3 FLOOD

The geographical location, climate, and topography of the Lompoc Valley make some areas of the City prone to flooding, particularly associated with the seasonal flooding of the Santa Ynez River. Flooding presents a hazard to development in floodplains. In addition to the damage to properties, flooding can also cut off access to utilities, emergency services, and transportation, and may impact the overall economic well-being of an area. Emergency response can be interrupted by damaged roads and infrastructure. Fire can break out as a result of dysfunctional electrical equipment. Hazardous materials can also get into floodways, causing health concerns and polluted water supplies. During a flood, the drinking water supply can be contaminated. Climate change is expected to increase the frequency and intensity of heavy rainstorms that cause riverine flooding.

Approximately 1,052 acres (14.05 percent) of the City are susceptible to the 1-percent annual chance of flood as identified by FEMA. Based on the GIS analysis conducted for the 2022 MJHMP, the City has 17 improved parcels valued at over \$29 million in the 1-percent annual chance floodplain. Based on this analysis, which accounts for residents only and not workers, 44 residents are living in the 1-percent annual chance floodplain throughout the City. An additional 4,769 improved parcels and over \$2.1 billion in value fall within the 0.2-percent annual chance floodplain. Areas of the City vulnerable to the 0.2-percent annual chance riverine flood are home to 12,676 residents. Development in the 0.2-percent annual chance floodplain is typically not regulated, thus a large flood event could be extremely damaging to the City. This information is summarized in Table 6-7 below.

Table 6-7. City of Lompoc FEMA Floodplain Exposure and Loss

Property Type	Improved Parcel Count	Total Value	Estimated Loss	Population	
<i>Riverine 1% Annual Chance Floodplain Exposure and Loss</i>					
Exempt	1	\$0	\$0	44	
Industrial	1	\$8,571,448	\$2,142,862		
Residential	15	\$20,471,777	\$5,117,944		
Total 1% Chance	17	\$29,043,224	\$7,260,806		
<i>Riverine 0.2% Annual Chance Floodplain Exposure and Loss</i>					
Agricultural	2	\$255,282	\$63,821	12,676	
Commercial	264	\$426,557,026	\$106,639,257		
Exempt	41	\$67,457,306	\$16,864,327		
Industrial	103	\$178,369,310	\$44,592,328		
Mixed Use	3	\$864,202	\$216,051		
Residential	4,353	\$1,426,282,305	\$356,570,576		
Improved Vacant	3	\$849,442	\$212,361		
Total 0.2% Chance	4,769	\$2,100,634,873	\$525,158,718		
Total Flood Hazard	4,786	\$2,129,678,097	\$532,419,524		12,720

As listed in Table 6-8, 54 critical facilities in the City with a total known value of \$6,912,480 would be vulnerable to damage or destruction from 1-percent or 0.2-percent annual chance of flood (Figure 6-4; see also, Section 6.3.3, *Flood of the 2022 MJHMP*).

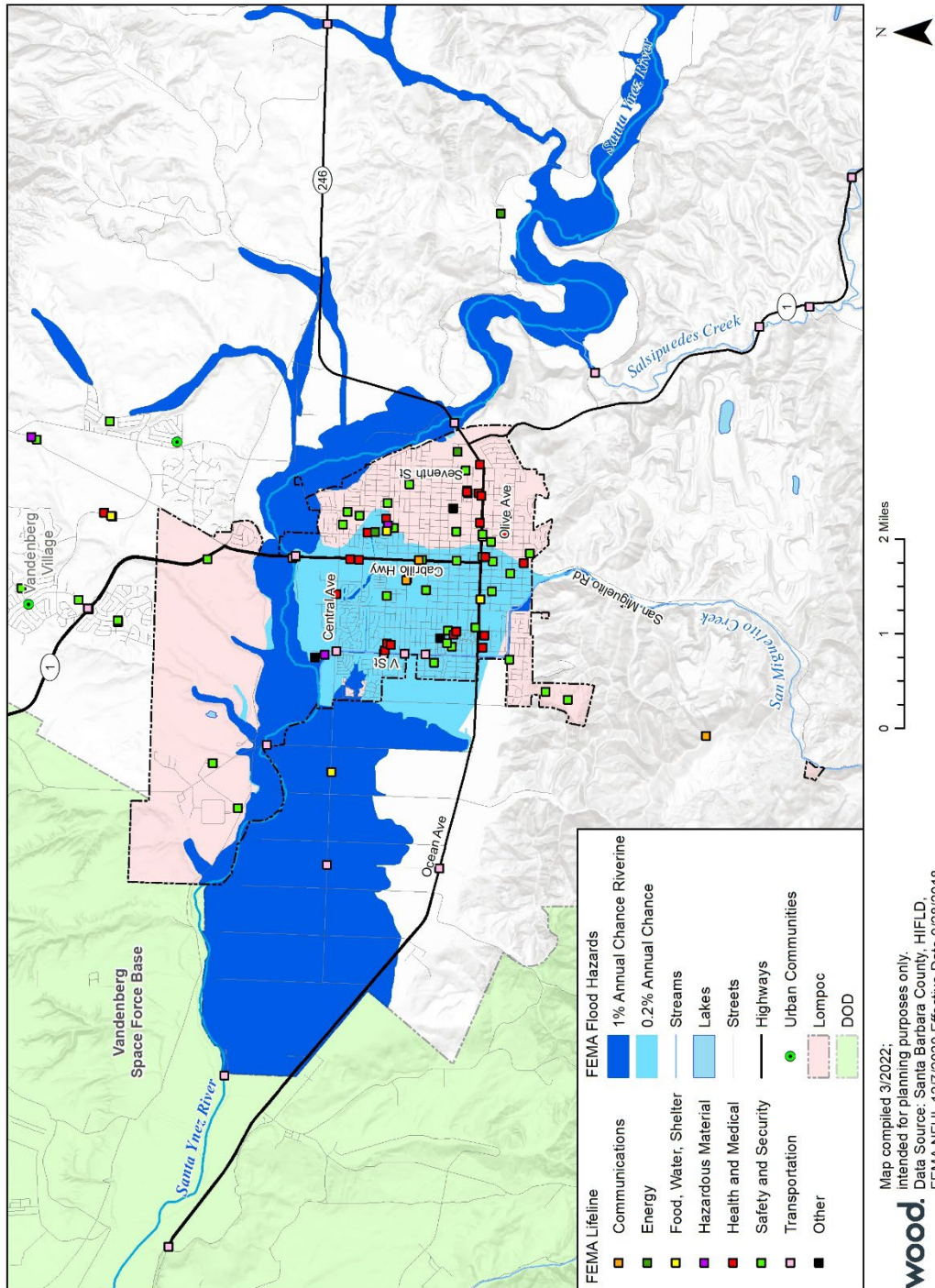
Table 6-8. City of Lompoc Critical Facilities at Risk to Flood Hazard same twice listed issue

Type	Name	FEMA Flood Chance	Total Building Value
Government	Tap TV	0.2% Chance	-
Utilities	GTE	0.2% Chance	-
Government	City Electrical Receiving Station	0.2% Chance	-
Shelter	Good Samaritan Recovery	0.2% Chance	-
Water Treatment Plant	Water Treatment Plant	0.2% Chance	-
Hazmat	Household Hazardous Waste Collection Facility	0.2% Chance	-
RMP Facilities	Lompoc Water Treatment Plant	0.2% Chance	-
Clinic	Lompoc Community Health Services	0.2% Chance	\$2,571,730
Clinic	Lompoc Wellness Center	0.2% Chance	\$1,318,376
Clinic	Lompoc County Health Maintenance Bldg.	0.2% Chance	\$81,984
Clinic	Lompoc County Health Serv Furnace Bldg.	0.2% Chance	\$43,476
Clinic	Lompoc Skilled and Rehabilitation Center	0.2% Chance	-
Clinic	PHD Lompoc Clinic	0.2% Chance	-
Clinic	Community Health Centers of the Central Coast- Lompoc	0.2% Chance	-
Clinic	Lompoc Artificial Kidney Center	0.2% Chance	-
Clinic	Sansum Clinic-Lompoc	0.2% Chance	-
Clinic	Lompoc Skilled & Rehab Center	0.2% Chance	-
Clinic	Lompoc Community Health Center	0.2% Chance	-
Clinic	SB County Health Care Services	0.2% Chance	-
Clinic	H Street Lompoc Valley Medical	0.2% Chance	-
Clinic	Sansum Clinic	0.2% Chance	-
EMS Station	Lompoc Fire Station 52	0.2% Chance	-
EMS Station	Lompoc Fire Station 51	0.2% Chance	-
Nursing Home	Lompoc Skilled Nursing & Rehabilitation Center	0.2% Chance	-
Nursing Home	Fountain Square of Lompoc	0.2% Chance	-
Senior Center	Dick DeWees Community and Senior Center	0.2% Chance	-
Construction	V & J Rock Transport	0.2% Chance	-
Construction	Valley Rock Ready Mix Concrete	0.2% Chance	-
Child Center	United Boys & Girls Clubs of Santa Barbara County - Lompoc Unit	0.2% Chance	-
Child Center	Bright Beginnings Pre-School	0.2% Chance	-
Education	Clarence Ruth Elementary	0.2% Chance	-

6.0. Vulnerability Assessment

Type	Name	FEMA Flood Chance	Total Building Value
Education	La Canada Elementary	0.2% Chance	-
Education	Lompoc High School	0.2% Chance	-
Education	Lompoc Valley Middle School	0.2% Chance	-
Education	La Purisima Catholic School	0.2% Chance	-
Education	El Camino School	0.2% Chance	-
Fire Station	Lompoc Fire Station 51	0.2% Chance	-
Fire Station	Lompoc Fire Station 52	0.2% Chance	-
Government	Lompoc Dept Of Social Services Bldg.	0.2% Chance	\$2,682,917
Government	V Street Purchasing Yard	0.2% Chance	-
Government	Lompoc City Corporate Yard	0.2% Chance	-
Government	Lompoc Civic Auditorium	0.2% Chance	-
Government	ADMHS OFFICES	0.2% Chance	\$213,997
Library	Lompoc Library	0.2% Chance	-
Museum	Carnegie Library/ Lompoc Museum	0.2% Chance	-
Airport	Lompoc City Airport	1% Chance	-
Bridge	Bridge	0.2% Chance	-
Bridge	Bridge	0.2% Chance	-
Bridge	Bridge	1% Chance	-
Bridge	Bridge	1% Chance	-
Bridge	Bridge	1% Chance	-
Bridge	Bridge	1% Chance	-
Bridge	Bridge	1% Chance	-
Government	Lompoc City Bus Yard	0.2% Chance	-

Figure 6-4. City of Lompoc Critical Facilities in FEMA Flood Hazard Zones Need figure



6.4 DAM FAILURE

Bradbury Dam is of the largest concern to the City of Lompoc. Failure of Bradbury Dam would inundate portions of the City with relatively little evacuation time. Based on the GIS analysis conducted for the 2022 MJHMP, in Lompoc, 6,253 improved properties with a total value of \$2.4 billion are vulnerable to the catastrophic flooding that would occur if Bradbury Dam failed. Approximately 17,163 residents within the inundation zone may need to be evacuated, cared for, and possibly permanently relocated. This information is summarized in Table 6-9 below.

Table 6-9. City of Lompoc at Risk of Dam Inundation Hazard

Property Type	Improved Parcel Count	Total Value	Population
Agricultural	2	\$255,282	
Commercial	164	\$370,231,348	
Exempt	36	\$61,446,914	
Industrial	150	\$226,111,875	
Mixed Use	1	\$363,728	3
Residential	5,897	\$1,820,746,806	17,160
Improved Vacant	3	\$628,442	
Total	6,253	\$2,479,784,395	17,163

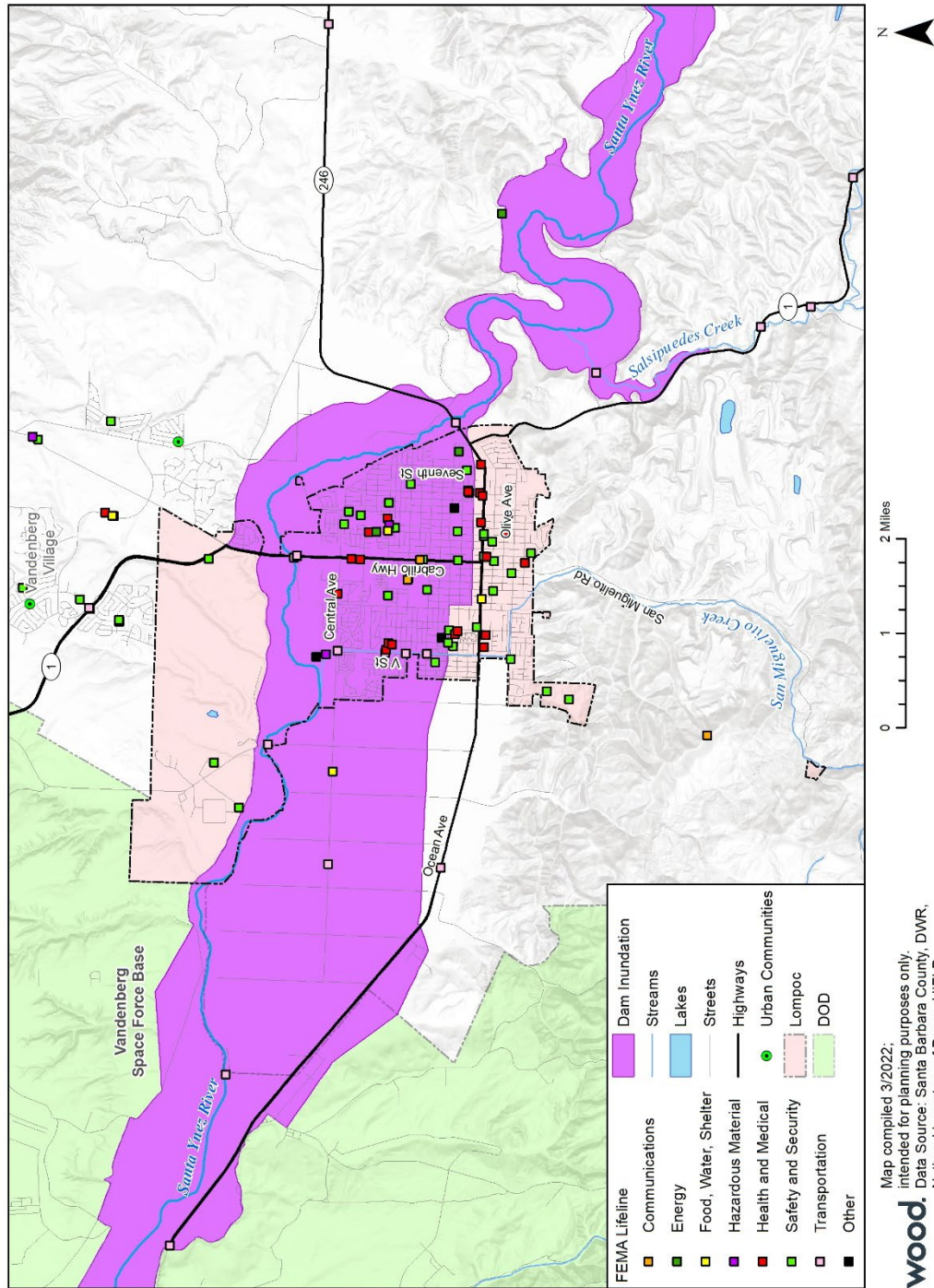
As listed in Table 6-10, 47 critical facilities in the City with a total known value of \$294,845 would be vulnerable to damage or destruction from dam inundation (Figure 6-5; see also, Section 6.6.3, *Dam Failure of the 2022 MJHMP*).

Table 6-10. City of Lompoc Critical Facilities Vulnerable to Inundation from Dam Failure

Type	Name	Total Building Value
Government	Tap TV	-
Utilities	GTE	-
Government	City Electrical Receiving Station	-
Sub Station	PG & E Substation	-
Water Treatment Plant	Water Treatment Plant	-
Hazmat	Household Hazardous Waste Collection Facility	-
RMP Facilities	Lompoc Water Treatment Plant	-
Clinic	Lompoc Skilled and Rehabilitation Center	-
Clinic	Community Health Centers of the Central Coast- Lompoc	-
Clinic	Lompoc Artificial Kidney Center	-
Clinic	Sansum Clinic-Lompoc	-
Clinic	Lompoc Comprehensive Care Center	-
Clinic	Lompoc Skilled & Rehab Center	-
Clinic	H Street Lompoc Valley Medical	-
Clinic	Lompoc Convalescent Home	-

Type	Name	Total Building Value
Clinic	Sansum Clinic	-
EMS Station	Lompoc Fire Station 52	-
EMS Station	American Medical Response Station 7	-
Nursing Home	Lompoc Skilled Nursing & Rehabilitation Center	-
Nursing Home	Lompoc Valley Medical Center Comprehensive Care Center D/P SNF	-
Nursing Home	Fountain Square Of Lompoc	-
Construction	V & J Rock Transport	-
Construction	Valley Rock Ready Mix Concrete	-
Construction	CalPortland Lompoc Ready Mix Plant	-
Child Center	Bright Beginnings Pre-School	-
Child Center	A Caring Place	-
Education	Clarence Ruth Elementary	-
Education	La Canada Elementary	-
Education	Lompoc High School	-
Education	El Camino School	-
Education	Lompoc Schools Admin Office	-
Education	Leonora Fillmore Elementary	-
Education	Mission Valley	-
Education	La Honda Steam Academy	-
Fire Station	Lompoc Fire Station 52	-
Flood Control	Flood Control Office and Shop	\$80,848
Government	D Street Transit Yard	-
Government	ADMHS OFFICES	\$213,997
Library	Lompoc Library	-
Airport	Lompoc City Airport	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-
Bridge	Bridge	-

Figure 6-5. City of Lompoc Critical Facilities in Dam Inundation Zone



Map compiled 3/2022;
intended for planning purposes only.
Data Source: Santa Barbara County, DWR,
National Inventory of Dams, HIFLD



6.5 LANDSLIDE

The City has 831 improved parcels that lie within Class 7, 9, or 10 landslide hazard zone, amounting to \$251 million, and home to 2,395 residents (Table 6-11). However, Lompoc is a gently sloping area in a riverine flood plain where the risk of landslide is generally low. An increase in risk related to landslides would be man-made through excavation or other soil disturbance. While not a concern for the City, data related to areas within the landslide hazard zone is included to be consistent with the 2022 MJHMP.

Table 6-11. City of Lompoc Improved Properties at Risk to Landslide Summary

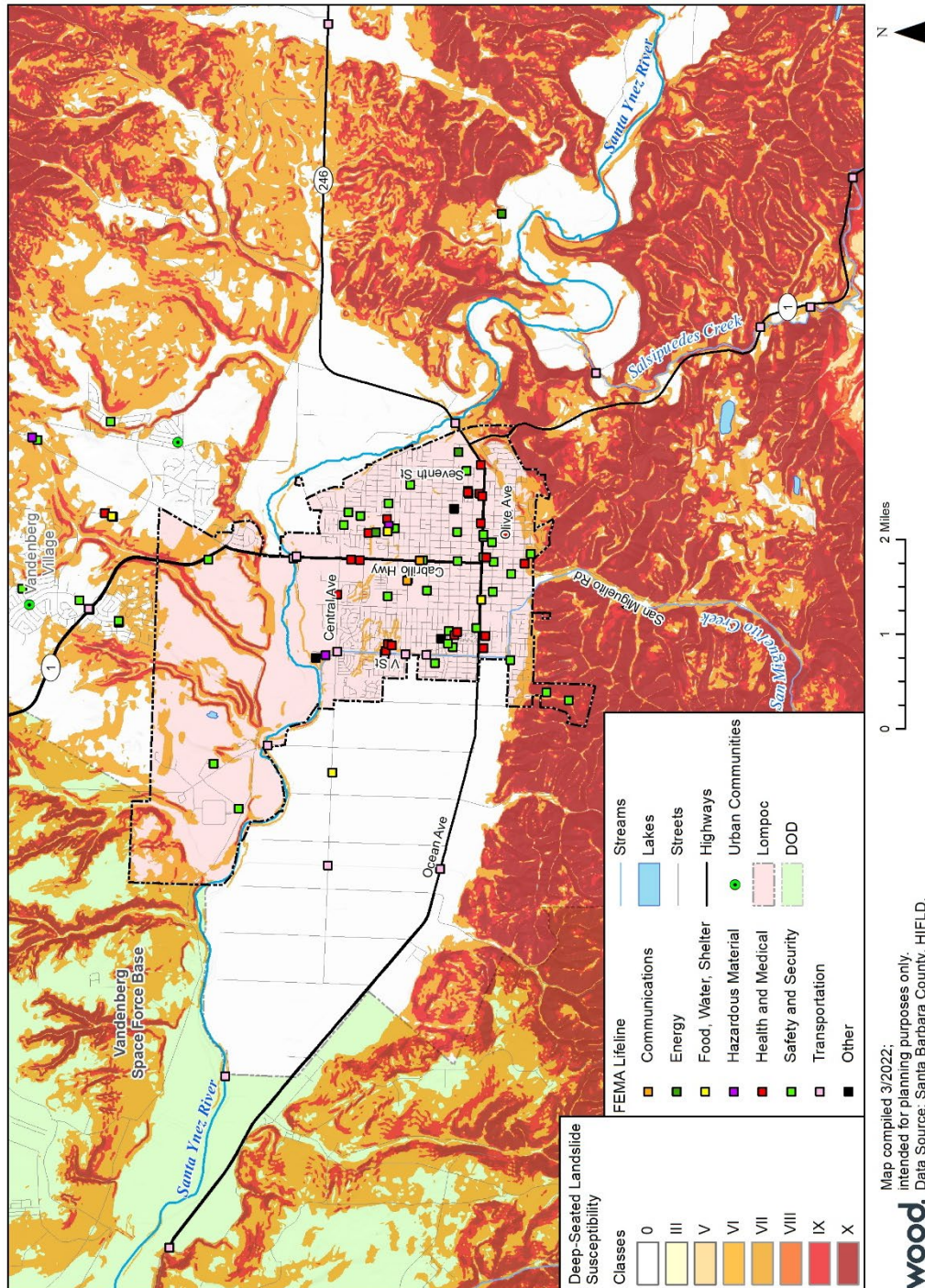
Class 7 Parcel Count	Class 9 Parcel Count	Class 10 Parcel Count	Total Improved Parcel Count	Total Value	Population
758	57	16	831	\$251,613,721	2,395

Further, as listed in Table 6-12, 11 critical facilities in the City with a total known value of \$2,683,634 would be vulnerable to damage or destruction from landslides (Figure 6-6; see also, Section 6.3.7, *Landslide* of the 2022 MJHMP).

Table 6-12. City of Lompoc Critical Facilities Vulnerable to Landslide

Type	Name	Landslide Severity Class	Total Building Value
Hazmat	Household Hazardous Waste Collection Facility	7	-
EMS Station	LOMPOC FIRE DEPARTMENT STATION 2	7	-
Veteran Services	Veterans Memorial Building	7	\$2,561,254
Veteran Services	LOMPOC VETERANS SERVICES OFFICE	7	\$122,380
Historic Site	Mission Vieja de la Purisima Site – F Street	7	-
Solid Waste	Lompoc City Landfill	7	-
Solid Waste	Solid Waste Yard	10	-
Bridge - Non-Scour Fair Condition	Bridge	7	-
Bridge - Non-Scour Good Condition	Bridge	7	-
Bridge - Non-Scour Good Condition	Bridge	7	-
Bridge - Non-Scour Good Condition	Bridge	7	-

Figure 6-6. City of Lompoc Critical Facilities within Landslide Susceptibility Zones



7.0 MITIGATION STRATEGY

In preparation for the 2022 LHMP update, the City's LPT made no revisions to the countywide goals and objectives because they continue to reflect the needs of the City; see also, Chapter 7.0, *Mitigation Plan* of the 2022 MJHMP. This section contains the City's updated and most current mitigation strategy as of 2022.

7.1 MITIGATION GOALS AND OBJECTIVES

The City's LPT accepted and agreed to the following goals and objectives for the 2022 update. These goals and objectives represent a vision of long-term hazard reduction or enhancement of capabilities. These preliminary goals, objectives, and actions were developed to represent a vision of long-term hazard reduction or enhancement of capabilities. To help further the development of these goals and objectives, the LPT compiled and reviewed current jurisdictional sources, including the City's planning documents, codes, and ordinances, and specifically discussed hazard-related goals, objectives, and actions as they related to the overall LHMP.

The updated goals and objectives of this plan are:

Goal 1: Ensure future development is resilient to known hazards.

Objective 1.A: Ensure development in known hazardous areas is limited or incorporates hazard-resistant design based on applicable plans, development standards, regulations, and programs.

Objective 1.B: Educate developers and decision-makers on design and construction techniques to minimize damage from hazards.

Goal 2: Protect people and community assets from hazards, including critical facilities, infrastructure, water, and public facilities.

Objective 2.A: Enhance the ability of community assets, particularly critical facilities, to withstand hazards.

Objective 2.B: Use the best available science and technology to better protect life and property.

Objective 2.C: Upgrade and replace aging critical facilities and infrastructure.

Objective 2.D: Ensure mitigation actions encompass vulnerable and disadvantaged communities to promote social equity.

Goal 3: Actively promote understanding, support, and funding for hazard mitigation by participating agencies and the public.

Objective 3.A: Engage, inform, and educate the public on tools and resources to improve community resilience to hazards, reduce vulnerability, and increase awareness and support of hazard mitigation activities.

Objective 3.B: Ensure effective outreach and communications to vulnerable and disadvantaged communities.

Objective 3.C: Increase awareness and encourage the incorporation of hazard mitigation principles and practice among public, private, and nonprofit sectors, including all participating agencies.

Objective 3.D: Ensure interagency coordination and joint partnerships with the County, cities, state, tribal, and federal governments.

Objective 3.E: Continuously improve the County's capability and efficiency at administering pre- and post-disaster mitigation programs, including providing technical support to cities and special districts and providing support for implementing local mitigation plans.

Objective 3.F: Monitor and publicize the effectiveness of mitigation actions implemented countywide.

Objective 3.G: Position the County and participating agencies to apply for and receive grant funding from FEMA and other sources.

Goal 4: Minimize the risks to life and property associated with urban and human-caused hazards.

Objective 4.A: Minimize risks from biological hazards, including disease, invasive species, and agricultural pests.

Objective 4.B: Be prepared and respond to urban hazards, including terrorism, cyber threats, and civil disturbance.

Objective 4.C: Minimize risks from energy production, including hazardous oil and gas activities.

Goal 5: Prepare for, adapt to, and recover from, the impacts of climate change and ensure regional resiliency.

Objective 5.A: Use the best available climate science to implement hazard mitigation strategies in response to climate change.

Objective 5.B: Identify, assess, and prepare for impacts of climate change.

Objective 5.C: Coordinate with the public, private, and nonprofit sectors to implement strategies to address regional hazards exacerbated by climate change.

Objective 5.D: Ensure climate change hazard mitigation addresses vulnerable and disadvantaged communities.

7.2 MITIGATION PROGRESS

Since 2017, the City has incorporated the LHMP goals, objectives, and mitigation actions into its local plans and processes, including the General Plan Safety Element by reference, specific hazard planning efforts (e.g., Comprehensive Emergency Management Plan), the City's grant pursuits, and capital improvement planning. Ongoing monitoring and evaluation of the LHMP by the City ensured mitigations are implemented and tracked. Key mitigation actions underway since 2017 include inspecting Fire Station No. 51 for needed earthquake retrofits and enhanced outreach techniques.

The City's LPT reviewed the mitigation actions listed in the 2017 LHMP to determine the status of each action. Once reviewed, deferred projects from 2017 were renumbered to reflect 2022 updates (see Table 7-1).

Table 7-1. Status of City of Lompoc Previous Mitigation Actions

Mitigation Action No.	Mitigation Action Description	Status	Comments	In 2022 Update?
2016-1	Earthquake Retrofit Fire Station	In Progress	The Fire Station No. 51 building was inspected in 2014 but has not been retrofitted	X
2016-2	Continue to identify the most at-risk critical facilities in Lompoc and create a mitigation action plan for those facilities	In Progress		X
2016-3	Inform public about proper evacuation procedures.	In Progress		X
2016-4	Advise the public about the local flood hazard, flood insurance, and flood protection measures.	In Progress		X
2016-5	Create a wildfire scenario to estimate potential loss of life and injuries, the types of potential damage, and existing vulnerabilities within a community to develop Wildfire mitigation priorities.	In Progress		X
2016-6	Schedule an annual "what's new in mitigation" briefing for the City Council.	In Progress		X
2016-7	Continue City of Lompoc Water Wise outreach program	In Progress		X
2016-8	Santa Ynez Riverbank Stabilization-Riverside Location-Part 1	In Progress		X
2016-9	Santa Ynez Riverbank Stabilization-Riverside Location-Part 2	In Progress		X

7.3 MITIGATION APPROACH

A simplified Benefit-Cost Review was applied to both deferred and new mitigation actions to prioritize the mitigation recommendations for implementation. The priority for implementing mitigation recommendations depends upon the overall cost-effectiveness of the recommendation when considering monetary and non-monetary costs and benefits associated with each action. Additionally, the following questions were considered when developing the Benefit-Cost Review:

- How many people will benefit from the action?
- How large an area is impacted?
- How critical are the facilities that benefit from the action?
- Environmentally, does it make sense to do this project for the overall community?

Section 7.4, *Implementation Plan* provides a benefit-cost review for each mitigation recommendation, as well as a relative priority rank (High, Medium, and Low) based upon the judgment of the Planning Team. The general category guidelines are listed below:

- High – Benefits are perceived to exceed costs without further study or evaluation
- Medium – Benefits are perceived to exceed costs but may require further study or evaluation before implementation
- Low – Benefits and costs evaluation requires additional evaluation before implementation

Discussion of the rationale for these priorities is included in the mitigation action descriptions below.

7.4 IMPLEMENTATION PLAN

2022-1. Earthquake Retrofit Fire Station No. 51

A 2014 Seismic Evaluation of Fire Station No. 51 advised that the building is very likely to be partially or completely non-functional as a fire station due to aging facilities and retrofit needs. The City pursued funding for station retrofit and redesign in 2015 but was not awarded funding by CalOES (2019). In 2019, a Structural Condition Assessment indicated no imminent safety concern but did not evaluate seismic compliance issues. As such, structural retrofit, design, and upgrades continue to be needed for Fire Station No. 51 to support increased staffing, modern apparatus, workspace, restrooms and gender accommodations, training, and CIP requests.

Mitigation Priority and Performance	
Priority	Low
Hazards Mitigated	Earthquake
Estimated Timeline	18 months
Estimated Cost/Funding Source	\$3,266,514/ BRIC
Responsible Agency/Department	Fire Department
Comments	This project was adapted from 2016-1 included as part of the 2017 LHMP. In 2019, CalOES denied funding due to ineligibility.

2022-2. Critical Facilities Review and Identification

Using GIS mapping of all Critical Facilities to facilitate analysis to identify vulnerable facilities.

Mitigation Priority and Performance	
Priority	High
Hazards Mitigated	Wildfire, Earthquake, Flood, Drought & Water Storage, Dam Failure
Estimated Timeline	24 months

Mitigation Priority and Performance	
Estimated Cost/Funding Source	\$3,000/ Departmental budgets
Responsible Agency/Department	Fire Department
Comments	This project was adapted from 2016-2 included as part of the 2017 LHMP.

2022-3. Evacuation Procedure Public Outreach

Create an Education Campaign to Inform the public about proper evacuation procedures. The Campaign would use the City Web page, social media, print, audio, and video media. The Fire Department would include proper evacuation procedures in their CERT curriculum

Mitigation Priority and Performance	
Priority	High
Hazards Mitigated	Wildfire, Earthquake, Flood, Dam Failure
Estimated Timeline	Ongoing with new programs introduced quarterly
Estimated Cost/Funding Source	\$50,000/ Departmental budgets
Responsible Agency/Department	Fire Department
Comments	This project was adapted from 2016-3 included as part of the 2017 LHMP.

2022-4. Flood Hazard Public Outreach

Inform the public at regularly scheduled Public Events as to local flood hazards, flood insurance, and flood protection measures. The events will be held at Home Depot CERT training, LISTOS training, and Ready SBC training. City webpage and Social Media will also be utilized.

Mitigation Priority and Performance	
Priority	High
Hazards Mitigated	Flood
Estimated Timeline	Ongoing
Estimated Cost/Funding Source	\$2,000/ Departmental budgets
Responsible Agency/Department	Fire Department
Comments	This project was adapted from 2016-4 included as part of the 2017 LHMP.

2022-5. Wildfire Scenario Planning

Using GIS mapping of wildfire hazard areas to facilitate analysis and planning decisions through comparison with zoning, development, infrastructure, etc. Developing and maintaining a database to track community vulnerability to wildfire.

Mitigation Priority and Performance	
Priority	Moderate
Hazards Mitigated	Wildfire
Estimated Timeline	Ongoing
Estimated Cost/Funding Source	\$5,000/ Departmental budgets
Responsible Agency/Department	Fire Department

7.0. Mitigation Strategy

Mitigation Priority and Performance	
Comments	This project was adapted from 2016-5 included as part of the 2017 LHMP.

2022-6. Annual City Council Briefing

Present to the City Council and Public the status of Mitigation Measures in progress and completed. Advise the City Council and Public of the effectiveness of the Mitigation and its cost-effectiveness.

Mitigation Priority and Performance	
Priority	High
Hazards Mitigated	Wildfire, Earthquake, Flood, Drought & Water Storage, Dam Failure
Estimated Timeline	Ongoing
Estimated Cost/Funding Source	\$1,000/ Departmental budgets
Responsible Agency/Department	Fire Department
Comments	This project was adapted from 2016-6 included as part of the 2017 LHMP.

2022-7. Water-Wise Public Outreach

Inform and educate residents about water conservation programs and rebates to reduce water usage, and increase water efficiency

Mitigation Priority and Performance	
Priority	Moderate
Hazards Mitigated	Drought & Water Storage
Estimated Timeline	Ongoing
Estimated Cost/Funding Source	\$10,000/ Departmental budgets
Responsible Agency/Department	Utilities Department
Comments	This project was adapted from 2016-7 included as part of the 2017 LHMP.

2022-8. Santa Ynez Riverbank Stabilization-Riverside Location Part 1

Mitigate bank erosion poses potential threats to adjacent residences, properties, and public streets. Construct a bank stabilization project to mitigate these threats.

Mitigation Priority and Performance	
Priority	Moderate
Hazards Mitigated	Flood
Estimated Timeline	24 months
Estimated Cost/Funding Source	\$1.1 million/ FMA Grant Grants
Responsible Agency/Department	Public Works Department
Comments	This project was adapted from 2016-8 included as part of the 2017 LHMP.

2022-9. Santa Ynez Riverbank Stabilization-Riverside Location Part 2

Design and construct a bank stabilization project: The continual progression of Santa Ynez Riverbank erosion poses potential threats to adjacent properties, City park facilities, and public streets. Additionally, continued bank erosion is anticipated to damage the Riverbend Park bikeway within the next one to two large (10-year recurrence interval) storms.

Mitigation Priority and Performance	
Priority	Moderate
Hazards Mitigated	Flood
Estimated Timeline	24 months
Estimated Cost/Funding Source	\$2.4 million/ FMA Grant
Responsible Agency/Department	Public Works Department
Comments	This project was adapted from 2016-19 included as part of the 2017 LHMP.

2022-10. Riverbend Park Flood Hazard Assessment

Risk assessment study for flood hazard vulnerabilities present at Riverbend Park: City desires to improve and expand the recreational uses within Riverbend Park and the surrounding area if possible. The park is currently used as a soccer field, a bike park, and a baseball field. The park and surrounding area are located in flood Zone AE per FEMA FIRM Map 06083C0737G. Engage Engineering consultant to determine the feasibility of any flood mitigation efforts that could lead to the ability of the City to construct permanent park improvements such as lighting, sports field expansion, restrooms, concessions, etc.

Mitigation Priority and Performance	
Priority	Moderate
Hazards Mitigated	Flood
Estimated Timeline	2027
Estimated Cost/Funding Source	\$500,000/FMA Grant
Responsible Agency/Department	City Public Works Department and Santa Barbara County Flood Control and Water Conservation District
Comments	

8.0 PLAN MAINTENANCE

8.1 MONITORING, EVALUATING, AND UPDATING THE PLAN

Since the last LHMP in 2017, the LPT has monitored, evaluated, and updated the plan on a continuing and as-needed basis. The City has made progress on implementing some of the 2017 mitigation actions as noted in Table 7-1. All mitigation actions outlined in the 2017 LHMP are ongoing at the time of this 2022 update.

The City Fire Department will be responsible for ensuring that this LHMP is monitored on an ongoing basis. The Fire Department will call the LPT together quarterly to review the mitigation actions outlined in this LHMP and discuss progress. During that meeting the LPT, while continuing to

collaborate with the County MAC team, will develop a list of hazards to be updated, added, or removed in future revisions of this LHMP.

The LHMP will be a discussion/work item on the City staff meeting agenda. City Department heads and other emergency preparedness staff who serve in the County's EOC will focus on evaluating the LHMP in light of technological, budgetary, political changes, or other significant events that may occur during the year.

The City will continue to participate in the countywide MAC and attend the annual meeting organized by the County Office of Emergency Management to discuss items to be updated/added in future revisions of this plan. The MJHMP is evaluated by the MAC annually to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. This includes re-evaluation of goals, objectives, and mitigation actions for each jurisdiction by the MAC. The MAC also reviews the goals and mitigation actions to determine their relevance to changing situations in the county, as well as changes in State or Federal regulations and policy. The MAC reviews the risk assessment portion of the MJHMP and its annexes to determine if this information should be updated or modified, given any new available data. The responsible parties for the mitigation actions report on the status of their projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised. Any updates or changes necessary for the City's LHMP will be forwarded to the County Office of Emergency Management for inclusion in further updates to the MJHMP.

The City is committed to reviewing and updating this LHMP at least once every five years, as required by the DMA. Major disasters affecting the City, legal changes, and/or other events may trigger a meeting of the MAC. This group will be responsible for determining if the LHMP needs to be updated before the five-year mark. To remain eligible for mitigation grant funding from FEMA, the City is committed to revising the plan at a minimum of every five years. The City's Director of Public Safety or the City's designee will contact the county four years after this plan is approved to ensure that the county plans to undertake the plan update process. The jurisdictions within Santa Barbara County should continue to work together on updating this multi-jurisdictional plan.

8.2 IMPLEMENTATION THROUGH EXISTING PLANS AND PROGRAMS

The City implements the LHMP through existing plans, programs, and procedures, as detailed in Section 4.0, *Capability Assessment*. This LHMP provides a baseline of information on the hazards impacting the City and the existing institutions, plans, policies and ordinances that help to implement the LHMP (e.g., General Plan, building codes, floodplain management ordinance). The General Plan and the LHMP annex are complementary documents that work together to achieve the goal of reducing risk exposure to the City's citizens. An update to a General Plan may trigger an update to the hazard mitigation plan. Implementation responsibilities of mitigation actions are integrated into the operational functions of the responsibility parties identified, including responsibility for seeking funding needed for implementation.

The City incorporates the LHMP by reference into its General Plan Safety Element. Under AB 2140, the City may adopt its current, FEMA-approved LHMP into the Safety Element of the General Plan. This adoption makes the City eligible to be considered for part or all of its local-share costs on

eligible Public Assistance funding to be provided by the state through the California Disaster Assistance Act (CDAA) (see Section 2.0, *Plan Purpose and Authority* for the adopting resolutions). The LHMP has also been prepared to support the City's effort to evaluate wildfire scenarios. The Floodplain Management Ordinance applies in concert with the City's zoning ordinance and building codes to reduce flooding hazards from land use. The LHMP includes mitigations addressing flood control infrastructure to support the City's efforts to reduce flooding hazards.

The information contained within this LHMP, including results from the Vulnerability Assessment and the Mitigation Strategy, is used by the City to help inform updates and the development of local plans, programs, and policies. The City may utilize the hazard information when developing and implementing the City's capital improvement programs and the Planning and Building Divisions may utilize the hazard information when reviewing a site plan or other type of development applications.

8.3 ONGOING PUBLIC OUTREACH AND ENGAGEMENT

The public will continue to be involved whenever the LHMP is updated and as appropriate during the monitoring and evaluation process utilizing the robust Lompoc Fire Department Outreach program (refer to Section 3.4.2). Before the adoption of updates, the City will provide multiple opportunities for the public to comment on the revisions. Lompoc citizens will be made aware of public meetings via the City webpage, print, audio, visual, and social media. Moreover, the City will engage stakeholders in community emergency planning. As described in Section 3.4, *Public Outreach and Engagement*, the public outreach strategy used during development of the current update will provide a framework for public engagement through the plan maintenance process. It can be adapted for ongoing public outreach as determined to be feasible by the MAC and the LPT.

8.4 POINT OF CONTACT

Comments or suggestions regarding this plan may be submitted at any time to Carol Brown, Battalion Chief, using the following information:

Carol Brown
Battalion Chief
City of Lompoc Fire Department
115 South G Street
Lompoc, CA. 93436
C_Brown@ci.lompoc.ca.us
(805) 315-8153

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