RESOLUTION NO. 2025-73

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAMARILLO ADOPTING THE SAFETY ELEMENT UPDATE OF THE CAMARILLO GENERAL PLAN AND THE 2022 VENTURA COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN AND ALL FUTURE UPDATES BY REFERENCE INTO THE SAFETY ELEMENT OF THE GENERAL PLAN IN ACCORDANCE WITH ASSEMBLY BILL 2140 REQUIREMENTS

The City Council of the City of Camarillo resolves as follows:

SECTION 1. General Findings. The City Council of the City of Camarillo finds and declares as follows:

A. The Safety Element is a mandatory Element of the City's General Plan. The Safety Element establishes goals, objectives, and policies to reduce the potential short and long-term risk of death, injury, and property damage from natural and man-made hazards, including fires, floods, droughts, earthquakes, landslides, climate change, and other hazards.

B. Senate Bill 1035 requires the City to review the Safety Element of the General Plan when the Housing Element or Local Hazard Mitigation Plan is updated, at least once every eight years, and make updates to include new information related to natural hazards, climate adaptation, resiliency strategies and evacuation accessibility, and to comply with statutory changes outlined in California Government Code Sections 65302(g) and 65302.15.

C. The Camarillo City Council adopted its Housing Element on September 29, 2021, which then necessitated this update to the Safety Element.

D. The Safety Element meets the requirements of California Government Code Sections 65302(g) and 65302.15 as updated by Senate Bills 379, 1035, and 99 as well as Assembly Bills 747 and 1409.

E. The City of Camarillo adopts the 2022 Ventura County Multi-Jurisdictional Hazard Mitigation Plan and all future updates by reference into the Safety Element of the General Plan, in accordance with Assembly Bill 2140 (AB 2140) requirements.

F. On December 10, 2024, the Board of Forestry reviewed and accepted the Draft Safety Element Update.

G. On May 6, 2025, the Planning Commission voted unanimously to recommend adoption of the Safety Element Update to the City Council. Its findings are based on the entire administrative record including testimony and evidence presented to the Planning Commission on March 18, 2025 and May 6, 2025, including, without limitation, the staff report submitted by the Director of Community Development.

H. On May 30, 2025, the Draft Safety Element Update was submitted to the California Geological Survey of the State Department of Conservation. The City received no comments.

I. Notices of Public Hearing before the City Council were duly given and

published in the time, form, and manner as required by law; and

J. On September 10, 2025, the City Council opened the public hearing to receive public testimony and considered this Resolution. Its findings are based on the entire administrative record including testimony and evidence presented to the City Council on September 10, 2025, including, without limitation, the staff report submitted by the Director of Community Development.

SECTION 2. Environmental Findings. The City reviewed the environmental impacts of the Project under the California Environmental Quality Act (Public Resources Code §§ 21000, et seq. "CEQA") and the regulations promulgated thereunder (14 Cal. Code of Regs. §§ 15000, et seq., the "CEQA Guidelines"). CEQA Guidelines §§ 15060(c)(2), 15061(b)(3), and 15378 exempt activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, activities where there is possibility that it may have a significant effect on the environment, and activities that do not constitute a "project" as defined, respectively. The proposed Safety Element Update is a policy document. No development is proposed, and it can be seen with certainty that there is no possibility that the proposed Safety Element Update may have a significant effect on the environment and this activity is exempt from further review.

SECTION 3. Project Findings. The City Council, after review of the project, finds:

A. The updated Safety Element is internally consistent and does not conflict with the other Elements of the City's General Plan.

SECTION 4. Approval of the Safety Element Update. Based on the above findings, and after receiving evidence and testimony at a public hearing, the City Council adopts the:

1. Safety Element Update, attached as Exhibit A and incorporated by reference; and
2. Adoption of the 2022 Ventura County Multi-Jurisdictional Hazard Mitigation Plan and all future updates by reference into the Safety Element of the General Plan, in accordance with AB 2140 requirements.

SECTION 5. Office of Record. The record of proceedings upon which this decision is based is located in City Hall, which is the office of record for the matter.

SECTION 6. Construction. This resolution must be broadly construed in order to achieve the purposes stated in this Resolution. It is the City Council's intent that the provisions of this Resolution be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Resolution.

SECTION 7. Reliance on Record. Each and every one of the determinations in this Resolution are based on the competent and substantial evidence, both oral and written, contained in the entire record relating to the matter. The determinations constitute the independent findings and determinations of the City Council in all respects and are fully and completely supported by substantial evidence in the record as a whole.

SECTION 8. Limitations. The City Council's analysis and evaluation of this matter is based on the best information currently available. It is inevitable that in evaluating the matter

that absolute and perfect knowledge of all possible aspects of the matter will not exist. One of the major limitations on analysis of the matter is the City Council's lack of knowledge of future events. In all instances, best efforts have been made to form accurate assumptions. Somewhat related to this are the limitations on the City's ability to solve what are in effect regional, state, and national problems and issues. The City must work within the political framework within which it exists and with the limitations inherent in that framework.

SECTION 9. Preservation. This Resolution does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Resolution's effective date. Any such amended part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Resolution.

SECTION 10. Severability. If any part of this Resolution or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Resolution are severable.

SECTION 11. Electronic Signatures. This Resolution may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 12. The Mayor, or presiding officer, is hereby authorized to affix their signature to this Resolution signifying its adoption by the City Council of the City of Camarillo, and the City Clerk is directed to attest thereto.

PASSED AND ADOPTED September 10, 2025.

Kevin Kildee
Mayor

Attested to on 9/16/2025

City Clerk

I, Carrie Weal, City Clerk of the City of Camarillo, certify Resolution No. 2025-73 was adopted by the City Council of the City of Camarillo at a regular meeting held September 10, 2025, by the following vote:

AYES: Councilmembers: Kildee, Martinez-Bravo, Santangelo, Tennessen
NOES: Councilmembers: None
ABSENT: Councilmembers: Trembley

City Clerk

CITY OF CAMARILLO INCORPORATED OCTOBER 22, 1964 CALIFORNIA

City of Camarillo

Safety Element Update

Prepared for:

City of Camarillo
Community Development Department
601 Carmen Drive
Camarillo, California 93010

Prepared by:

Rincon Consultants, Inc.

11.0 City of Camarillo Safety Element

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11.0 City of Camarillo Safety Element

11.1 Introduction

The Safety Element describes potential natural and human-induced hazards that exist in Camarillo and the measures that the City is taking to address them. Some naturally occurring hazards may be unavoidable, but their impacts on communities can be reduced through planning and preparation. Thus, the Safety Element addresses geologic, seismic, flood, fire hazards, as well as climate change considerations. This Safety Element also addresses hazards created by human activity including hazardous materials and waste, aircraft hazards, and incidents that require emergency response and evacuation. The Safety Element describes the City's efforts to prepare for and respond to emergencies and increase community resilience to climate change. Additionally, the Safety Element was drafted with input from Camarillo residents via a community questionnaire. This questionnaire was used to understand the public's safety concerns and current emergency preparedness, which helped inform the policies included in the Safety Element. The questionnaire results are described further in Community Equity and Resilience below.

11.1.1 Community Equity and Resilience

The City of Camarillo has also conducted a Climate Change Vulnerability Assessment (CCVA) in compliance with Government Code §65302, as amended by SB 379, included as Appendix B. The CCVA helps to inform the goals, policies, and implementation programs of the Safety Element and assesses potential equity impacts by evaluating how climate change may impact vulnerable populations, natural and managed resources, buildings and facilities, and infrastructure and critical services within the city. The Camarillo CCVA includes identification and vulnerability scoring of populations that are most at risk of being impacted by climate change. Assessing vulnerability of communities follows a methodology that originates from the Southern California Climate Adaptation Planning Guide and uses indicators found in the US Census American Community Survey and the Healthy Places Index. Factors such as health, age, ability, social disadvantages, inequities in access to healthcare, economic opportunity, education and other resources, and inequities found in basic needs and exposure to environmental stressors are taken into consideration when identifying those in a community who may be more affected by climate change than others.

Vulnerable Populations in the City of Camarillo

- People experiencing houselessness
- Outdoor workers
- Older adults
- Children
- Renters
- Communities of color or with limited English proficiency
- Veterans
- Individuals with medical conditions or disabilities (physical and cognitive)
- Individuals without a computer

The following sections discuss these vulnerable populations, within the subgroups delineated below, their disproportionate risk to climate hazards in the city, and why there is a connection between specific populations and each relevant climate hazard risk.



Individuals with high outdoor exposure including people experiencing houselessness and outdoor workers face disproportionate direct exposure to climate hazards, causing them to be extremely vulnerable to the effects of climate change. Individuals in these groups often live in homes that are less protected against climate hazards, lack a permanent residence, or don't have shelter altogether. People experiencing houselessness may not have access to healthcare coverage or financial resources to address health concerns either caused by or exacerbated by climate hazards.



Under-resourced individuals often do not have access or the ability to afford resources needed to prepare for, cope with, and recover from climate change impacts. People in this group often face financial barriers and limited access to resources when preparing for and recovering from climate change hazards. Under-resourced individuals often lack the financial resources to evacuate from a climate hazard and/or find an affordable place to evacuate to. Households without a computer may not receive emergency alerts or governmental guidance before or during a climate hazard event, leaving them in dangerous situations during evacuation scenarios.



Individuals facing systemic discrimination also face additional impacts of climate change. Communities of color are more likely to live in high hazard risk areas and less likely to be homeowners, which leaves them vulnerable to climate hazards.



Individuals with chronic health conditions or health related sensitivities are socially and physiologically vulnerable to climate change impacts and hazards. Older adults and individuals with disabilities may have limited or reduced

mobility, mental function, or communication abilities, making it difficult to evacuate during or prepare for a climate hazard event. They may also have medical needs for electricity which may be impacted during a public safety power shutoff or climate hazard event. Individuals in these groups are more likely to have pre-existing medical conditions or chronic illnesses that may exacerbate the risk of illnesses and medical problems from climate hazards. Children are socially and physiologically vulnerable to climate hazards with limited understandings of climate hazards and insufficient resources to independently prepare for and safely respond during a climate hazard event. Children, especially young ones, are reliant on their parental figures to ensure their health, safety, and wellbeing. Children also have vulnerable physical characteristics because they have not fully physiologically developed and are therefore more vulnerable to health effects of climate change impacts. Military Veterans are more likely to be low-income and experience houselessness after their service, which also makes them vulnerable to preparing and responding to climate hazards.

The Safety Element seeks to provide Camarillo residents with strategies specific to community needs and desires to prepare for, respond to, and recover from climate hazard events. As such, in addition to the CVA (Appendix B), the City conducted a community survey to gather vital community feedback on natural and man-made hazard concerns and preparedness. The survey, which ran from April 15 to June 3, 2024, saw participation from 51 residents, who provided their insights on Camarillo safety and hazards. Residents ranked wildfires, drought, earthquakes, and extreme heat days as top concerns. Wildfires emerged as the primary concern, underscoring the community's vulnerability to this hazard. The survey also revealed only 41% of respondents are prepared with an emergency kit and most residents prefer to receive disaster notification via VC Alert, city emails, or online news. Consequently, this Safety Element contains policies to enhance community safety through land use policies, exploring funding mechanisms for at-risk properties, enhanced drainage systems, and establishing resilience hubs for community support during emergencies. These complete survey results are included in Appendix A.

The Safety Element emphasizes community equity and resilience by detailing the City's comprehensive approach to preparing for and responding to natural and man-made hazards. This element also highlights emergency response infrastructure and policies to ensure effective, safe, and accessible evacuation routes and emergency response in the event of climate-related emergency scenarios. Through the identification of hazards, inclusion of community input, and development of policies and actions to mitigate risks, the City of Camarillo will continue to build its resilience to climate hazards. This Safety Element provides an understanding of the existing setting and provides essential goals, policies, and implementing actions to increase community equity and resilience.

11.1.2 Authority for Element

California Government Code Section 65302(g)(1) requires that a General Plan include:

" . . . A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wildland and urban fires."

11.1.3 Element Organization

This element has been organized to be consistent with the other General Plan Elements. As such, the goals, objectives, and policies are the essence of the element, providing declarative statements setting forth the City's approach to various issues. A definition of these key terms is provided below, and Table 11-1 explains the hierarchy and numbering for the goals, objectives, and policies.

11.0 City of Camarillo Safety Element

Goal: A general statement of desired community outcome.

Objective: A subset of a goal, an objective is more specific and provides measurable strategies.

Policy: Policies are actions that a community will undertake to meet the goals and objectives.

Implementing Action: A list of recommended actions necessary to achieve element goals, objectives, and policies; implementing actions are discussed in Section 11.4.

Table 11-1 Goal, Objective, and Policy Hierarchy and Numbering

Goal, Objective, and Policy Hierarchy and Numbering		Element Acronym Example	
1. Goal	Each goal number starts with the element acronym and is followed by the number of the goal	Goal SAF-1	Each goal statement follows the goal acronym and number and generally has one or more objectives associated with the goal.
2. Objective	Each objective number starts with the element acronym and is followed by the number of the goal and objective.	Objective SAF-1.1	Each objective statement follows the objective number and generally has a policy associated with the objective.
3. Policy	Each policy number starts with the element acronym and is followed by the number of the goal, objective, and policy.	Policy SAF-1.1a	Each policy statement is associated with a specific goal and objective

11.1.4 Relationship to Other General Plan Elements

The Safety Element supports the other General Plan elements and focuses on community safety. The elements of the General Plan that have the greatest relationship to the Safety Element are Land Use Element, Circulation Element, Noise Element, Housing Element, and Open Space & Conservation Element. While the Safety Element has a less direct relationship with the remaining General Plan elements, each element is singularly important, and collectively, the elements form the framework of Camarillo's future.

Land Use Element

The Land Use Element of the General Plan identifies the classifications of land within the city. The Safety Element provides additional guidance on potential natural and human-made hazards as they relate to the siting and development of future land uses.

Circulation Element

The Circulation Element discusses road design and non-motorized mobility. The Safety Element considers the road system throughout the city for emergency response services and emergency evacuation.

Noise Element

The Noise Element serves as a comprehensive program for controlling noise in the Camarillo Planning area. The Noise Element: 1) provides noise environment information in the form of CNEL contours so that noise may be effectively considered in the land use planning process; 2) includes noise standards, policies, and implementation measures to avoid incompatible land uses due to excessive noise; and 3) protects existing regions within Camarillo where noise environments are deemed acceptable and protect existing and future areas throughout Camarillo that are considered to be noise sensitive. The Safety Element considers the noise levels associated with the Camarillo Airport.

Housing Element

The Housing Element includes an identification and analysis of existing and projected housing needs, and a statement of goals, policies, quantified objectives and scheduled programs for the preservation, improvement and development of housing, along with the identification of adequate sites for housing and the adequate provision for the existing and projected needs of all economic segments of the community. The Safety Element addresses hazards or nuisances that should be avoided in the location of housing or mitigated in the construction and on-going maintenance of housing (e.g., maintaining defensible space).

Open Space and Conservation Element

The Open Space and Conservation Element is the primary tool for the protection of the community's natural environment and informs the Land Use and Circulation Elements. The Safety Element directly relates to topics of concern in the Open Space and Conservation Element, particularly with respect to the management of natural hazards (i.e., flooding and wildfire) in open space areas.

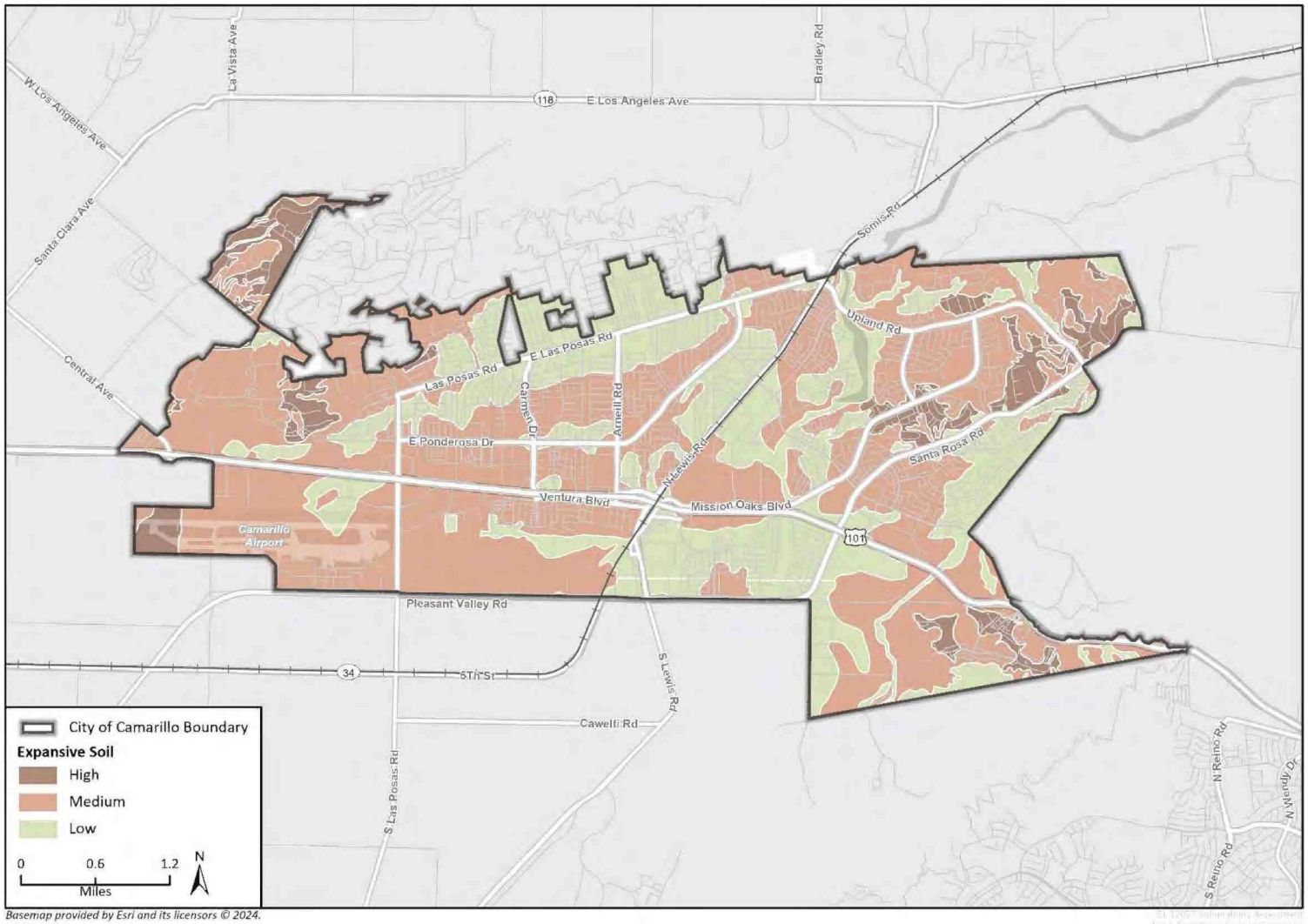
11.2 Camarillo Safety Setting, Regulations, and Related Documents

11.2.1 Existing Setting

A. Soils

There are many types of soils within Camarillo. Generally, soils in Camarillo are expansive in nature and have a high shrink-swell potential. Highly expansive soils are present in the east and west ends of the city. Less expansive soils are present in the core of the city. See Figure 11-1.

Figure 11-1 Camarillo Soils Map



Basemap provided by Esri and its licensors © 2024.
Additional data provided by Ventura County, 2024.

These expansive soils present potential hazards in Camarillo because they expand when wet and collapse or shrink when dry. The change in volume due to high shrink-swell potential can exert detrimental stresses on buildings and cause structural damage. In the past, damage has been recorded in the Camarillo Heights area and on the west side of the city. The residential areas on the east side of the city on Santa Rosa Road are also located in areas of highly expansive soils.

Loading Settlement

Loading settlement is the downward movement of soil when a load is applied above the soil, which increases the vertical stress exerted onto the soil. It can be immediate or occur gradually over a long period of time. Immediate settlement is normally associated with loose granular soils when they are subjected to loads. These soils are generally found in young alluvium or loosely deposited materials.

Subsidence and Inundation

Subsidence is the ground settlement that results over time from the extraction of oil or groundwater. This process usually extends over a large area and occurs on a gradual basis so the settlement effects on a single site, relative to its immediate neighbors, may be negligible as the neighboring properties are also subsiding.

Inundation is a potential secondary effect of subsidence in Ventura County. Both the ocean and the Santa Clara River could flood into depressed areas of the Oxnard Plain. The Santa Clara River is building up sediments within its present course while no longer adding deposits to the remainder of the Oxnard Plain. If the old deposition consolidates, a flood could change the river course and thus inundate the lower land. Extraction of oil and/or water could increase the potential for such an occurrence and increase the area affected.

As climate change increases extreme precipitation events throughout the state, it is likely that the conditions for subsidence and saturated soils will increase. These infrequent, but heavy rainfall events will rapidly saturate soils and could cause more unstable soils, which could result in landslides, subsidence, and liquefaction of soils within the city. Consequently, these events could cause damage to City properties, residential areas, and critical infrastructure throughout Camarillo.

B. Seismic Hazards

Camarillo, like the rest of Southern California, is located within a seismically active region. The effects of seismic hazards on structures and land development within the city are mitigated by adhering to adopted building codes. *The California Building Standards Code* regulates the design and construction of foundations, building frames, retaining walls, excavations, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. Faults and earthquakes present direct hazards from fault rupture and ground shaking as well as secondary hazards are described below.

Faults

The most significant known active fault zones that are capable of seismic ground shaking and can impact Camarillo are discussed below and are shown on Figure 11-2.

Simi/Santa Rosa Fault. The Simi/Santa Rosa fault zone is a complex zone of faults that trends westward from the Santa Susana Mountains, along the northerly margin of the Simi and Tierra Rejada Valleys, along the southern slopes of the Las Posas and Camarillo Hills, to their westerly slopes of the Las Posas and Camarillo Hills, to their easterly termination at the western edge of Camarillo.

Bailey Fault. This fault marks the boundary between the western margin of the Santa Monica Mountains and the Oxnard Plain and is located in the City of Camarillo. It extends from the Mugu Lagoon area northerly to an apparent intersection with the Camarillo Fault north of U.S. 101. The location of this fault is inferred based primarily upon water well data.

Camarillo Fault. The Camarillo fault extends in an east-west direction from the southern side of Camarillo High School to the Camarillo Airport. The trace of the fault is highlighted by the abrupt linear ridges that have been uplifted along the northern side of the fault in the southern portion of Camarillo.

Wright Road Fault. This fault is located at the western end of Camarillo and was named the "Wright Road fault" after its most prominent scarp across Wright Road. In 1998, CDMG zoned the Wright Road fault under the Alquist-Priolo Fault Hazard Zone Act after Treiman (1997) determined that it is an active, near-surface feature.

Sycamore Canyon and Boney Mountain Faults. These faults are the most prominent of a series of northeast-trending breaks extending from the Point Mugu and south coast area to the Thousand Oaks area. The presence of the faults is evident by surface exposures showing displacement of sedimentary and volcanic rocks of pre-Pleistocene age. The faults are designated as potentially active until more information is available for evaluation.

Oak Ridge Fault System (Not Depicted on Figure 11-2). The Oak Ridge fault is a major 35- to 56-kilometer-long, south-dipping reverse fault. The fault extends from the Santa Susana Mountains, westward to the Ventura area where it has been overridden by the Ventura-Pitas Point and Country Club faults. The fault system is considered active and a portion of the fault near the Bardsdale Cemetery in Fillmore (approximately 11 miles north of Camarillo) has been delineated as an Alquist-Priolo fault-hazard zone by the California Division of Mines & Geology.

Ventura-Pitas Point and Country Club Faults (Not Depicted on Figure 11-2). The Ventura fault has been mapped along the base of the hills south of Sulphur Mountain extending from north Saticoy westerly to the mouth of the Ventura River then westerly an unknown distance into the Santa Barbara Channel area, located approximately 11 miles from Camarillo, in the City of Ventura. The fault is referred to as the Pitas Point fault where it extends offshore.

Red Mountain/San Cayetano/Santa Susana/San Fernando Fault System (Not Depicted on Figure 11-2). This fault system consists of a major series of north-dipping thrust faults, which extend over 150 miles from Santa Barbara County into Los Angeles County. Geologic evidence suggests that the fault system should be considered active throughout its length is shown by location of earthquake epicenters. The system is associated with an intense zone of folded and faulted bedrock.

Santa Ynez Fault (Not Depicted on Figure 11-2). This fault extends from Point Conception in Santa Barbara County, across the central portion of Ventura County, to near the eastern County line. It is considered to be one of the major faults in the region and is about 90 miles long. Past displacement has been about 10,000 feet of the relative uplifting of the south side of the fault. The fault lies about 4 miles north of Ojai.

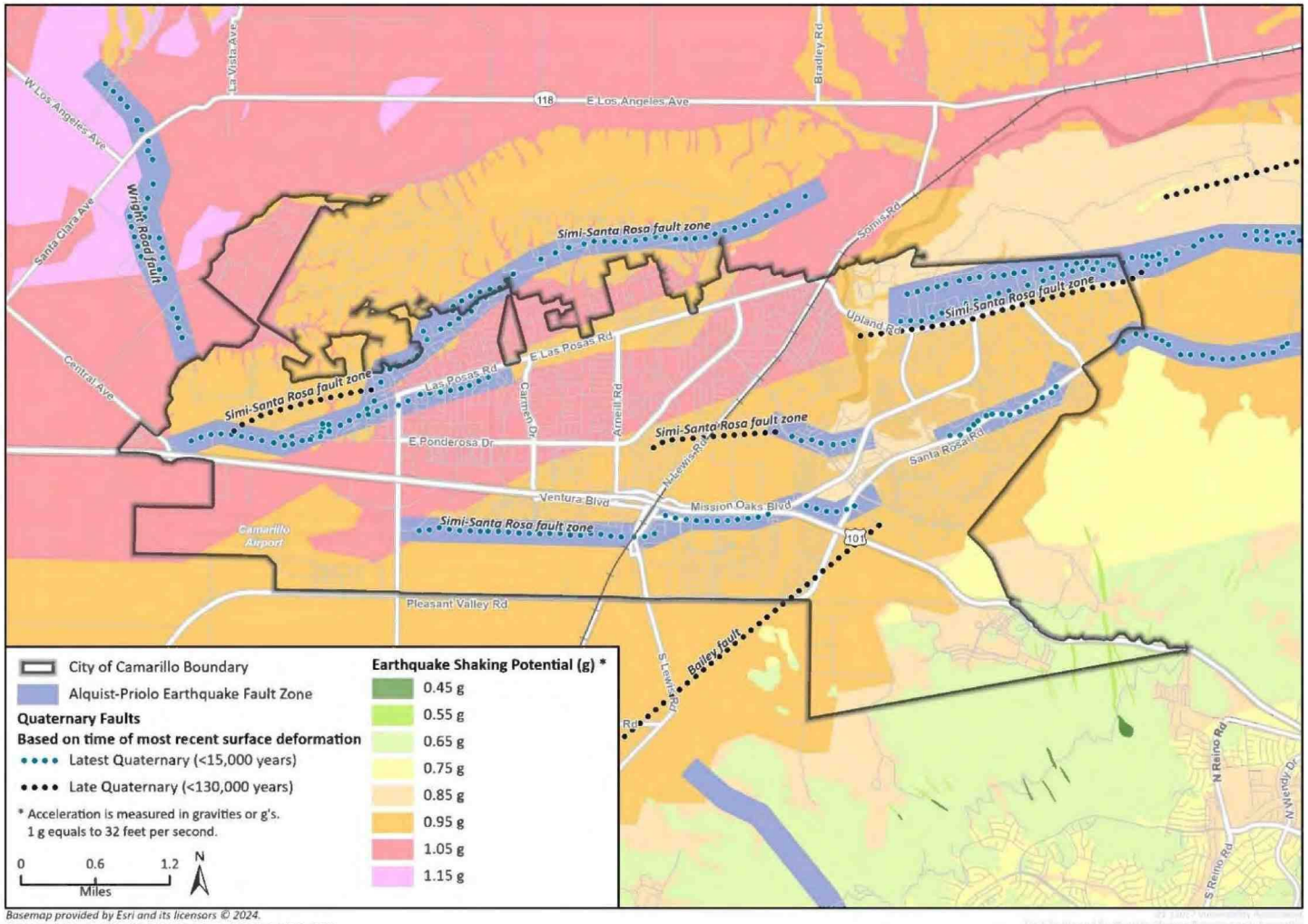
North County Line Faults (Not Depicted on Figure 11-2). Several large faults occur in the mountainous area north of the Santa Ynez fault and within Ventura County. The most significant of these faults are the Tule Creek, Munson Creek, Aqua Blanca, Frazier Mountain, and Big Pine faults. Of those, the more important appear to be the Pine Mountain Thrust and Big Pine faults (9 and 16 miles north of Ojai, respectively). Both of those faults are considered active.

San Andreas Fault (Not Depicted on Figure 11-2). The San Andreas is the longest and perhaps most important fault in California. That historically active fault has a length of over 960 kilometers and forms the tectonic boundary between the Pacific Plate to the west and the North American Plate to the east. Several major earthquakes have been recorded on the San Andreas fault, and it is generally considered to pose a significant earthquake risk to California. In its closest proximity to Camarillo, this fault is located 30-40 miles north of the City of Camarillo.

Fault Rupture

To assist cities and counties in avoiding the hazard of surface fault rupture, the Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish Earthquake Fault Zones around the surface traces of active faults. The State has identified three Alquist-Priolo Earthquake Fault Zones within Camarillo, shown in Figure 11-3. These zones are located along and just north of Las Posas Road, south of U.S. 101 just to the east of the airport, and north of U.S. 101 in the vicinity of Camarillo Road. To supplement the State-designated fault-rupture zones, Camarillo has established several additional fault-rupture zones that also require fault investigations.

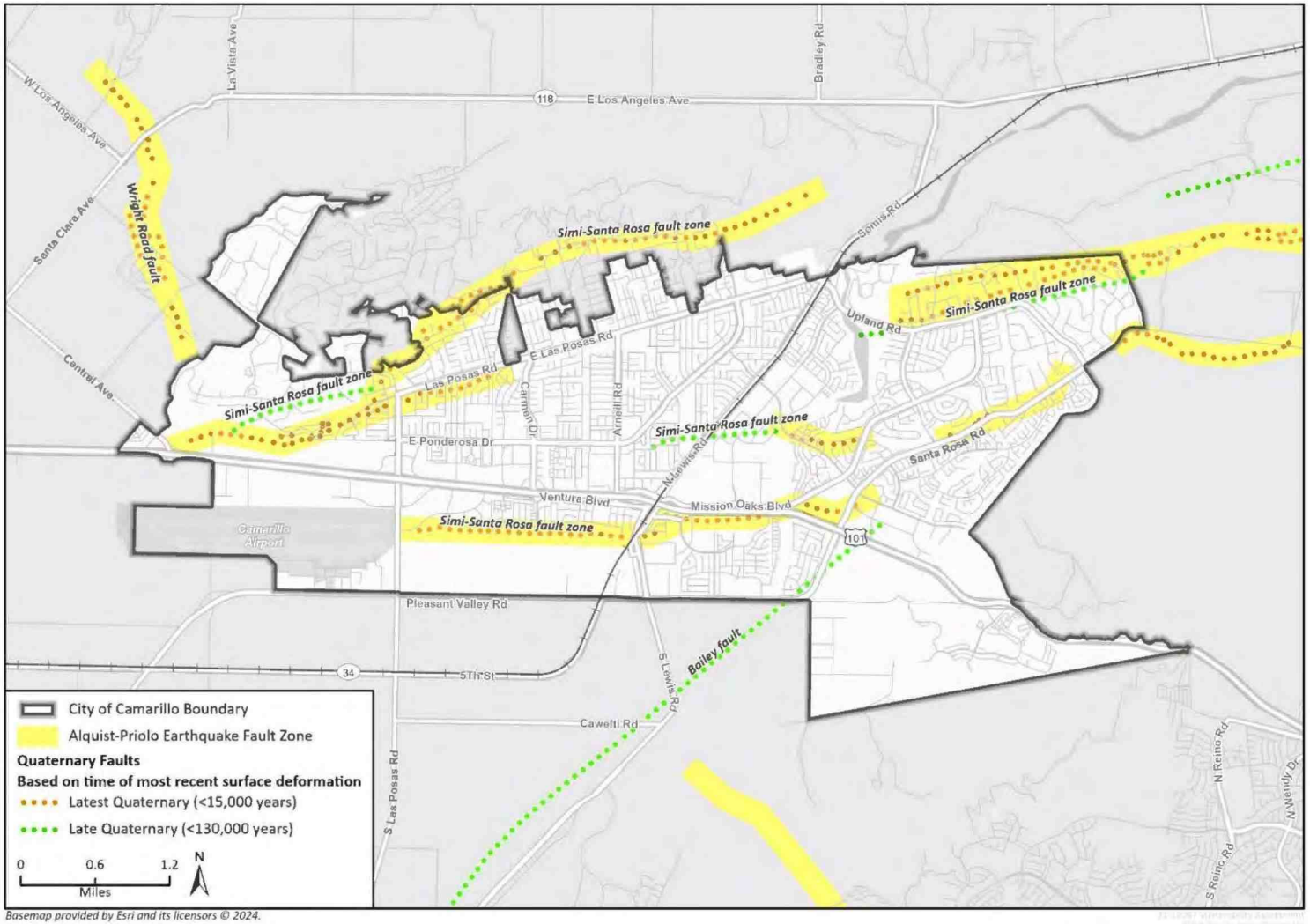
Figure 11-2 Camarillo Fault Map[1]



Basemap provided by Esri and its licensors © 2024.
Additional data provided by CGS Map Sheet 48, 2016; USGS, 2020.

[1] Earthquake shaking potential is used to describe the vibration of the ground during an earthquake, caused by body waves and surface waves. The severity of ground shaking increases as the magnitude of the earthquake increases.

Figure 11-3 Alquist-Priolo Earthquake Fault Zone Map



Basemap provided by Esri and its licensors © 2024.
Additional data provided by USGS, 2020.

Secondary Seismic Hazards

Ground shaking can induce secondary seismic hazards such as liquefaction, lateral spreading, subsidence, ground fissuring, and landslides. Liquefaction of saturated cohesionless soils can be caused by strong ground motion resulting from earthquakes. A large portion of the city, primarily the western half, lies within a liquefaction hazard zone per the State of California; refer to Figure 11-4. The process of liquefaction may also produce lateral spreading of soils on properties adjacent to creeks and drainages, such as Calleguas Creek and Conejo Creek.

Active faults may develop fissuring along the fault trace during a significant seismic event or groundwater elevation change, which could lead to differential subsidence. If commercial water wells are installed within or near the subsidence zone, the potential for ground fissuring and differential settlement effects could be more noticeable.

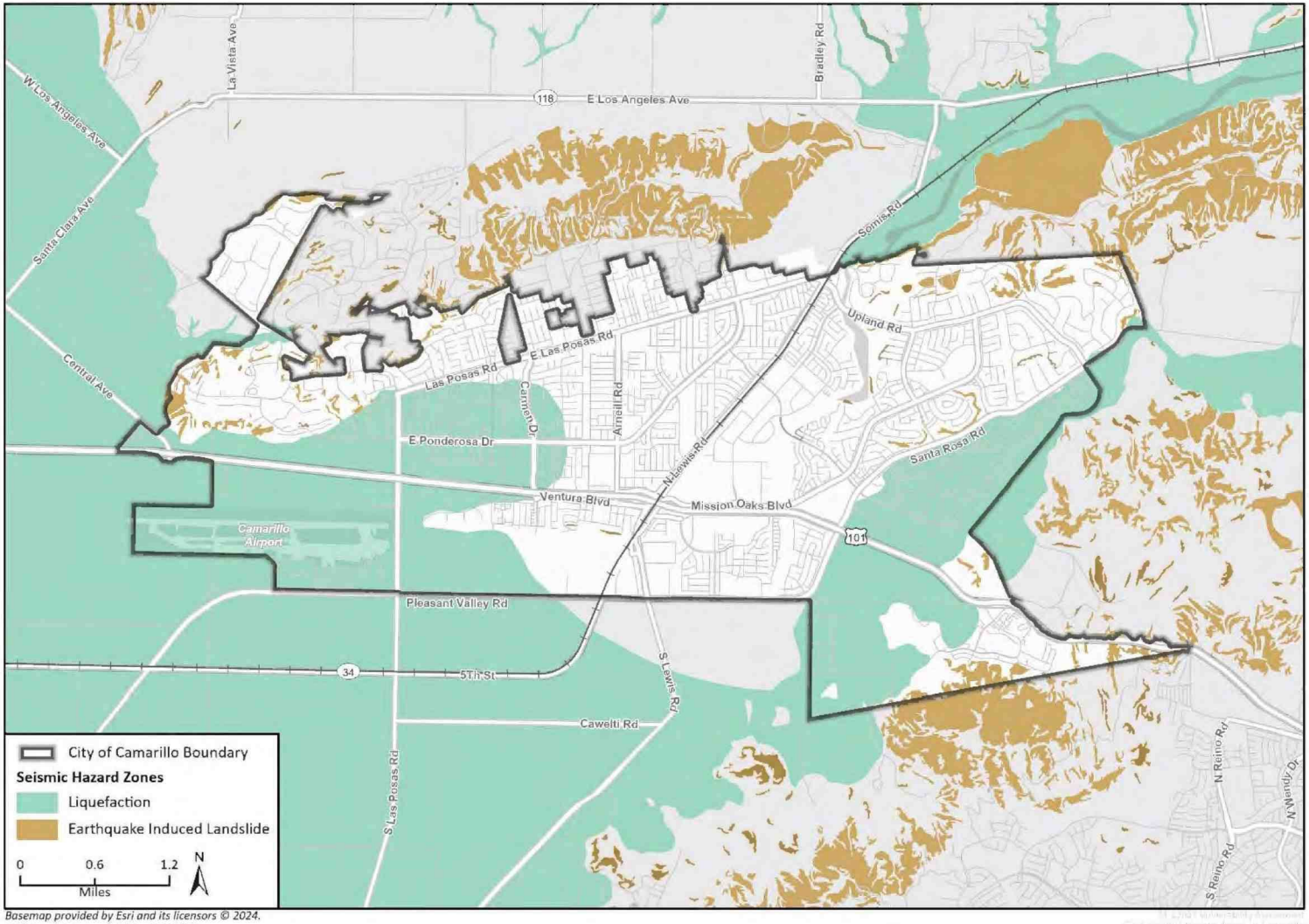
Earthquake-related landslide potential within Camarillo can be understood based on known conditions and published geologic maps. Landslides and potentially unstable slopes are especially common in hillside areas underlain by sedimentary bedrock of the Pico, Saugus, Santa Barbara, Monterey/Modelo and Rincon Formations. Those formations are generally soft and contain abundant silt and clay strata. Portions of the southern, eastern and western margins of the Camarillo Hills and the southwestern Santa Rosa Hills are present within the city. A few significant landslides are known to exist within those areas, and many slopes are only marginally stable. As in most other hilly terrain, landsliding can be caused by heavy precipitation events, which can lead to soil saturation and instability. Especially after wildfire events, where vegetation is burned and hillsides become barren, heavy precipitation can create dangerous landslide regimes. Climate change impacts such as increased longer droughts, larger and more intense wildfires, and increases in extreme precipitation events are expected to increase the likelihood of landslides.

Older buildings, mobile homes, and informal housing (unpermitted backyard units, converted garages or other types of accessory dwelling units) are more likely to suffer damage or collapse during strong seismic shanks and landslide events and vulnerable populations are more likely to work and/ live in these structures. Without access to insurance or financial reserves, vulnerable households may lose their homes permanently or be unable to rebuild or relocate quickly causing long-term displacement and unstable living conditions. Lastly, language barriers, mobility issues, and lack of transportation may prevent timely and accurate emergency communication, prevent evacuation or access to shelters, and delay access to emergency care or disaster relief. For more information on the potential impacts of landslides in the city, see Appendix A. Other potential causes of landslides include construction activities, unless stability considerations are incorporated in the design of development. Additionally, the potential for rock fall due to a seismic event or natural weathering and instability is also present in properties at the base of hillsides where rocks and boulders exist.

Landslide risks in Camarillo occupy regions that overlap with wildfire zones, and along sloped areas in the hills north of the city. The Ventura County Multi-Jurisdictional Hazard Mitigation Plan

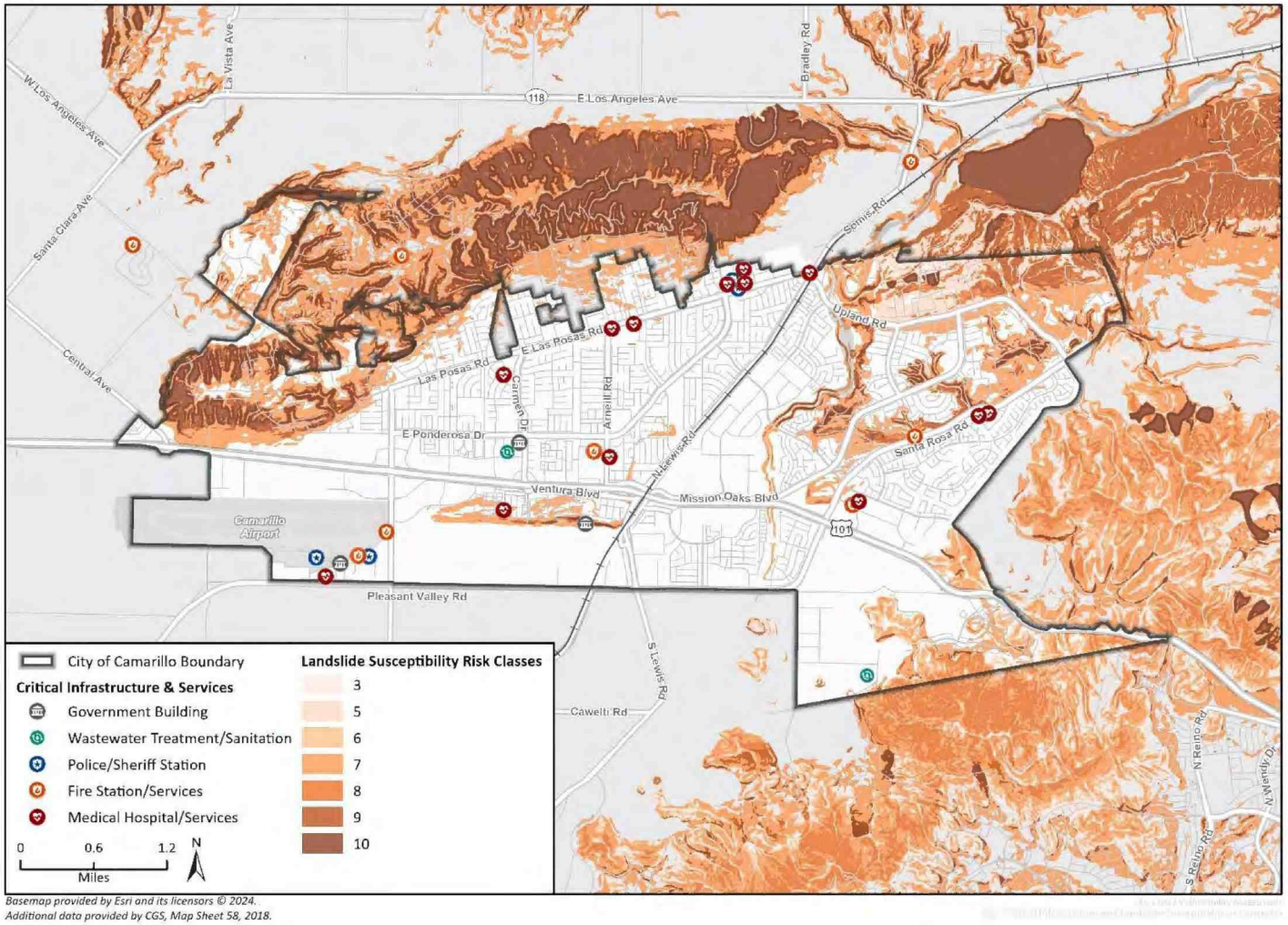
Exposure Assessment details past natural hazard events and specific assets at risk within Camarillo to landslides, as well as the number of people affected in the city. Figure 11-5 shows landslide susceptibility in Camarillo, with the highest risk areas being situated in the northern portion of the city. Specifically, landslide risk is significant in the region north of Ventura Boulevard and west of Las Posas Road, as well as in the region east of North Lewis Road and north of Mission Oaks Boulevard.

Figure 11-4 Liquefaction Susceptibility Map



Basemap provided by Esri and its licensors © 2024.
Additional data provided by CGS, 2002.

Figure 11-5 Landslide Susceptibility Map[1]



Basemap provided by Esri and its licensors © 2024.
Additional data provided by CGS, Map Sheet 58, 2018.

[1] The Landslide Susceptibility Map originates from the USGS 2009 National Elevation Dataset and shows the relative likelihood of deep-seated landsliding based on regional estimates of rock strength and steepness of slope. The map uses detailed information on past landslides, the location and relative strength of rock units, and steepness of slope to estimate susceptibility to deep-seated landsliding (0 to X, low to high). More information can be found at https://maps.conservation.ca.gov/cgs/metadata/MS58_metadata.pdf.

C. Flood Hazards

Creeks and Flooding

The Calleguas and Conejo Creeks are both located within the eastern portion of Camarillo, and the Beardsley Wash/Revolon Slough is located west of the city. Although extensive channel improvements have been constructed within the city, there are continuing efforts to reduce the flood risk east of Somis Road and off of Howard Road, along with building greater community resiliency through flood control project partnerships with the City and the Ventura County Watershed Protection District. Uses in the hazard areas are largely agricultural, with some residential and industrial development. Sections of U.S. 101 and rail lines of the Southern Pacific Railroad are also in the hazard zone. The Ventura County Watershed Protection District has designated Calleguas and Conejo Creeks and Beardsley Wash/Revolon Slough as District jurisdictional red line channels, and as such the District holds the right-of-way over the reaches of Calleguas and Conejo Creeks and Beardsley Wash/Revolon Slough and all other District jurisdictional red line channels within the current Camarillo city limits. The District's Flood Mitigation Plan for Ventura County identifies flood risk areas, flood hazard areas, and associated partners for flood mitigation such as federal agencies, legal and regulatory sources, and additional local policies, plans, programs, resources, and strategies.

Flooding in hazard areas can occur rapidly or slowly, depending on the heaviness and severity of rainfall. Climate change may cause low-lying areas throughout Camarillo to experience more frequent flooding and could increase the extent of 100-year floods. Riverine flooding is projected to increase as precipitation extremes increase (EPA 2023). Figure 11-6 maps the 100- and 500-year floodplains within Camarillo. Stormwater systems may be overwhelmed more frequently as more extreme rain events occur, causing localized flooding which could impact properties and close streets. Numerous facilities and infrastructure occupy 100-year or 500-year floodplains in Camarillo including several parks, a hospital, fire stations within and adjacent to floodplains, several schools, and wastewater facility are in existing flood plains.

Vulnerable populations are more likely to live and work in flood-prone areas, substandard housing, and experience slower infrastructure repairs in their neighborhoods. With flooding causing structural damage, mold, loss of possessions, and long-term displacement without the financial ability to rebuild or relocate. Flooding also increases exposure to waterborne illnesses, mold, and pollutants in poorly ventilated or crowded housing. These can more greatly impact people with chronic illnesses, children, and seniors. See Appendix A for more information on the potential impacts of climate-induced riverine and stormwater flooding in Camarillo.

Dam Inundation Areas

According to the Ventura County General Plan Hazards Appendix, there are many dams within the County. Additionally, much of Camarillo is within an area subject to potential inundation. Camarillo is within the vicinity of the Bard Reservoir, which holds approximately 11,000 acre-feet

of water. In addition, potential dam inundation associated with failure of the Pyramid Dam could affect parts Camarillo. Potential dam inundation areas are shown on Figure 11-7. Other dam inundation areas throughout the County are listed in Table 11-2 Dams with Inundation Potential in Ventura County, which includes other information about the dams such as owner, capacity, type, flood route, and potentially impacted areas. Should an inundation event occur, the City of Camarillo manages requirements for Flood Damage Protection via the City's Municipal Code. Camarillo Municipal Code Chapter 16.34 outlines requirements for Flood Damage Protection. Municipal Code Title 16 Code (in which Chapter 16.34 is located) incorporates the Uniform Building Code to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas.

Table 11-2 Dams with Inundation Potential in Ventura County

Dam/Reservoir Name	Owner	Capacity Acre-Feet	Type	Flood Route	Impacted Areas In Ventura County	Special Features
Bard Reservoir (Wood Ranch)	Calleguas Municipal Water District	11,000	Earth	Arroyo Simi	Simi Valley, Moorpark, Camarillo	
Bouquet Canyon	Los Angeles City Dept of Water and Power (DWP)	36,500	Earth	Santa Clara River	Fillmore, Bardsdale, Santa Paula, El Rio, Oxnard, Pt. Mugu, Pierpoint Bay	Dam near S.A. Fault Zone (5 miles)
Casitas Dam	Bureau of Reclamation	254,000	Earth Fill	Coyote Creek Ventura River	Casitas Springs, Ventura Avenue	Short Time for Warming
Castaic Dam	California Department of Water Resources (CDWR)	325,000	Earth	Santa Clara River	Piru, Fillmore, Bardsdale, Santa Paula, Oxnard Plain	Hot Potential for Debris
Drink Water Reservoir*	Los Angeles City DWP	80	Earth	San Francisquito Canyon	Santa Clara River	River Drainage
Dry Canyon*	Los Angeles City DWP	1,140 (Maintained) Empty)	Hydrofill	Santa Clara River	Immediate Vicinity of River	Hydrofill
Elderberry Flood Basin*	Los Angeles City DWP	33,000	Earth	Santa Clara River	Fillmore, etc.	Drains into Lake Castaic

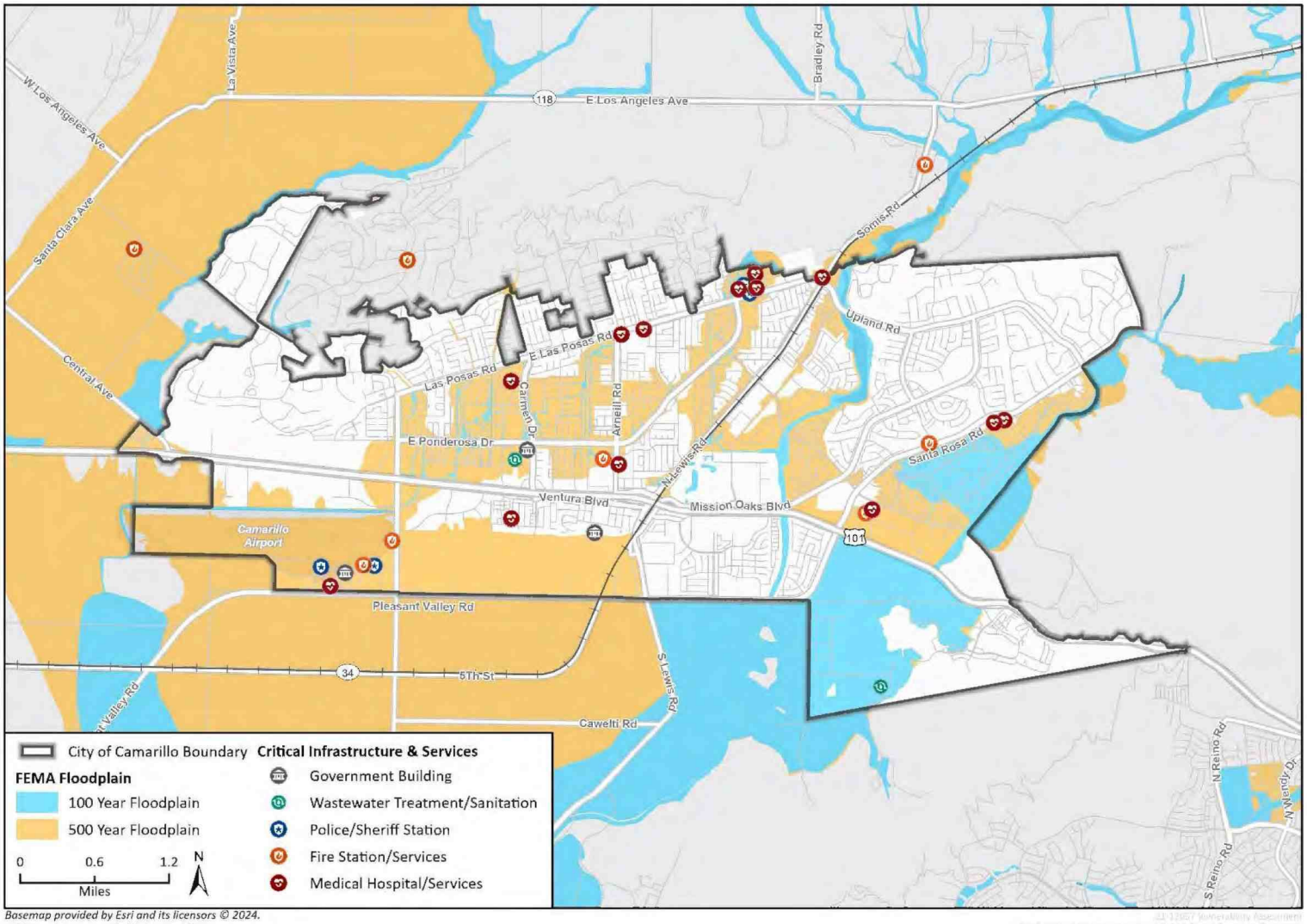
Ferro Debris Basin*	V.C. Watershed Protection District	7,900	Earth	Beardsley Wash/Revolon Slough	Agricultural Area, Highway 118	
Lake Eleanor	Conejo Open Space and Conservation Agency	128	Constant Radius Arch	Eleanor Creek	Westlake Blvd. to Westlake	Concrete Arch (1881) Short time for Warming
Lake Sherwood	Murdock Development Company	2,694	Constant Radius Arch	Petrero Creek	Westlake area to Thousand Oaks	Concrete Arch (1904) Short time for Warming
Las Llajas Reservoir	V.C. Watershed Protection District	1,250	Earth	Las Llajas Canyon	Simi Valley (midsection)	
Las Posas Estates Debris Basin*	V.C. Watershed Protection District	42	Earth	Beardsley Wash		
Matilija Dam	V.C. Watershed Protection District	1,800	Variable Radius Arch	Matilija Creek Ventura River	Matilija Hot Springs, Friends Ranch, County Dump, Live Oak Acres, County Honor Farm, Casitas Springs, and Ventura Riverbed	Dam Declared unsafe (Notch reduces storage capacity, monitored quarterly by VCFCD)
Meiners Oaks*	Meiners Oaks County Water District	15 (out of service)	Earth			
Sycamore Canyon*	V.C. Watershed Protection District	890	Earth	Arroyo Simi	Simi Valley	Inundated by Bard (Wood Ranch)
Pyramid Dam	CDWR	179,000	Earth Fill	Piru Creek, Santa Clara River	Piru, Bardsdale, Fillmore, Santa Paula, Oxnard Plain	Flows into Lake Piru (Santa Felicia Dam)
Runkle Debris Basin	V.C. Watershed Protection District	100	Earth	Runkle Canyon	Simi Valley (Midsection)	
Santa Felicia Dam (Lake Piru)	United Water Conservation District	100,000	Earth	Piru Creek, Santa Clara River	Piru, Bardsdale, Fillmore, Santa Paula, Oxnard, Pt. Hueneme	Short time to Piru

Senior Canyon Reservoir	Senior Canyon Mutual Water Co.	78	Earth	Senior Canyon, San Antonio Creek	Ojai	
Sinaloa Lake	Sinaloa Lake Home Owners Association	200	Earth	Oak Canyon Arroyo Simi	Simi Valley	Inundated by Bard (Wood Ranch)

*Exempted by State Office of Emergency Services (OES) from preparing Dam Inundation Plans or Inundation Maps for Ventura County.

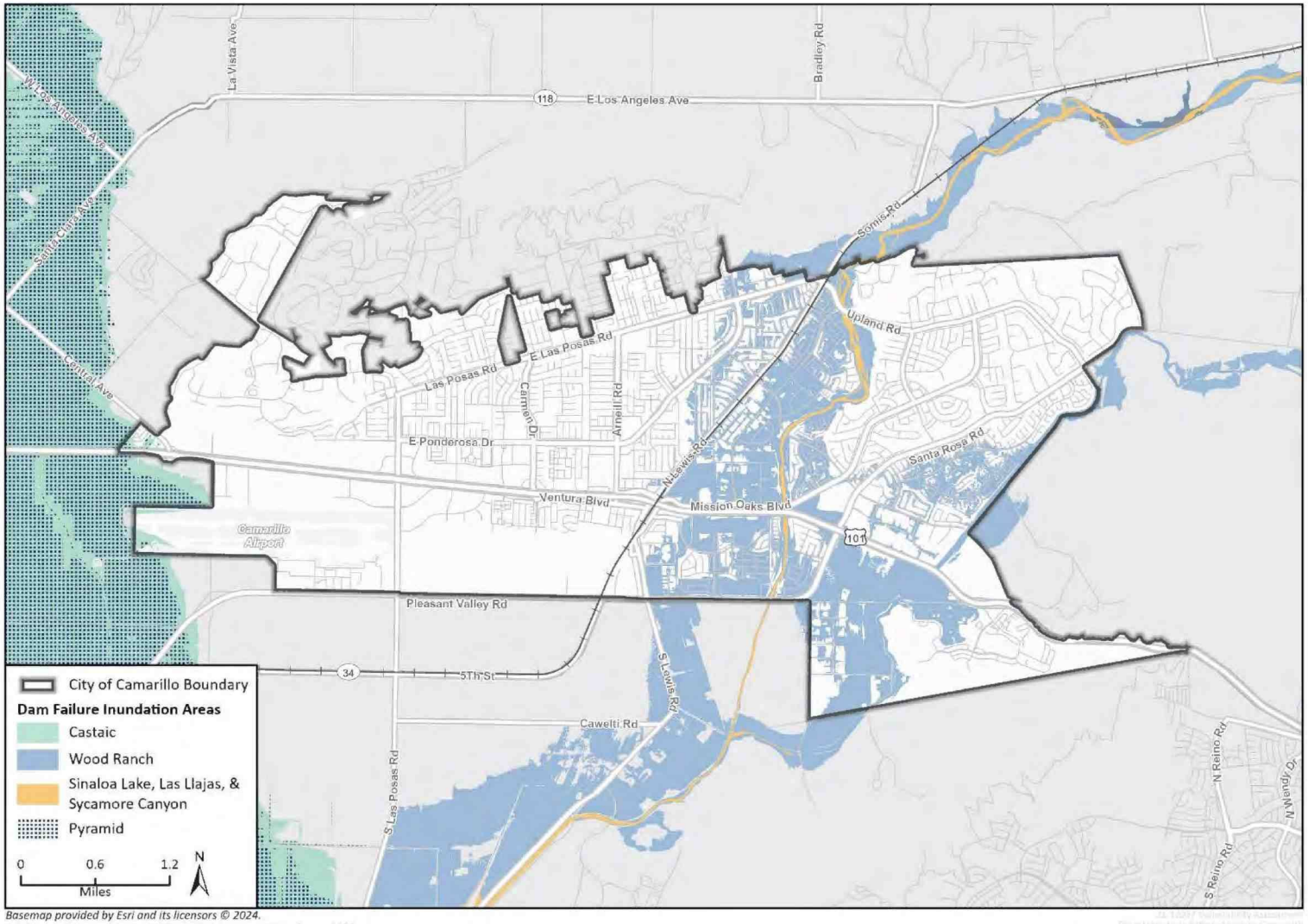
Source: Figure 2.11.1, Ventura County General Plan, June 28, 2011.

Figure 11-6 FEMA Flood Zones



Basemap provided by Esri and its licensors © 2024.
Additional data provided by FEMA, 2021.

Figure 11-7 Dam Inundation Areas



Basemap provided by Esri and its licensors © 2024.
Additional data provided by DWR, DSOD Dam Inundation Areas, 2023.

D. Extreme Heat and Warm Nights

Extreme heat has historically presented challenges for California communities and ranks amongst the deadliest of all climate-driven hazards in California.[1] Extreme heat events are defined by days in which the daily maximum temperature exceeds the 98th percentile value of the historical average. Camarillo's extreme heat threshold temperature is 92.1°F.[2] Over the past 30 years on average, Camarillo has experienced 3 extreme heat events per year. However, as the effects of climate change worsen, Camarillo is projected to experience 24 extreme heat events per year by the end of the century. This 8-fold increase in extreme heat events will have many compounding effects on Camarillo's natural and built environment, vulnerable populations, and the economy. Warm nights in Camarillo, or nights when the daily minimum temperature is above the 98th percentile value of historical daily minimum/maximum threshold temperature of 63.4°F, will further exacerbate the compounding impacts of extreme heat. Historically, Camarillo has experienced 6 warm nights per year, but is expected to experience 63 warm nights per year by the end of the century.[3] These drastic increases in extreme heat will further strain much of the Camarillo's resources, communities, and infrastructure.

Impacts on the Camarillo's natural and built environment from extreme heat could include cracked pavement, grid overload, strained emergency services, and wildlife and vegetative stress. Extreme heat events are also likely to increase dependence on and demand for air conditioning throughout the city, leading to grid overload and potential blackouts. These blackouts could further exacerbate heat-related illnesses if households are without electricity for a significant amount of time. Additionally, telecommunications could be impacted as telecom tower computers could overheat and shut down, leading to a lack of access to a reliable communications network.[4] These compounding effects could result in extreme heat emergencies and a lack of access to health care and emergency services, which could cause health-related emergencies for residents of Camarillo. Similarly, wildlife and vegetation are likely to experience negative impacts from extreme heat, such as heat stress, habitat shifts, increased mortality rates, and dehydration.[5]

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[1] California Natural Resources Agency (CNRA). *Protecting Californians from Extreme Heat: A State Action Plan to Build Community Resilience.* April 2022. https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Climate-Resilience/2022-Final-Extreme-Heat-Action-Plan.pdf (accessed May 2024)

[2] California Energy Commission (CEC). 2024. Cal-Adapt: *Local Climate Change Snapshot for Camarillo.* https://cal-adapt.org/tools/local-climate-change-snapshot/ (accessed April 2024)

[3] California Energy Commission (CEC). 2024. Cal-Adapt: *Local Climate Change Snapshot for Camarillo.* https://cal-adapt.org/tools/local-climate-change-snapshot/ (accessed April 2024)

[4] BSR. 2024. "Infrastructure Breaks Under Extreme Heat." https://www.bsr.org/en/emerging-issues/infrastructure-breaks-under-extreme-heat (accessed March 2024)

[5] Office of Environmental Health Hazard Assessment (OEHHA). 2022. Indicators of Climate Change in California: Impacts on Vegetation and Wildlife. https://oehha.ca.gov/media/vegwildlifesection2022.pdf (accessed May 2024)

Extreme heat will put vulnerable populations at a disproportionately high risk of heat-related impacts. Exposure to extreme heat can lead to heat stroke, dehydration, heart disease, respiratory illness, and health-related mortality. Those especially at risk to heat-related illnesses include under-resourced individuals, individuals facing systemic discrimination, individuals with chronic health conditions or health related sensitivities, and outdoor workers. More information about these impacts is discussed in the Climate Change Vulnerability Assessment included as Appendix B.

Current efforts to mitigate the risks associated with exposure to extreme heat and reduce the incidence of mortality include a public cooling center operated by Ventura County at the Camarillo Public Library, managing the Ventura County Contingency Plan for Heat/Cold Weather Events, and assisting residents via the Southern California Edison (SCE) Medical Baseline Program.

E. Drought

Camarillo has experienced more frequent and continuous drought conditions in recent years, threatening the City's water supply and impacting agricultural production. Drought conditions are likely to worsen, as climate change increases the likelihood that low-precipitation years will coincide with above-average temperature years. The average length of dry spells, or the number of consecutive days with precipitation totals less than 1 mm, in Camarillo is projected to increase by 16 days to a total expected average of 173 days per year by the end of the century.[6] As a result, there will be a decreased supply of moisture and increased atmospheric demand for moisture, leading to increased moisture loss from soils and vegetation. The Ventura County region has been historically prone to severe droughts, most recently experienced in 2011-2015.[7] As climate change exacerbates drought conditions, the impacts to the community are likely to worsen. During periods of drought, vulnerable workers (e.g., agriculture, landscaping, and rural economies) can face fewer work hours, layoffs, and/or wage cuts as well as lack of unemployment benefits or other types of government aid. Droughts can also impact vulnerable communities by causing increases in food prices, water rates, electricity costs. The City currently supplies water to residents via groundwater from the Fox Canyon Aquifer from four community wells and imported water from the Calleguas Municipal Water District.[8] As drought conditions increase water demand for drinking water and agricultural irrigation, it is likely that the City will face water insecurity in the coming years. Additionally, because agriculture is one of the City's main industries, many of the residents are likely to face compounding effects due to drought, as agricultural production is threatened, leading to economic losses. To combat these ongoing

[6] California Energy Commission (CEC). 2024. Cal-Adapt: *Local Climate Change Snapshot for Camarillo.* https://cal-adapt.org/tools/local-climate-change-snapshot/ (accessed April 2024)
[7] Hall, Alex Neil Berg, Katharine Reich. (University of California, Los Angeles). 2018. Los Angeles Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-007.
[8] City of Camarillo. 2020. *Annual Water Quality Report.* https://ear.waterboards.ca.gov/Home/ViewCCR?PwsID=CA5610019&Year=2020&isCert=false (accessed April 2024)

drought conditions, the City has implemented water conservation ordinances such as one day per week lawn watering, public education materials, and drought tolerant landscaping on public properties. Additionally, the City maintains the Urban Water Management Plan which contains a Drought Risk Assessment and Water Shortage Contingency Plan to ensure proper demand reductions, supply augmentations, operational changes, emergency response, and communication protocols in the event of ongoing drought. However, as drought conditions worsen throughout the region, the City will need to update its management strategies to ensure water insecurity does not threaten community safety.

F. Fire Hazards

Wildland Fires

A wildland fire is an uncontrolled fire spreading through vegetative fuels that may expose or consume structures. Although not located in a wilderness area, the threat of a wildland fire in or near Camarillo is high due to the wildland urban areas in and around the city, where structures and other human development meet or intermingle with wildland or vegetative fuels. The threat of wildfire is particularly significant during dry summer months and when there are strong Santa Ana winds. The fire season typically extends approximately five to six months, from late spring through fall. The aftermath of wildland fire produces new areas of potential landslides as burned and defoliated soils are exposed to winter rains.

The undeveloped hillside areas in and adjacent to the city present a potentially serious wildfire hazard due to the high potential for large-scale wildland fires, as shown in Figure 11-8. The hills along the northern and eastern boundaries of the city, are within the "Very High," "High," and "Moderate" Fire Hazard Severity Zones (VHFHSZ, HFHSZ, and MFHSZ respectively). The Camarillo Springs neighborhood at the southeast portion of the city is in the VHFHSZ and HFHSZ. There are several critical facilities within the VHFHSZ including transportation infrastructure assets along U.S. 101. The St. John's Hospital in the northern portion of the city is adjacent to VHFHSZ. Several roads and residential areas are also located within the city's fire zones including U.S. 101 in the southeastern portion of the city. Figure 11-8 displays the most recent State Responsibility Area and Local Responsibility Area Fire Hazard Severity Zone Map as of July 2024. CAL FIRE updates to Fire Hazard Severity Zone maps and data can be accessed on the CAL FIRE website.[9] Wildfires can create risk of injury, death, or financial hardship if personal property is damaged as well as physical damage to all other assets creating cascading risks for vulnerable populations when infrastructure is damaged or off-line. Based on California historical fire perimeters data from CAL FIRE's Fire and Resource Assessment Program (FRAP), Camarillo has

[9] CALFIRE. 2024. "LRA and SRA Fire Hazard Severity Zone Viewer." https://osfm.fire.ca.gov/what-we do/community-wildfire-pre11-20paredness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps

experienced wildfires in 1958, 1973, 1985, 1997, and as recently as 2018.[10] The 2017 Thomas Fire burned 281,893 acres in both Ventura County and Santa Barbara County, though Camarillo did not incur any structural damage, and was only indirectly impacted due to smoke and by providing mutual aid and evacuation centers. However, in 2018, the Hill/Woolsey Fire started in the Camarillo area and was driven by fierce Santa Ana winds, ultimately burning 4,531 acres, including the Camarillo Grove Park.[11] More information regarding historical wildfires in Camarillo can be found via CAL FIRE's FRAP database and the U.S. Geological Survey's Wildfire Datasets from 1878-2019.[12]

The occurrence of wildfire and the average burned area are projected to increase in Camarillo through mid and end-century projections due to climate change.[13] Wildfire events are a product of temperature increases compounded with precipitation declines creating wildfire prone conditions. Ventura County's wildfires are influenced by Santa Ana Winds, which are responsible for the region's most destructive wildfires. Nearly 80% of wildfires occur during the summer and fall, with a quarter of annual wildfires occurring during Santa Ana events.[14]

Wildfire hazards can be higher for vulnerable populations due to older housing that is built with less wildfire mitigating materials and lack of defensible space. Before or during a wildfire, vulnerable populations may face barriers to evacuation and emergency alerts due to lack of access to vehicles, public transit, limited physical mobility, and language or literacy barriers to understanding alerts and instructions. These challenges can delay or prevent timely evacuation and increase risk of injury or death. Wildfire smoke also impacts children and adults with health conditions. Also access to clean indoor air via air purifiers and HEPA filters is often limited in low-income households. Wildfires disrupt tourism, agriculture, and service-sector economies and vulnerable workers often have no paid leave, savings, or access to other financial aid. For more information on the potential impacts of wildfire on the Camarillo community, reference Appendix A.

Because of the high wildfire risk, there are a number of building criteria and site maintenance regulations that are required by Ventura County. These regulations are enforced by the Ventura

10 CAL FIRE. 2024. "California Historical Fire Perimeters." https://gis.data.cnra.ca.gov/maps/CALFIRE-Forestry::california-historical-fire-perimeters/about (accessed September 2024)

11 Ventura County Fire Department. 2024. http://fire.countyofventura.org/AboutVCFD/FireCommunicationsCenterFCC/tabid/90/Defa ult.aspx (accessed April 2024)

12 US Geological Survey (USGS). 2019. Combined wildfire datasets for the United States and certain territories 1878-2019. https://www.sciencebase.gov/catalog/item/imap/5ee13de982ce3bd58d7be7e7 (accessed September 2024)

13 California Energy Commission (CEC). 2024. Cal-Adapt: *Local Climate Change Snapshot for Camarillo.* https://cal-adapt.org/tools/local-climate-change-snapshot/ (accessed April 2024)

14 Bendix, Jacob and Hartnett, Justin J. 2018. Environmental Research Letters. "Asynchronous lightning and Santa Ana winds highlight human role in southern California fire regimes." July 6, 2018. https://iopscience.iop.org/article/10.1088/1748-9326/aace39 (accessed April 2024) BSR. 2024. "Infrastructure Breaks Under Extreme Heat." https://www.bsr.org/en/emerging-issues/infrastructure-breaks-under-extreme-heat (accessed March 2024).

County Fire Department (also known as the Ventura County Fire Protection District) and the City of Camarillo.

These regulations are detailed in the California Building Standards Code, Chapters 7 and 7A, and the California Fire Code, Chapter 47 (California Code of Regulations, Title 24, Part 9), and address topics such noncombustible siding for buildings and 100-foot fuel modification (buffer) zones. Additionally, Ventura County maintains strict Fire Prevention Standards and Guidelines to guide communities within the County on proper fire mitigation techniques. These standards cover topics such as fire machinery access, defensible space and fuel modification zones, retrofit materials for commercial and residential building design, fire alarm installation, public school fire access and water storage, prohibited plant lists, combustible fencing, landscape and fuel modification, and more. Complying with these local standards is essential for the City to maintain the strictest fire safe guidelines throughout the community.

In addition, community planning, awareness, and involvement are proven elements of effectively reducing the occurrence of wildland fires and damage associated with them. Weed abatement notices are sent to property owners in Camarillo, and the Ventura County Fire Department actively enforces weed abatement procedures. The Ventura County Community Wildfire Protection Plan also outlines a weed abatement procedure along Calleguas Creek and establishes priorities for funding and mitigation strategies to reduce impacts of wildfire on communities within the county. The purpose of this plan is to ensure that annual combustible plants such as Arundo and Tamarisk are removed to prevent fire hazards along the creek, wildfire history is discussed, firefighting assets are assessed, and communities are adequately prepared for wildfire. This program is in process and ongoing year-round as necessary.

Urban Fires

No significant unusual urban fire hazards have been identified in Camarillo. Local high fire hazard zones are located in the wildland/urban interface areas, as described above. Management of hazardous materials that can cause fires are described in the Hazardous Materials Hazards section. Protection from urban fire hazards includes fire prevention and suppression, described in Fire Protection below.

Fire Protection

Fire suppression and preventative services in Camarillo are provided by the Ventura County Fire Department. Mutual aid, automatic aid and other agreements with surrounding departments allow the Ventura County Fire Department to provide the fastest and highest level of service.

The County Fire Department has three fire stations located within the City of Camarillo, described below.

Fire Station 50. Located on South Las Posas Road, Fire Station 50 was completed in early 2001 and serves Camarillo Airport, the western portion of the City of Camarillo and unincorporated portions of the Oxnard Plain. It is also the headquarters for Division 1.

This District's hazardous materials response unit and the District's Hazmat Officer are also assigned here. The aircraft fire/rescue vehicle also operates out of this Station.

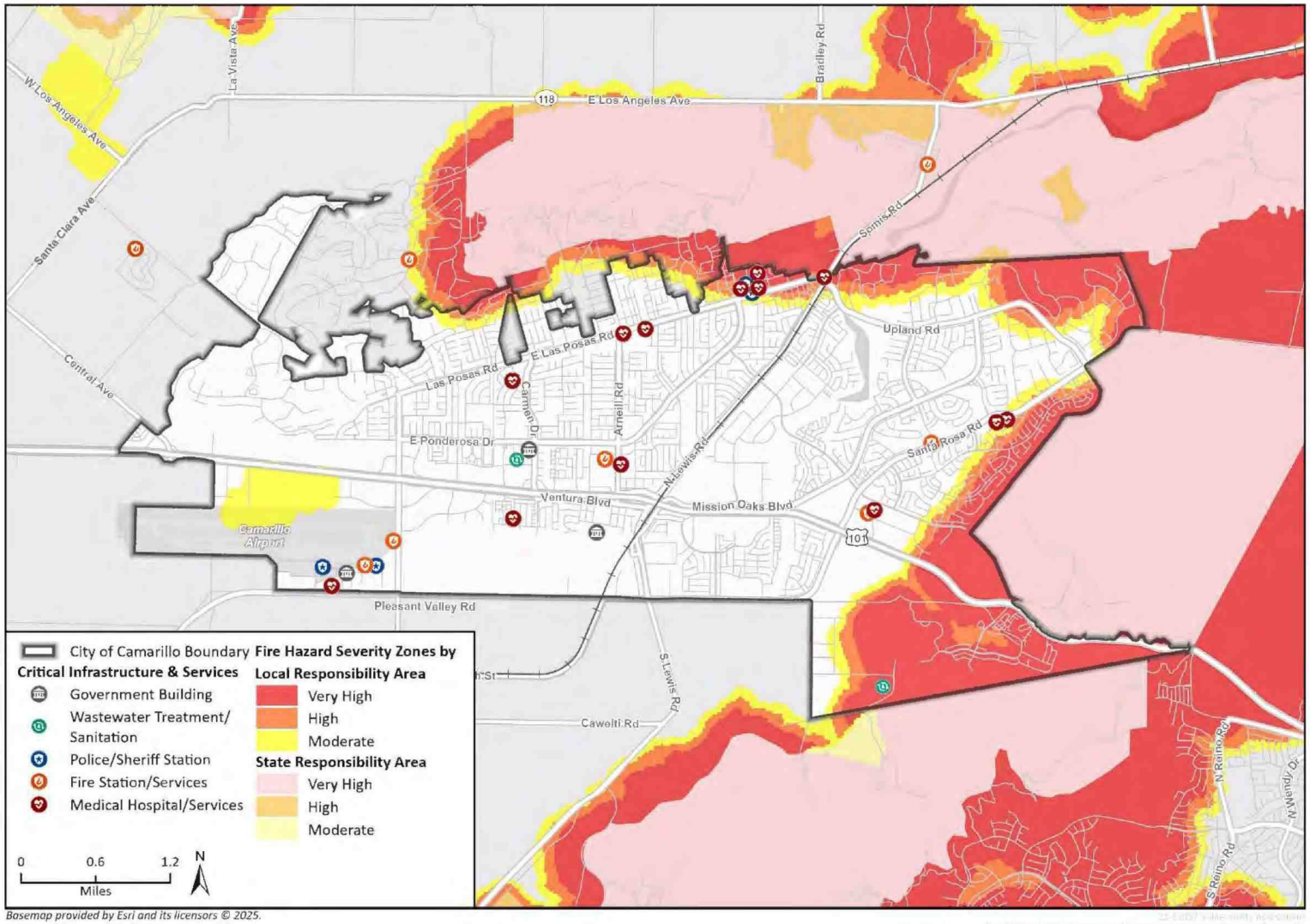
In 2023, a Rescue Ambulance with two Paramedic/Firefighters went into service at Station 50. The Station is staffed daily by five firefighters and houses an engine (Engine 50); a crash truck (Crash 50); a tractor-trailer HazMat unit (Hazmat 50); a recue ambulance (Rescue Ambulance 50); and a utility pickup (Utility 50). Also assigned to Station 50 are two De-Con trailers used for decontamination at HazMat incidents.

Fire Station 52. This Station is located on Santa Rosa Road and serves the eastern portion of the City of Camarillo and much of the Santa Rosa Valley. The Station was built in 1982 on land donated by the City to provide protection for the growth in the area. In 2002, the firefighter position was upgraded to Paramedic/Firefighter. This Station is staffed daily by three firefighters and houses a medic/engine (Medic/Engine 52); a reserve engine (Engine 152); and a reserve rescue ambulance (Rescue Ambulance 352).

Fire Station 54. Located at 2160 Pickwick Drive and serves the central area of Camarillo. The Station was built in 1995 to replace the old fire station and county building on Ventura Boulevard. The station is staffed daily by seven firefighters and houses an engine (Engine 54); a ladder truck (Truck 54); an urban search and rescue unit (USAR 54); and a swift water rescue unit (Swift Water 54). In addition, the station serves as the Battalion 1 Headquarters. Battalion 1 commands the Camarillo and Somis areas and the department's Special Operations activities. Special operations include hazardous materials mitigation, urban search and rescue services and specialized firefighting activities such as shipboard and aircraft emergencies.

Fire Station 55. Located at 403 Valley Road, this station was built in 1968 to serve the Las Posas Estates and was remodeled in the early 1990's. Fire Station 55 is staffed daily by three firefighters and houses Engine 55 and Brush Engine 355. Currently, it serves the northern portion of the city as well as the Las Posas Valley and the Spanish Hills area.

Figure 11-8 High Fire Hazard Severity Zones



Basemap provided by Esri and its licensors © 2025.
Additional data provided by CAL FIRE, 2024/2025.

Emergency Response Times and ISO Ratings

It is anticipated that average response times within Camarillo are within 8.5 minutes from receipt of the initial 9-1-1 call in the fire dispatch center. Insurance Services Offices (ISO) rates are used by the Ventura County Fire Department.

Fire Prevention Codes

The Fire Department engages in activities that are aimed at preventing fires and compliance with California Building Standards Code, Chapters 7 and 7A, and the California Fire Code (California Code of Regulations, Title 24, Part 9), which is derived from the International Fire Code (IFC). The Department provides fire protection engineering, building inspections for code compliance, new construction inspections for State Fire Marshal occupancies , fire hazard reduction program and hazardous materials inspections. As described later in this Element, the Department also provides education and training in public safety and emergency preparedness. Ventura County also maintains the Fire Prevention Standards and Guidelines which are stricter than state standards and provide regulations for defensible space maintenance, landscape and vegetation management, and building retrofitting.

Additionally, new development is subject to payment of a Fire Protection Facilities Fee. The Camarillo Municipal Code Section 16.50.010 states that new construction within the city will create a need for additional fire protection services and a corresponding need for additional or enlarged fire stations from which to provide those services.

Fire Prevention Programs

Ready, Set, Go! -- Wildfire Action Plan. Since Ventura County is so large and fires can be very prevalent, a county-wide program called “Ready, Set, Go” is a fire protection plan that is intended to protect residents from Urban and Wildfires. The purpose of the “Ready, Set, Go” program is to provide residents with a Wildfire Action Plan that serves as an educational tool informing residents about wildland/urban interface, defensible spaces, making their homes more fire resistant, fire preparation, and finally, in the event of a fire emergency, preparing to leave and evacuate to safety.

Ventura County Community Wildfire Protection Plan. In 2023, the Ventura Regional Fire Safe Council prepared the Ventura County Community Wildfire Protection Plan (CWPP) for all of Ventura County. This document, which was established in collaboration with local communities, federal agencies, and community organizations in the county, identifies wildfire risks and establishes priorities for funding and mitigation strategies to reduce impacts of wildfire on communities within the County. The CWPP discusses wildfire history, firefighting resources, assets at risk, future risk assessment, provides local community snapshots for cities within the county, including Camarillo, and discusses priority actions to mitigate fire hazards. These priority actions include community engagement and education, structural hardening, defensible space, fuels reduction, and evacuation and emergency response.

Ventura County Fire Department Fire Hazard Reduction Program (FHRP). The FHRP is the cornerstone of the Wildland Fire Action Plan, in which the Ventura County Fire Department provides county residents with guidance for vegetation clearance, defensible space, landscapes and fuel modifications, and real estate defensible space inspections. Additionally, the program works in coordination with the Ventura Regional Fire Safe Council and the Firewise USA Community program via the National Fire Protection Association (NFPA) to ensure Ventura County communities are adequately prepared for wildfire.

Ventura County Fire Department Unit Strategic Fire Plan. The Unit Strategic Fire plan describes Ventura County's fire history, firefighting capabilities, and collaboration throughout different agencies, non-government organizations, and private entities. It also provides a reporting mechanism that tracks the implementation of projects that work to meet VCFPD's goals and objectives.

Ventura County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The Ventura County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), the most current MJHMP, which covers the City of Camarillo's planning area, was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and follows FEMA's Local Hazard Mitigation Plan guidance. The MJHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which includes both short and long-term strategies, involves planning, policy changes, programs, projects, and other activities related to hazards including wildfires.[15]

G. Air Quality

Policies to address air quality are included in Camarillo's Open Space and Conservation Element of the General Plan. However, as impacts of climate change are expected to exacerbate air quality conditions, this Safety Element includes additional policies to mitigate air quality impacts associated with other safety issues, such as extended droughts, more frequent wildfires, and extreme heat. Local continuous pollution sources include smog, pesticide drift from agricultural fields, wind-blown dust particles from nearby agriculture. Increased temperatures can lead to higher rates of smog and decreased soil moisture, which will contribute to increased dry, dusty conditions and can increase the amount of inhalable particulate matter in the air. Also, severe wildfire conditions are increasing in frequency and severity due to climate change and exacerbated by strong Santa Ana winds in the region. These wildfires lead to increased wildfire smoke exposure and release associated toxins, pollutants, and particulate matter into the air at increased rates. Precipitation variability and longer dry spells will lead to less moisture in the air,

[15] Ventura, County of. Multi-Jurisdictional Hazard Mitigation Plan. https://www.readyventuracounty.org/county-plans/#:~:text=The%20County%E2%80%99s%20Multi-jurisdictional%20Hazard%20Mitigation%20Plan%20%28HMP%29%20inventories,reduction%20based%20on%20a%20comprehensive%20area-wide%20mitigation%20strategy. (accessed April 2024)

which naturally filters pollutants and improves air quality conditions.[16] As a result, there will be less natural air filtration throughout the region, exacerbating pesticide drift, smog, dust, and smoke conditions.

A large percentage of outdoor workers are employed in Camarillo and agriculture is one of its leading economic industries. These workers have endured poor air quality (especially during the recent Thomas and Woosley Fires) and will continue to face exposure to poor air quality, which can lead to health risks such as cardiovascular and respiratory diseases and illnesses. Vulnerable populations such as immunocompromised individuals, elderly people, and houseless individuals will also face disproportionate impacts from decreased air quality due to climate change.

The City of Camarillo is part of the Ventura County Air Pollution Control District which is the governing body for air quality monitoring and pollution mitigation in the county. The District currently operates five air quality monitoring stations located in El Rio, Okai, Piru, Simi Valley, and Thousand Oaks. Via these stations, up to date air quality data is regularly available and the City is able to adequately respond should pollution levels rise above acceptable standards. The District also recently published the 2022 Ventura County Air Quality Management Plan, which provides strategies for attaining the federal 8-hour ozone standards and progressing the County's air quality management strategies to maintain compliance with these standards as climate change exacerbates air quality conditions. Such strategies include enhancing rideshare and alternative transportation measures, reducing vehicle miles traveled, requiring marine vessel speed limitations off the coast of Ventura County, and enhancing the Funding Agricultural Replacement Measures for Emission Reduction (FARMER) Program.

H. Hazardous Materials and Waste

A hazardous material is any substance that may be explosive, flammable, poisonous, corrosive, radioactive, reactive, or any combination thereof, because of its quantity, concentration, or characteristics. Hazardous materials require special care in handling due to the hazards they pose to public health, safety, and the environment. Potential hazards associated with hazardous materials include fires, explosions, and leaks. Releases of hazardous materials can be damaging when they occur in highly populated areas or along transportation routes.

Hazardous materials are transported through the city, and businesses within the city handle, transport, and/or store hazardous materials. Other sources of hazardous materials include agricultural operations, illegal drug manufacturing, and clandestine dumping.

Existing Federal, State, and local laws regulate the use, transport, disposal, and storage of hazardous materials within Camarillo. The United States Environmental Protection Agency (EPA) and the California Department of Toxic Substance Control (DTSC) have developed and continue to update lists of hazardous wastes subject to regulation. Additionally, the Regional Water Quality Control Board (RWQCB), Los Angeles County Region (Region 4), is the enforcing agency

[16] Hall, Alex Neil Berg, Katharine Reich. (University of California, Los Angeles). 2018. Los Angeles Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-007.

for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil, groundwater, and surface water bodies. At the local level, the City manages the Municipal Code Section 19.54.085 and 9.04.010 which delineates hazardous materials and hazardous waste management siting criteria.

Additionally, the County of Ventura's Environmental Health Hazardous Materials Program is a Certified Unified Program Agency (CUPA). The CUPA is a single local agency designated by the California Environmental Protection Agency as having regulatory authority for six environmental programs: Hazardous Waste, Hazardous Waste On-site Treatment, Spill Prevention Countermeasure Plan (aboveground tanks), Underground Storage Tanks, Hazardous Materials Business Plan and Inventory, and Risk Management Plan. The Ventura County CUPA enforces those programs throughout the County, except for the City of Oxnard. In addition to the CUPA Program, County staff responds whenever there is an accidental release of hazardous materials.

The program also includes the Leaking Underground Fuel Tank (LUFT) Program that oversees cleanup of leaky underground tank sites under contract to the State Water Board. Environmental Health Department Reference Documents include the following:

- California Health and Safety Code, Division 20
- California Code of Regulations, Title 19, Title 22 and Title 23
- Ventura County Ordinance, Chapter 5
- Ventura County Environmental Health Division

Transport of Hazardous Materials

Hazardous substance incidents are prone to occur within the City of Camarillo due to the presence of highways and railways. Transportation of hazardous materials/wastes is regulated by California Code of Regulations Title 26. The Federal Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials, and establishes regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). The California Highway Patrol and the California Department of Transportation enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State and local governmental authorities and private persons and are treated as Threat Assessment 2 through the Camarillo Multi-Hazard Functional Plan.

Hazardous Materials Sites

Certain businesses in the City of Camarillo incorporate hazardous materials into their production or service processes, and some generate hazardous waste. These businesses include automotive services, dry cleaners, photo processing, printing, lithography, and medical services. Additionally, the Multi-Hazard Functional Plan identifies the Equilon Pipeline Company Crude Oil Line, located in the northeast portion of the city east of Upland Road as an active and a potential threat, as well as transmission/distribution gas lines within and adjacent to the city.

Hazardous materials disclosure allows for the inspection of businesses that generate, store, and use hazardous materials. Through regular inspections, VCFD can identify hazardous conditions and can obtain compliance through the fire code to provide for the safety of citizens and fire fighters in the event of a hazardous materials fire or release.

Furthermore, a Hazardous Materials Business Plan (HMBP) provides the Ventura County Certified Unified Program Agency (CUPA), local fire agencies, and the public with information on hazardous materials at businesses and most government facilities. The HMBP also incorporates California Health and Safety Code Chapter 6.95 and California Code of Regulations Title 19. The CUPA is responsible for HMBP program compliance within Camarillo.

Hazardous Materials Incidents

The HazMat Unit of the Ventura County Fire Department responds to hazardous materials incidents, with further assistance provided by the County Department of Environmental Health. All Ventura County Fire Department personnel receive first responder operations training and are trained in hazardous materials decontamination procedures, so that they can determine that a problem exists, isolate the problem, and assist an advanced team when it arrives. From there, the County Department of Environmental Health Staff provides organizational assistance and supervision for cleanup and decontamination of hazardous materials incidents.

Hazardous Waste

Hazardous waste is waste with properties that make it dangerous or potentially harmful to human health or the environment. Camarillo and Ventura area landfills do not accept hazardous waste. However, households may bring hazardous waste to collection centers and collection events within Camarillo, while businesses that generate hazardous waste are required by State and Federal Law to contract with registered hazardous waste transporters and disposers.

I. Aircraft Hazards

Camarillo Airport

Camarillo Airport is classified in the National Plan of Integrated Airport Systems (NPIAS) as a general aviation reliever airport for the Los Angeles metropolitan area (FAA 1995, p. A-1 5).

Reliever airports play a key role in the nation's aviation system by providing an alternative to general aviation users in major metropolitan areas. Camarillo Airport is within the corporate limits of the City of Camarillo, three miles southwest of the City's central business district (CBD). The airport is situated less than one-mile south U.S. 101 and seven miles east of the Pacific Ocean coastline. Access to the airport is provided by Pleasant Valley Road immediately south of the airport. The airport is bordered to the east by Las Posas Road, which links the airport to the Ventura Freeway and the City of Camarillo to the north as well as Naval Base Ventura County - Point Mugu and the Pacific Coast Highway (State Highway 1) to the south.

The Ventura County Airport Land Use Commission (VCALUC) adopts plans to protect and promote the safety and welfare of airport users and residents in the airport vicinity. The Airport Comprehensive Land Use Plan (ACLUP) for Ventura County establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Ventura County. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners (including special district and other local government entities as well as private parties) in their design of new development. State law requires each local agency to have jurisdiction over land uses within an ALUC's planning area to modify its general plan and any affected specific plans to be consistent with the compatibility plan.

The basic function of airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. The principal compatibility concerns involve impacts related to Noise Compatibility, Safety Compatibility, and Airspace Protection and Heights.

For this purpose, both the ACLUP and the Camarillo Airport Master Plan are summarized below.

Airport Noise

Noise is a common issue for development surrounding airports. Sensitive receptors such as residential or institutional uses (i.e., single-family houses, churches, schools, or hospitals) must be accounted for. The noise compatibility standards and ranges noted in Table 11-3 are measured in decibels in the CNEL range and shown below.

Safety Compatibility

The Camarillo Airport Master Plan states that ALUCs are somewhat limited in their enforcement power. The statute specifically says that ALUCs have no authority over either existing land uses or the operation of airports. Local general plans are the primary mechanism for implementing the compatibility policies set forth in the ALUC's plan. State law allows for the county board of supervisors to designate an existing body to fulfill the role of the ALUC instead of creating an entirely new entity. The Ventura County Transportation Commission (VCTC) has been designated by the Board of Supervisors to act as the ALUC for Ventura County.

On July 7, 2000, the VCTC adopted the Airport Comprehensive Land Use Plan for Ventura County (ACLUP). The ACLUP included the four airports located in the County. *Exhibit 11-8* presents the approved compatibility map associated with Camarillo Airport. This map and the recommendations for land use compatibility have subsequently been included in the City of Camarillo Zoning Code (Article VI, Chapter 19.170, Airport Protection Overlay Zone [AP]) as of

March 2006. The compatibility map defines several zones and provides recommended land uses. A summary of the recommended land uses by zones are as follows:

- **Runway Protection Zone (RPZ).** Should be free of any land uses that will generate congregations of people on the ground. Unacceptable uses include residential, public/ institutional, commercial, industrial (except utilities and automobile parking), and recreation/open space (with the exception of golf courses).
- **Outer Safety Zone (OSZ).** Roughly corresponds to the 14 CFR Part 77 approach surface extending between the RPZ and the base of the 14 CFR Part 77 horizontal surface. The size of this area will differ based on the type(s) of instrument approach(es) and local operating procedures. For example, the Camarillo OSZ was enlarged to cover the area beneath a commonly used right turning flight track on Runway 26 departures. Residential and public/institutional uses are unacceptable in the OSZ. Some commercial, industrial, transportation, communication, utilities, recreation/open space uses are conditionally acceptable pursuant to meeting specific guidelines. Conditionally acceptable uses should have avigation easements and fair disclosure agreements.
- **Traffic Pattern Zone (TPZ).** Roughly rectangular area centered on the airport. It is an area commonly traversed by low altitude aircraft overflights and touch-and-go traffic in the pattern. At Camarillo, the TPZ extends 3,400 feet to either side of the runway. Most land uses are conditionally acceptable in the TPZ including residential, commercial, and industrial uses; whereas, some uses are fully acceptable including transportation terminals, utilities, automobile parking, and most outdoor recreational/open space uses with the exception of those creating large gatherings of the public (sports arenas, amphitheaters, etc.). Public/institutional uses are unacceptable in the TPZ. Conditionally acceptable uses should have avigation easements and fair disclosure agreements.

Table 11-3 Adopted Land Use Compatibility Standards Related to Aircraft Noise for Ventura County Airports

Land Use	CNEL Range (dB) 60-65	65-70	70-75	75-80	Over 80
Residential [1]					
Single Family	C [a]	U	U	U	U
Multi-Family	C [a]	U	U	U	U
Mobile Home Parks	U	U	U	U	U
Public/Institutional					
Hospitals/Convalescent Homes	C [a]	C [b]	U	U	U
Schools	C [a]	C [b]	U	U	U
Churches/Synagogues	C [a]	C [b]	U	U	U
Auditoriums/Theaters	C [a]	C [b]	C [c]	U	U
Transportation Terminals	A	A	C [d]	C [c]	C [f]
Communication/Utilities	A	A	C [d]	C [c]	C [f]
Automobile Parking	A	A	C [d]	C [c]	C [f]
Commercial					
Hotels and Motels	C [a]	C [b]	C [c]	U	U
Offices and Business/Professional Services	A	A	C [g]	C [h]	U
Wholesale	A	A	C [d]	C [e]	C [f]
Retail	A	A	C [g]	C [h]	U
Industrial					
Manufacturing – General/Heavy	A	A	C [d]	C [e]	C [f]
Light Industrial	A	A	C [d]	C [e]	C [e]
Research and Development	A	A	C [d]	C [e]	C [e]
Business Parks/Corporate Offices	A	A	C [d]	C [e]	C [e]
Recreation/Open Space					
Outdoor Sports Arenas	A	C	C	U	U
Outdoor Amphitheaters	U	U	U	U	U
Parks	A	A	A	U	U
Outdoor Amusement	A	A	A	U	U
Resorts and Camps	A	A	A	U	U
Golf Courses and Water Recreation	A	A	A	U	U
Agriculture	A	A	A	A	A

Notes

A = Acceptable land use

C = Land use is conditional upon meeting compatibility criteria (see footnotes) U = Unacceptable land use

A fair disclosure covenant shall be recorded for all conditionally acceptable land uses.

[a] New construction or development may be undertaken only after an analysis of noise reduction requirements and necessary noise insulation is included in the design.

[b] Noise level reduction [NLR] from outdoor to indoor of at least 25 A-weighted decibels (dBA) must be achieved by incorporation of noise attenuation into the design and construction of the structure.

[c] Noise level reduction [NLR] from outdoor to indoor of at least 30 dBA must be achieved by incorporation of noise attenuation into the design and construction of the structure.

[d] Measures to achieve NLR of 25 dBA must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

[e] Measures to achieve NLR of 30 dBA must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

[f] Measures to achieve NLR of 35 dBA must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

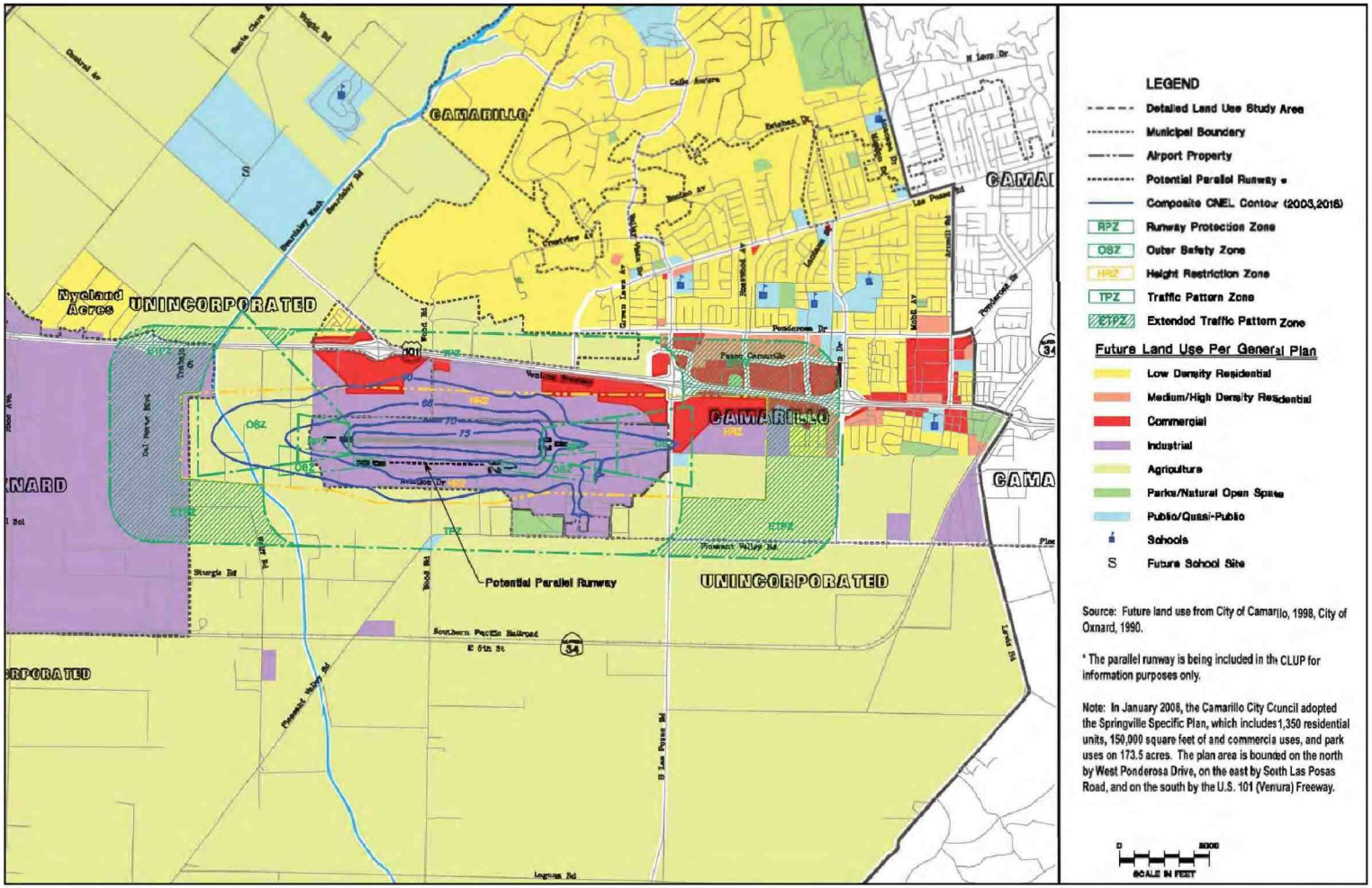
[g] Noise level reduction [NLR] of 25 dBA is required.

[h] Noise level reduction [NLR] of 30 dBA is required.

[i] Noise level reduction [NLR] of 35 dBA is required.

Source: Table 6A, Airport Comprehensive Land Use Plan for Ventura County, July 2000.

Figure 11-9 Airport Comprehensive Land Use Plan[17]



[17] Camarillo Airport. Airport Master Plan Draft Final. 2010. https://vcportal.ventura.org/AIRPORTS/docs/document_library/Camarillo_Airport_Master_Plan_(Draft_Final).pdf (accessed June 2024).

- **Extended Traffic Pattern Zone (ETPZ).** Based on the area which is beneath the extended traffic pattern on a typical or average busy day at the airport. All land uses are acceptable in the ETPZ; however, some uses are conditionally acceptable. Conditionally acceptable uses should have avigation easements and fair disclosure agreements.

The ACLUP stipulates that for all conditionally acceptable land uses, the recording of an avigation easement, fair disclosure agreement, and covenant shall be required. *Table 11-4*, demonstrates the Adopted Land Use Compatibility Standards in Safety Zones for Civilian Airports.

Figure 11-9, *Airport Comprehensive Land Use Plan*, shows the noise level contours and air travel pattern zones as they relate to surrounding land uses. *Figure 11-10*, *Camarillo Airport Master Plan Concept*, shows the ultimate buildout of the airport and its runways.

Airspace Protection and Heights

The Height Restriction Zone (HRZ) is essential to protecting airspace and structures from passing aircraft. The HRZ is established in accordance with Federal Aviation Regulation (F.A.R.) Part 77, which requires people proposing to construct certain tall structures (over 200 feet) or other structures near airports that would penetrate imaginary surfaces defined in Part 77 to notify the FAA of the proposed construction. The Federal Aviation Administration (FAA) will review the proposal and issue an acknowledgment stating that the proposal: 1) would not exceed any airspace protection surfaces defined on the airport's F.A.R. Part 77 Airspace Plan; or 2) would exceed a standard of the F.A.R. Part 77 Airspace Plan but would not be a hazard to air navigation; or 3) would exceed a standard of the F.A.R. Part 77 Airspace Plan and may be a hazard to air navigation pending a further aeronautical study. Within 30 days, the project sponsor may request the aeronautical study. Until an aeronautical study is completed, the proposed structure shall be presumed to be a hazard to air navigation.

Table 11-4 Adopted Land Use Compatibility Standards in Safety Zones for Civilian Airports

Land Use	Runway Protection Zone	Outer Safety Zone	Traffic Pattern Zone	Extended Traffic Pattern Zone
Residential				
Single Family	U	U	C [a, e]	A [e]
Multi-Family	U	U	C [a, e]	A [e]
Mobile Home Parks	U	U	C [a, e]	A [e]
Public/Institutional				
Hospitals/Convalescent Homes	U	U	U	A [e]
Schools	U	U	U	A [e]
Churches/Synagogues	U	U	U	A [e]
Auditoriums/Theaters	U	U	U	A [e]
Commercial				
Hotels and Motels	U	U	C [a, e]	A [e]
Offices and Business/Professional Services	U	C [a, e]	C [a, e]	A
Wholesale	U	C [a, e]	C [a, e]	A
Retail	U	C [a, e]	C [a, e]	A
Industrial, Transportation, Communication, and Utilities				
Manufacturing – General/Heavy	U	C [a, e]	C [a, e]	A
Light Industrial	U	C [a, e]	C [a, e]	A
Research and Development	U	C [a, e]	C [a, e]	A
Business Parks/Corporate Offices	U	C [a, e]	C [a, e]	A
Transportation Terminals	U	U	A	A
Communication/Utilities	C [b]	A	A	A
Automobile Parking	C [b]	A	A	A
Recreation/Open Space				
Outdoor Sports Arenas	U	U	U	A
Outdoor Amphitheaters	U	U	U	A
Parks	U	C [a]	A	A
Outdoor Amusement	U	C [a, e]	A	A
Resorts and Camps	U	C [a, e]	A [e]	A [e]
Golf Courses and Water Recreation	C [d]	A	A	A
Agriculture	A	A	A	A

Notes

A = Acceptable land use

C = Land use is conditional upon meeting compatibility criteria (see footnotes)

U = Unacceptable land use

[a] Maximum structural coverage must be no more than 25 percent. "Structural coverage" is defined as the percent of building footprint area to total land area, including streets and greenbelts.

[b] The placing of structures or buildings in the Runway Protection Zone is unacceptable. Above ground utility lines and parking are allowed only if approved by the Federal Aviation Administration (FAA) as not constituting a hazard to air navigation.

[c] Maximum structural coverage must not exceed 50 percent. "Structural coverage" is defined as the percent of building footprint area to total land area, including streets and greenbelts. Where development is proposed immediately adjacent to the airport property, structures should be located as far as practical from the runway.

[d] Clubhouse is unacceptable in this zone.

[e] An avigation easement is recommended, and a fair disclosure agreement and covenant shall be recorded by the owner and developer of the property.

Source: Table 6B, Airport Comprehensive Land Use Plan for Ventura County, July 2000.

Figure 11-10 Camarillo Airport Master Plan Concept[18]



[18] Camarillo Airport. Airport Master Plan Draft Final. 2010. https://vcportal.ventura.org/AIRPORTS/docs/document_library/Camarillo_Airport_Master_Plan_(Draft_Final).pdf (accessed June 2024).

In 2005, the Airport Land Use Commission amended the ACLUP to have the study areas also be known as the "Sphere of Influence," which sets boundaries for the review of development projects. This boundary is depicted on *Exhibit 10a*, *Camarillo Airport Sphere of Influence*. Additionally, the following standard applies within the HRZ at all airports:

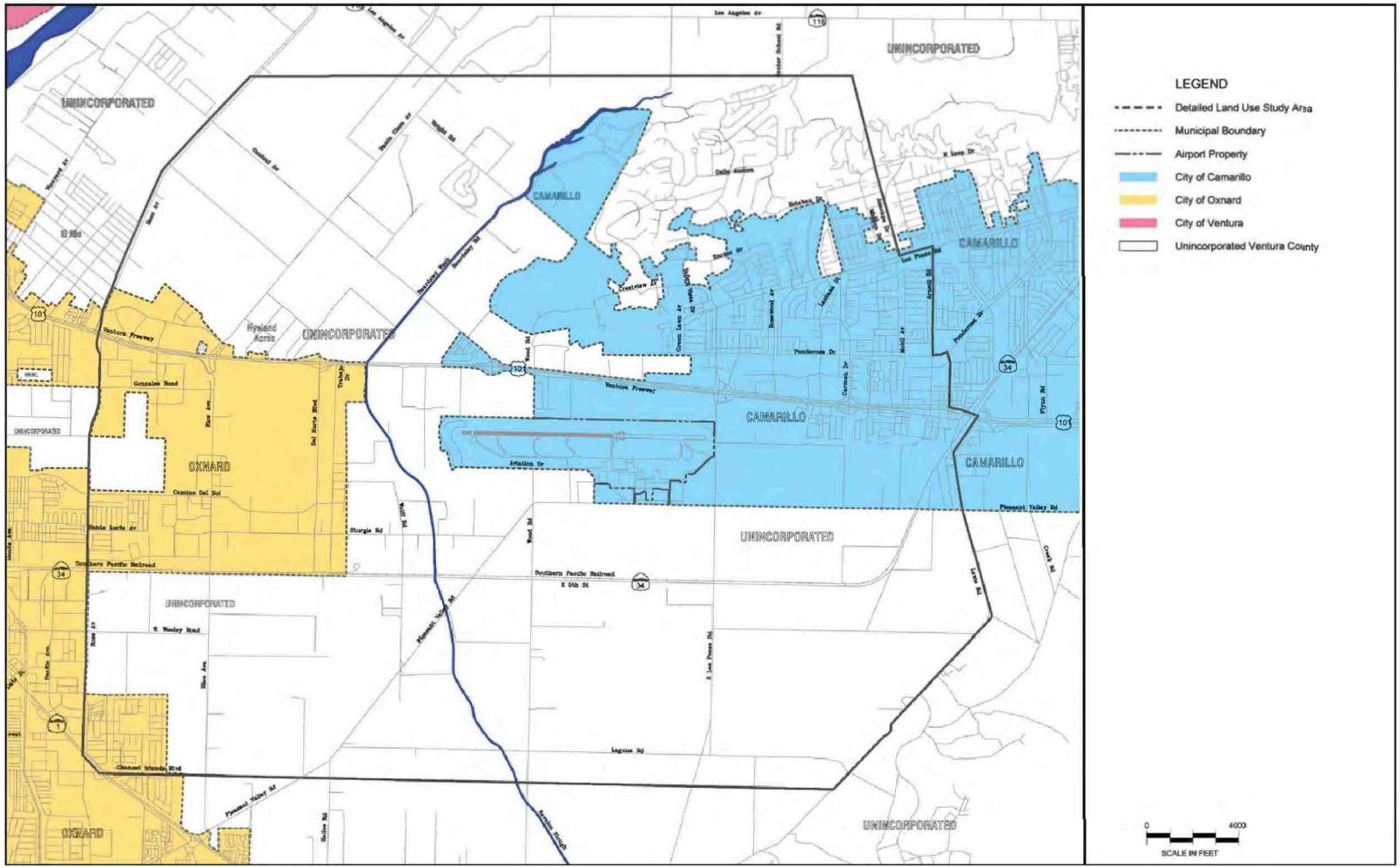
- Any structures proposed within the HRZ must remain below the Approach and Transitional Surface.
- Any structures proposed within any part of the F.A.R. Part 77 Airspace Plan which require a variance, conditional use, or special use permit because they exceed the permitted height requirements of the zoning ordinance shall be reviewed by the Airport Land Use Commission and the County of Ventura Department of Airports if the height of the proposed structure would penetrate any F.A.R. Part 77 surface.
- If the FAA reviews the proposed structure and finds that the structure would represent a hazard to air navigation, the proposal shall be disapproved. The proposal shall also be disapproved if the FAA finds that the structure would require the raising of approach minimums at any military or public use airport in the County.
- If the Federal Aviation Administration (FAA) reviews the proposed structure and makes a finding of "no hazard," the structure shall be permitted, provided that it shall be marked and lighted in accordance with the recommendations of the FAA.

Exhibits 11-10b and 11-10c, Camarillo Airport F.A.R. Part 77 Airspace Plan, show the permitted airspace travel pattern for Camarillo Airport.

Air Traffic Incidents

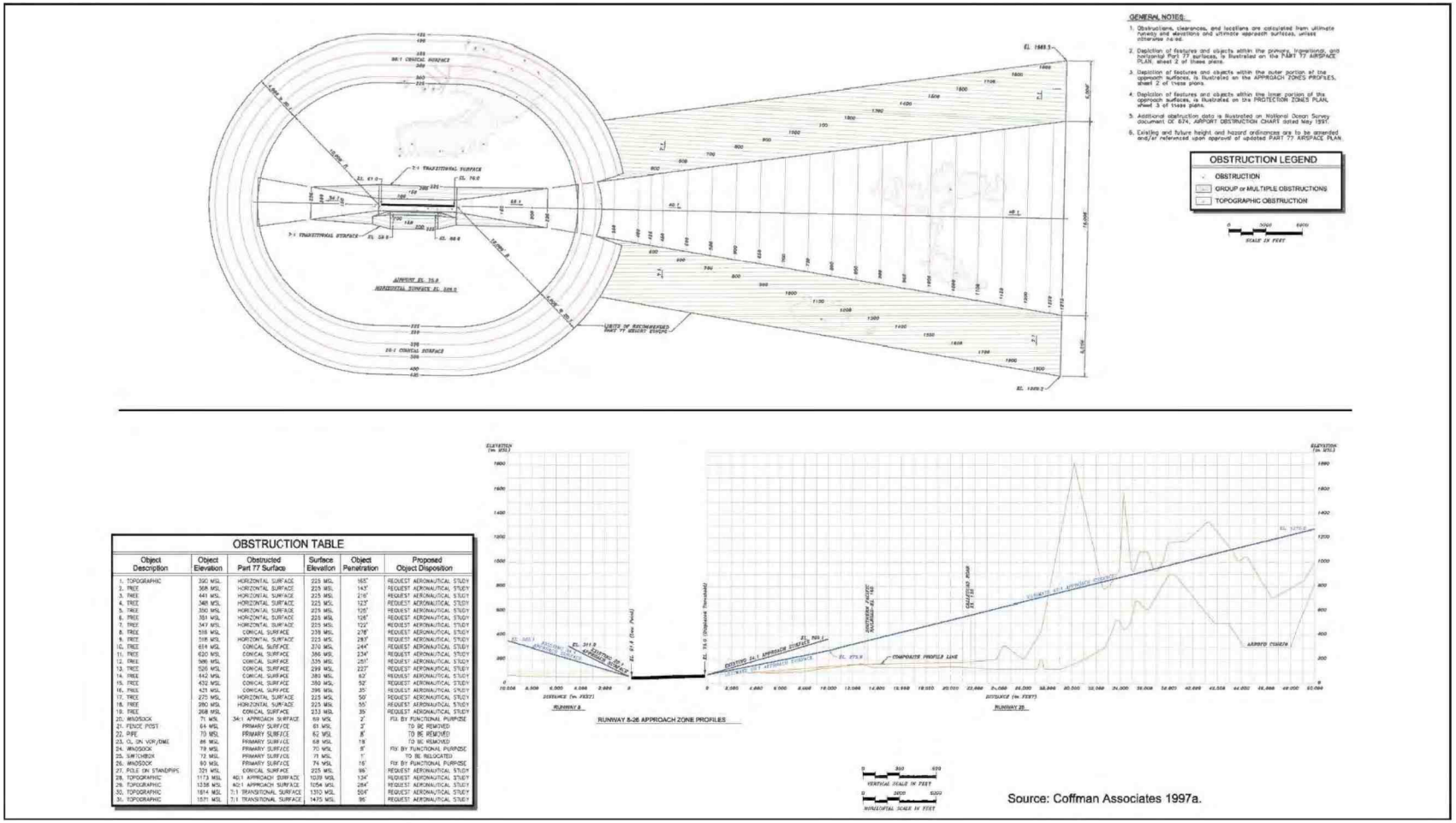
As noted above, all development, land use, and operational FAA Regulations in place at the Camarillo airport are intended to protect residents from potential aircraft crash incidents Compliance with all applicable FAA regulations severely reduces the potential for aircraft crash incidents. The various protection zones and height restriction zones are in place so that current and future development is not subjected to potential aircraft crash incidents. FAA Operational procedures must also be adhered to for arriving and departing aircraft. In the event that an incident does occur, Fire Station 50 has a specially trained Crash and Rescue unit that serves as a responder to aircraft crash incidents.

Figure 11-11 Camarillo Airport Sphere of Influence[19]



[19] Ventura, County of. Airport Comprehensive Land Use Plan for Ventura County Final Report. 1997. https://www.goventura.org/wp-content/uploads/2018/03/2000-airport-land-use-for-ventura-county.pdf (accessed June 2024)

Figure 11-12 Camarillo Airport F.A.R. Part 77 Airspace Plan[20]

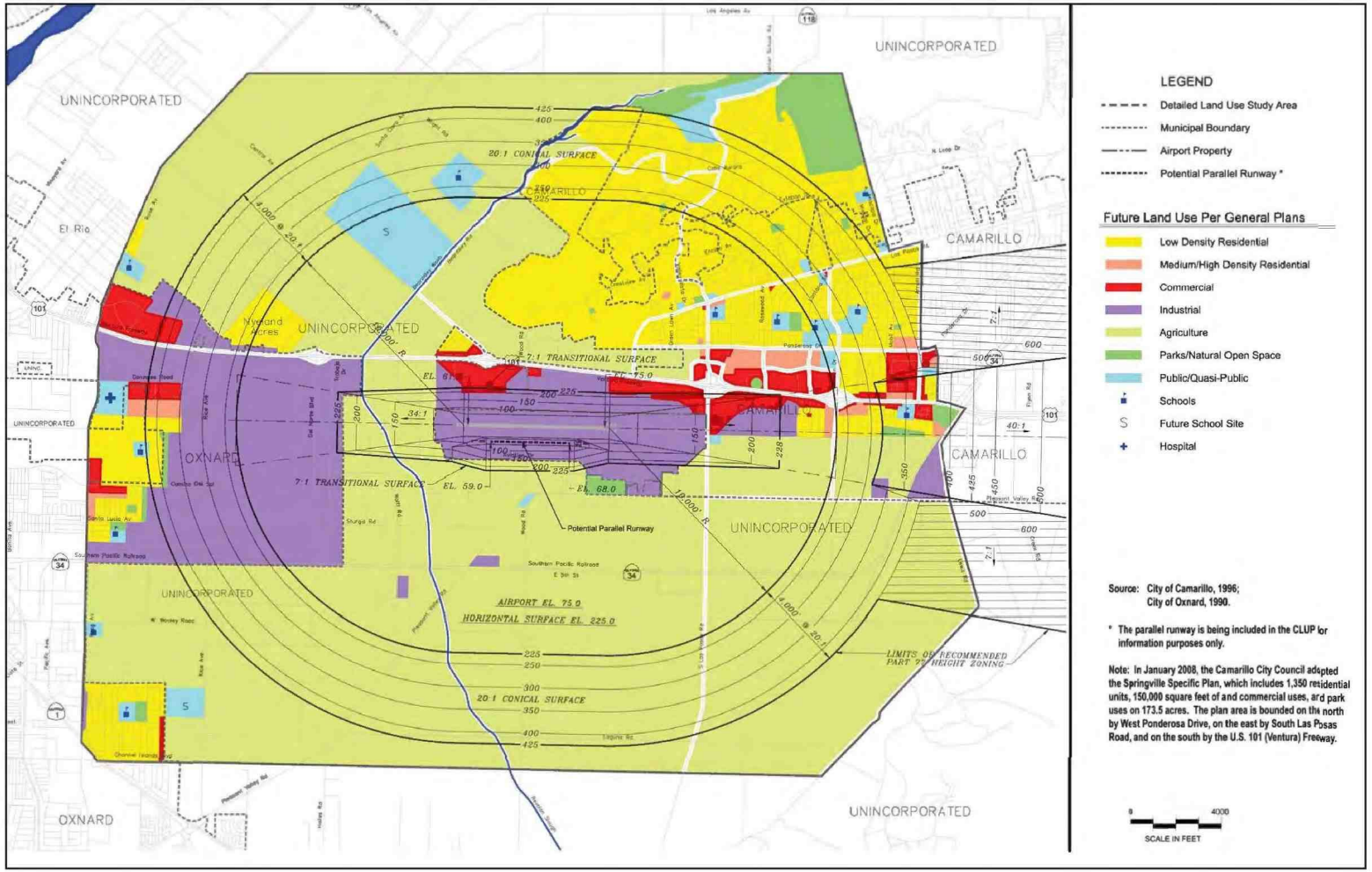


OBSTRUCTION TABLE

Object Description	Object Elevation	Obstructed Part 77 Surface	Surface Elevation	Object Penetration	Proposed Object Disposition
1. TOPOGRAPHIC	350 MSL	HORIZONTAL SURFACE	225 MSL	165'	REQUEST AERONAUTICAL STUDY
2. TREE	368 MSL	HORIZONTAL SURFACE	225 MSL	143'	REQUEST AERONAUTICAL STUDY
3. TREE	441 MSL	HORIZONTAL SURFACE	225 MSL	216'	REQUEST AERONAUTICAL STUDY
4. TREE	348 MSL	HORIZONTAL SURFACE	225 MSL	123'	REQUEST AERONAUTICAL STUDY
5. TREE	350 MSL	HORIZONTAL SURFACE	225 MSL	125'	REQUEST AERONAUTICAL STUDY
6. TREE	351 MSL	HORIZONTAL SURFACE	225 MSL	126'	REQUEST AERONAUTICAL STUDY
7. TREE	347 MSL	HORIZONTAL SURFACE	225 MSL	122'	REQUEST AERONAUTICAL STUDY
8. TREE	518 MSL	CONICAL SURFACE	239 MSL	279'	REQUEST AERONAUTICAL STUDY
9. TREE	518 MSL	HORIZONTAL SURFACE	225 MSL	293'	REQUEST AERONAUTICAL STUDY
10. TREE	614 MSL	CONICAL SURFACE	370 MSL	244'	REQUEST AERONAUTICAL STUDY
11. TREE	620 MSL	CONICAL SURFACE	386 MSL	234'	REQUEST AERONAUTICAL STUDY
12. TREE	586 MSL	CONICAL SURFACE	335 MSL	251'	REQUEST AERONAUTICAL STUDY
13. TREE	520 MSL	CONICAL SURFACE	293 MSL	227'	REQUEST AERONAUTICAL STUDY
14. TREE	442 MSL	CONICAL SURFACE	380 MSL	62'	REQUEST AERONAUTICAL STUDY
15. TREE	432 MSL	CONICAL SURFACE	380 MSL	52'	REQUEST AERONAUTICAL STUDY
16. TREE	421 MSL	CONICAL SURFACE	386 MSL	35'	REQUEST AERONAUTICAL STUDY
17. TREE	275 MSL	HORIZONTAL SURFACE	225 MSL	50'	REQUEST AERONAUTICAL STUDY
18. TREE	280 MSL	HORIZONTAL SURFACE	225 MSL	55'	REQUEST AERONAUTICAL STUDY
19. TREE	268 MSL	CONICAL SURFACE	233 MSL	35'	REQUEST AERONAUTICAL STUDY
20. WINDSOCK	71 MSL	34:1 APPROACH SURFACE	59 MSL	2'	FIX BY FUNCTIONAL PURPOSE
21. FENCE POST	64 MSL	PRIMARY SURFACE	61 MSL	3'	TO BE REMOVED
22. PIPE	70 MSL	PRIMARY SURFACE	62 MSL	8'	TO BE REMOVED
23. CL ON VOR/DME	86 MSL	PRIMARY SURFACE	68 MSL	18'	TO BE REMOVED
24. WINDSOCK	79 MSL	PRIMARY SURFACE	70 MSL	9'	FIX BY FUNCTIONAL PURPOSE
25. SWITCHBOX	72 MSL	PRIMARY SURFACE	71 MSL	1'	TO BE RELOCATED
26. WINDSOCK	90 MSL	PRIMARY SURFACE	74 MSL	16'	FIX BY FUNCTIONAL PURPOSE
27. POLE ON STANDPIPE	321 MSL	CONICAL SURFACE	225 MSL	96'	REQUEST AERONAUTICAL STUDY
28. TOPOGRAPHIC	1173 MSL	40:1 APPROACH SURFACE	1039 MSL	134'	REQUEST AERONAUTICAL STUDY
29. TOPOGRAPHIC	1338 MSL	40:1 APPROACH SURFACE	1054 MSL	284'	REQUEST AERONAUTICAL STUDY
30. TOPOGRAPHIC	1814 MSL	7:1 TRANSITIONAL SURFACE	1310 MSL	504'	REQUEST AERONAUTICAL STUDY
31. TOPOGRAPHIC	1571 MSL	7:1 TRANSITIONAL SURFACE	1475 MSL	96'	REQUEST AERONAUTICAL STUDY

[20] Ventura, County of. Airport Comprehensive Land Use Plan for Ventura County Final Report. 1997. https://www.goventura.org/wp-content/uploads/2018/03/2000-airport-land-use-for-ventura-county.pdf (accessed June 2024)

Figure 11-13 Camarillo Airport F.A.R. Part 77 Airspace Plan[21]



[21] Camarillo Airport. Airport Master Plan Draft Final. 2010. https://vcportal.ventura.org/AIRPORTS/docs/document_library/Camarillo_Airport_Master_Plan_(Draft_Final).pdf (accessed June 2024).

Naval Air Station Point Mugu

Naval Air Station (NAS) Point Mugu lies approximately 6-1/2 miles southeast of the City of Oxnard on the Pacific coast. Access to the facility is provided by State Route 1, which defines the eastern boundary of the base. The NAS Point Mugu Study Area and Jurisdictional Boundaries (as shown on Exhibit 5A in the *Airport Comprehensive Land Use Plan for Ventura County,* adopted July 7, 2000) includes an area of approximately 88 square miles, which includes most of the City of Port Hueneme and the City of Oxnard, the south part of the City of Camarillo, and a small part of the City of Thousand Oaks.

Air traffic operations at NAS Point Mugu are classified as military, air carrier, and general aviation. The air carrier category includes special charter flights carrying military personnel. The general aviation category includes operations by contractors or rented aircraft. Flight tracks at NAS Point Mugu were developed for use in the 1990 Aircraft Noise Study (HMMH 1990) and are depicted on Exhibit 5E through Exhibit 5J in the *Airport Comprehensive Land Use Plan for Ventura County,* adopted July 7, 2000.

Airport Noise Exposure

The CNEL noise contours for the NAS Point Mugu are shown on Exhibit 5L, 1990 Noise Exposure, NAS Point Mugu in the *Airport Comprehensive Land Use Plan for Ventura County,* adopted July 7, 2000. The shape of the noise pattern reflects the prevalence of arrivals and departures. The contours are long and narrow to the northeast, reflecting the arrivals to Runway 21. Near the facility, the contours balloon out, reflecting the traffic patterns and overhead approach flight tracks. The 60 CNEL contour extends nearly 42,000 feet northeast of the runway end and encompasses a small portion of the City of Camarillo that is north and west of Pleasant Valley Road, east of Calle De La Rosa and Calleguas Creek, and south of U.S. 101.

J. Emergency Response

Emergency Services

Emergency Dispatch

The Ventura County Fire Department is considered the first responder for emergency situations, including fires. The even distribution and strategic placement of 31 stations (including the three discussed above in Camarillo) allow the Fire Department to locate fire protection services and equipment throughout the county, including Camarillo. One of the greatest benefits of the new Fire Communications Center (FCC) is state-of-the-art technology that allows dispatchers to see the closest available fire vehicles and ambulances and send them where they are most urgently needed. Incoming 911 calls are displayed on computerized maps. Fire engines and ambulances are tracked with a Global Positioning System and dispatched according to the location of the calls.

Response levels are based on the type of incident, location, weather conditions, existing or potential emergencies, resources available and ultimately the information the department is provided with. Staffing levels and the staffing of specialized resources are adjusted according to existing or potential conditions.

The closest available resource, plus the closest available resources of the type needed, respond to incidents. GPS (global positioning satellite) systems on the vehicles and CAD (computer aided dispatch) allow the Fire Department to identify and dispatch the closest available fire engine. One of the priorities of the first arriving personnel is to determine the incident's needs and adjust the response accordingly.

Medical Services

Ventura County Firefighters are cross trained to provide services for medical emergencies. All fire suppression personnel are trained to the level of Emergency Medical Technician Defibrillator (EMT-D). All engines carry a defibrillator. Some firefighters are also trained as paramedics. The Department's engine companies are equipped for paramedic service, and AMR, a private ambulance provider, can transport critically ill or injured persons to hospitals.

Specialized Units

Specialized units with unique capabilities are available for response to incidents involving special hazards or needs. These units are not normally staffed. Personnel with specialized training and qualifications will move from their regularly assigned units at the fire station and respond with these specialized units as needed. Often, these specialized units will respond and operate in conjunction with similar units from other fire departments to form a regional response to incidents that present unique challenges.

- **Crash/Rescue.** This unit is located in Camarillo at Fire Station 50. This unit responds to incidents involving flammable liquids, primarily aircraft crashes, oil field facility fires, flammable liquid storage and transportation emergencies. Crash 50 has the capability of extinguishing flammable liquid fires and securing spills.
- **Hazardous Materials.** The Haz Mat unit is based at Fire Station 50 in Camarillo and responds to incidents involving chemical, biological, radiological, etiological hazards or any other unknown substances. The Haz Mat team will isolate, make entry into a hazardous area, identify and mitigate the hazard. They also perform decontamination of victims and emergency personnel.
- **Urban Search & Rescue.** Two USAR units respond to technical rescue incidents. One of the units is located at Fire Station 54 in Camarillo. These incidents involve victims who are trapped due to earthquakes, building collapse, cave-in, trench collapse, major transportation crash or other incidents where the entrapment exceeds the capabilities of the regular crews. The USAR team will stabilize the scene, make access to and extricate the victim.

- **Water Rescue.** Two rescue units respond to water rescue incidents that exceed the capabilities of land-based units. One unit is located at Fire Station 54 in Camarillo. The team is capable of in-water rescue and/or watercraft rescue. The team is trained in swift water, ocean and lake rescues.
- **Wildland/Aviation.** The Aviation Unit is based at the Camarillo Airport, but not actually at Fire Station 50. The Aviation Unit is located at a hangar further down the airport from the station. The Wildland Unit operates the Handcrew and bulldozer resources on wildland fires in the construction of fire control lines. The unit also operates with the Sheriff's Aviation unit on the helicopter's response to fire and rescue incidents. Staffing levels within the unit vary with the seasons and wildfire threat.

Emergency Preparedness

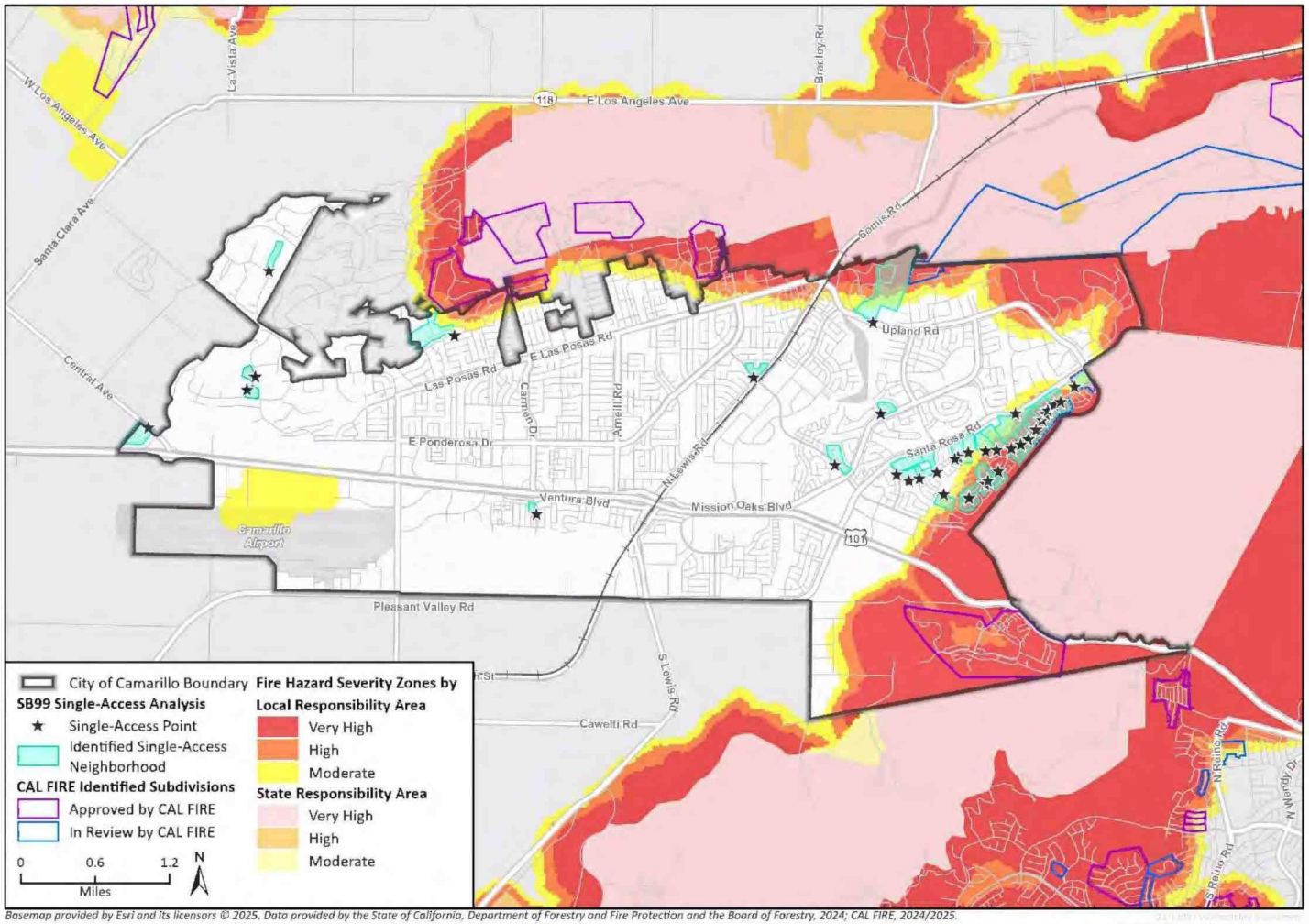
Evacuation Routes

Evacuation routes in Camarillo are dependent upon the event and need for evacuation. During a breach of the Bard Reservoir, the only required evacuation route would be the movement onto high ground out of the flood plain, which is generally north of Ponderosa Road, westerly of Ponderosa and Las Posas Roads and easterly of Calleguas Creek northerly of U.S. 101. In the event of a major chemical spill or other significant disaster, the City would be evacuated using U.S. 101 for east and westerly traffic or Lewis Road for evacuating the residents to the north or south.

In compliance with SB 99, residential neighborhoods (30 or more dwelling units) in hazard areas with only one entry/exit were identified. Figure 11-14 shows that within City limits, 37 single access neighborhoods with one entry/exit have been identified. Additionally, in compliance with AB 2911, CAL FIRE has identified seven subdivisions (30 or more dwelling units) in the VHFHSZ (both State Responsibility Area and Local Responsibility Area) that are either completely or partially located in the City of Camarillo. These identified subdivisions are also noted in Figure 11-14.

In compliance with AB 747, an Evacuation Capacity Analysis was conducted by Fehr and Peers to provide a broad planning level assessment of the capacity of the transportation system during an evacuation event affecting the east side of the City, specifically the communities of Camarillo Springs, Leisure Village, and Upland. The study showed that in this scenario, evacuation demand in the east side of the city would exceed the roadway capacity of many roadway segments along the identified primary evacuation routes (i.e., Camarillo Springs Road and Santa Rosa Road), secondary evacuation routes (i.e., Pleasant Valley Road and Lewis Road), and other evacuation routes (i.e., Las Posas Road and Flynn Road). A more detailed discussion of the Evacuation Capacity Analysis can be found in Appendix C.

Figure 11-14 Identified Single-access Neighborhoods



Basemap provided by Esri and its licensors © 2025. Data provided by the State of California, Department of Forestry and Fire Protection and the Board of Forestry, 2024; CAL FIRE, 2024/2025.
Rincon Consultants completed SB99 Analysis and identified single-access neighborhoods in addition to CAL FIRE, 2024.

Emergency Incident Information

In the event of a major natural or human-made disaster, or other incident that could significantly affect the Camarillo area, several methods are used to alert the public.

- The Emergency Alert System (EAS) sends emergency messages through a network of radio, television and cable providers. The primary radio stations in Ventura County for EAS broadcasts are KVTA 1590 AM, KHAT 100.7 FM and KMLA 103.7 (Spanish).
- Wireless Emergency Alerts (WEA) use cell towers to deliver emergency messages to any cellular phone within range.
- VC ALERT is an emergency notification system to deliver time-sensitive emergency alerts in English and Spanish to areas within Ventura County where there is a threat to health and safety. (source: www.readyventuracounty.org)
- Ventura County Office of Emergency Services posts official Ventura County information during an active incident including an incident summary and incident map on www.vcemergency.com.
- Ready Ventura County provides Ventura County residents with information regarding emergency incident preparedness and details on specific climate hazard such as Dam Failure, Earthquake, Flood, Wildfire, and more. This information can be found at www.readyventuracounty.org.

The Ventura County Joint Information Hotline, 805-465-6650, provides incident information in English and Spanish when activated.

Emergency Protection Services

Ventura County Sheriff's Office

Law enforcement and police protection services are provided in Camarillo by the Ventura County Sheriff's Office. The Mission Statement, Strategy, and Vision Statement, which are part of the values of the agency, are included below.

Mission Statement: We, the members of the Ventura County Sheriff's Office, are committed to safeguard the lives and property of residents of Ventura County and respond to public concerns in a manner which is fair, unbiased, lawful and promotes neighborhoods free from crime.

Strategy: Our strategy for accomplishing this mission is to preserve the peace, prevent crime, apprehend offenders, facilitate problem solving community partnerships, enforce laws, provide secure and humane detention for persons lawfully entrusted to our care and display empathy and respect for the dignity of all individuals.

11.0 City of Camarillo Safety Element

Vision Statement: The Ventura County Sheriff's Office is committed to increasing and strengthening community partnerships and utilizing technologies and evidence-based practices to enhance collaborative efforts at reducing crime and improving public safety. Our agency will also endeavor to recruit, retain, and promote a diverse group of honest, ethical, and highly qualified applicants that reflect and represent the communities we serve.

The County Sheriff's office is comprised of four divisions. The Patrol Division services the County of Ventura and the five contract cities of Camarillo, Fillmore, Moorpark, Ojai, and Thousand Oaks, as well as the unincorporated areas of Ventura County. Within Patrol are also the Mounted Unit, K-9 Unit, Sheriff's Communications Center and the Office of Emergency Services.

The Detention Division is the largest of the four divisions in both personnel and budget. This includes all jobs related to inmate services such as reception, booking and classification, jail services, court room and pre-trial security. Currently there are three jail facilities: pre-trial detention facility, Todd Road Jail, and East County Jail.

The Special Services Division includes the Air Unit, Major Crimes, Narcotics, Intelligence, Bomb Squad, S.W.A.T., Hostage Negotiations, Forensic Science Laboratory, Information Systems and the Evidence Unit.

The Support Services Division includes important internal departments that are essential to the structure and operational needs of the Sheriff's Office across a wide variety of areas. These departments include the Business Office, Human Resources, Professional Standards Bureau, Records, and Training Academy Staff.

Camarillo Disaster Assistance Response Team (D.A.R.T.)

The Camarillo D.A.R.T. responds in support of the City of Camarillo and the County of Ventura, under the direction of local law enforcement, in times of general need, emergency and declared disasters. To meet this objective, all D.A.R.T. members are trained in advanced medical intervention, traffic control, emergency radio communications, Incident Command, and skills necessary for light urban search and rescue operations. D.A.R.T. provided services during the Northridge earthquake, the La Conchita Mudslide, hazardous materials incidents, missing person searches, the Alaska FLT 271 plane crash and the Green Meadows Fire, where they assisted the Ventura County Fire Department. Members also assist the City and Ventura County Fire Department during CERT classes and training. The Camarillo D.A.R.T has members of all ages, backgrounds, professions, and talents.

Community Emergency Response Team (CERT)

CERT instruction is provided by firefighters of the Ventura County Fire Department (VCFD). All Camarillo Area residents at least 18 years of age are eligible to participate in the training. Since 2006, over 500 residents have participated in CERT training.

The CERT course includes instruction in triage, first aid, extinguishing fires, search and rescue, cribbing (to remove injured persons from beneath heavy objects), terrorism response, and more. During emergencies, fire and law enforcement personnel may request the services of CERT-trained residents.

Emergency Preparedness Information

The City's website provides information on its *Emergencies* webpage, such as emergency checklists, links to the CERT websites, and important emergency phone numbers. As in CERT training, residents are urged to prepare for at least a week of self-sufficiency.

Emergency Operations Plan

The City's Emergency Operations Plan (EOP) is updated by staff every four years. Emergency management and preparedness is done in compliance with the CA Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

Camarillo has an EOP prepared in accordance with SEMS/NIMS standards. The Plan addresses the City's planned response to emergencies associated with natural disasters and technological incidents. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the Standardized Emergency Management System and by extension, the National Incident Management System (hereafter referred to as SEMS/NIMS) and describes the overall responsibilities of the federal, state and county entities and the City for protecting life and property and assuring the overall well-being of the population. A general clarification of the potential natural and human-made threats to Camarillo are addressed in the Hazard Summary for the City of Camarillo in Section 8 of the EOP in Part 1, pages 51-60. The EOP also provides the locations of the City's Emergency Operations Center (EOC) and alternate locations, as well as the Red-Cross pre-identified emergency shelters and alternate shelter sites throughout Camarillo (current EOP adopted in November 2021).

The EOP also provides a comprehensive strategy for coordinating emergency responses involving local schools and medical centers. The City collaborates with local schools, including the Pleasant Valley School District and Oxnard Union High School District, to ensure preparedness and coordinated responses during emergencies. Schools are incorporated into the City's EOC framework, facilitating real-time communication and coordination during incidents. School personnel participate in emergency management exercises to enhance readiness and response capabilities. Utilization of systems like VC Alert ensures timely dissemination of information to students, parents, and staff during emergencies. Medical facilities in Camarillo, such as those under the Ventura County Health Care Agency, are integral to the city's emergency response plan. Hospitals implement Hospital Incident Command System to manage emergencies effectively, ensuring clear roles and responsibilities during incidents. Medical centers maintain direct lines of communication with the City's EOC, allowing for efficient resource allocation and

information sharing. Facilities are equipped and trained to handle mass casualty events, with protocols in place for triage, treatment, and patient distribution.

Vulnerable populations face barriers such as limited access to transportation, communication challenges, and mobility issues, which can impede timely evacuation. To address these challenges, the EOP emphasizes:

- Community Engagement: Collaborating with community-based organizations, faith-based groups, and schools to disseminate information and resources effectively.
- Transportation Strategies: Developing transportation plans that account for individuals without personal vehicles, ensuring access to evacuation routes and shelters.
- Communication Accessibility: Utilizing multiple communication channels, including VC Alert, to reach diverse populations, and ensuring messages are accessible to those with disabilities or language barriers.
- Infrastructure Considerations: Analyzing evacuation capacity and traffic flow to optimize evacuation routes, particularly for areas housing vulnerable populations.

Camarillo's approach includes regular reviews and updates to emergency plans, incorporating feedback from drills and actual events to enhance the effectiveness of evacuation procedures for vulnerable groups.

Mutual Aid Agreements

Incidents frequently require responses that exceed the resource capabilities of the affected response agencies and jurisdictions. When this occurs, mutual aid is provided by other agencies, local governments, and the State. Mutual aid is voluntary aid and assistance by the provision of facilities and services, including fire, police, medical and health, transportation, communications, utilities, and other assistance.

The California Master Mutual Aid Agreement is designed to ensure that adequate facilities, resources, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. Camarillo is part of Mutual Aid Region I. Inter-agency, multi-agency, and discipline-specific mutual aid system coordination is used by the City of Camarillo and other member jurisdictions of Ventura County for coordinating mutual aid. The Ventura County Fire Department is also part of the standard Countywide and Statewide mutual aid systems.

Volunteer and private agencies are also part of the City of Camarillo's mutual aid system. The American Red Cross is a significant organization of response to meet the care and shelter needs of disaster victims. Private sector medical/health resources are also an essential part of the medical response. Volunteer and private agencies mobilize volunteers and other resources through their own systems. They may also identify resource needs that are not met within their own systems that would be requested through the mutual aid system.

11.3 Goals, Objectives, and Policies

11.3.1 Citywide Safety and Climate Change

Goal SAF-1: A community protected from natural and human-made hazards and adequately prepared for the effects of climate change.

Objective SAF-1.1 Protect the public health, safety and general welfare of Camarillo Residents from hazards, potential disasters, and climate change events.

Policy SAF-1.1a Continue to incorporate new and updated hazards information, including climate change hazards, relevant to the City of Camarillo into the Safety Element, Emergency Operations Plan, and/or Local Hazard Mitigation Plan, as appropriate.

Policy SAF-1.1b Review public safety infrastructure and staff resources as new development is planned or proposed within the City of Camarillo Planning Area and ensure that these developments comply with local and State building design guidelines, such as the California Building Code and Ventura County Fire Department Fire Prevention Standards and Guidelines.

Policy SAF-1.1c Encourage the dedication of open space areas where potential hazards (fault zones, floodplains, fire hazard areas, etc.) may be located.

Policy SAF-1.1d Limit new development in areas of high risk when risk cannot be mitigated. This includes consideration of climate change risks, such as 100-year and 500-year floodplains, FHSZs, fault zones, and near landslide prone areas.

Policy SAF-1.1e Investigate and pursue additional available funding sources to fund safety programs, provide services, upgrade/construct retrofits to facilities, and purchase updated hazard response equipment.

Policy SAF-1.1f Explore the development of funding mechanisms for properties that are at risk of natural disasters, especially for underserved community members.

Objective SAF-1.2 Inform the community of natural and human-made hazards, climate change hazards, disaster preparedness and emergency response through education and public outreach efforts.

Policy SAF-1.2a Conduct community education efforts via local media coordination, City sponsored activities and events and other methods to reach the broader community, including vulnerable populations regarding emergency evacuation, potential hazards, and mitigation efforts.

Policy SAF-1.2b Continue supporting the Community Emergency Response Team (CERT) administered through the Ventura County Fire Protection District.

Policy SAF-1.2c Coordinate with the Pleasant Valley and Oxnard Union High School Districts to incorporate emergency preparedness and hazards identification, including climate change hazards, into school curriculums.

Policy SAF-1.2d Promote heat illness recognition and prevention via flyers in Spanish and English at local parks, schools, and community centers to increase awareness of personal prevention steps.

Policy SAF-1.2e Encourage residents to enroll in the SCE Medical Baseline Allowance Program to ensure heat sensitive individuals can continue operating space cooling equipment during power outages or blackouts.

Policy SAF-1.2f Ensure renewable back-up power supplies, such as solar, wind, and battery power, are being provided or being planned for critical facilities (e.g. Government Buildings, Wastewater Treatment Facility, Water Services, Police Station, Fire Stations, Hospital/Medical Services, and Schools).

Policy SAF-1.2g Provide emergency communications to residents via emergency text messages, through the county's VC Alert system and Emergency website, phone calls, or flyers during bad air quality or extreme heat days to ensure residents are taking the necessary steps to stay protected.

Policy SAF-1.2h Encourage residents to acquire and maintain an emergency kit that could sustain the household for 72 hours during an emergency event and provide guidance on City websites for kit items and maintenance.

Extreme Heat

Objective SAF-1.3 Protect the public health, safety, and general welfare of Camarillo Residents from extreme heat.

Policy SAF-1.3a Partner with Ventura County to regularly evaluate and, as necessary, update the Ventura County Contingency Plan for Heat Events to include Camarillo-specific policies.

Policy SAF-1.3b Continue to maintain and add to existing cooling center infrastructure to provide public relief during extreme heat events. Explore other options for public cooling centers within the city, including schools and parks.

Policy SAF-1.3c Seek funding to develop an Urban Forestry Management Plan to expand the City's urban forest and tree canopy to limit the urban heat island effect throughout the city. Prioritize tree implementation in areas with

populations with highest vulnerability to extreme heat, such as senior citizens, children, outdoor workers, individuals with disabilities, and individuals with chronic health conditions.

Policy SAF-1.3d Seek funding to develop an Extreme Heat Plan which includes plans to plan for and mitigate extreme heat, such as employing cool pavement technology and expanding the urban tree canopy.

Policy SAF-1.3e Investigate new cool pavement technology, including costs/benefits, challenges and opportunities.

Policy SAF-1.3f Consider establishing partnership with local organizations (such as the Ventura County Contractors Association) to provide installation of cool roofing technology to under-resourced communities throughout the city.

Policy SAF-1.3g Encourage alternatives to air conditions such as ceiling fans, air exchanges, increased insulation, and low solar gain exterior materials to reduce need for air conditioning and high electricity demands during high heat events to increase the reliability of the electricity grid.

Policy SAF-1.3h Partner with the Ventura County Resource Conservation District to identify open space areas in the city with the greatest cooling magnitude and areas to focus preservation and enhancement efforts.

Air Quality

Objective SAF-1.4 Protect the public health, safety, and general welfare of Camarillo Residents from poor air quality.

Policy SAF-1.3i Partner with the Ventura County Air Pollution Control District to regularly evaluate and update, as necessary, the Ventura County Air Quality Management Plan to adequately prepare for, respond to, and mitigate poor air quality conditions.

Policy SAF-1.3j Partner with the Ventura County Air Pollution Control District and local NGOs to provide air quality retrofits to eligible low-income homes, such as installing air filters and providing resources to outdoor workers to ensure adequate safety during poor air quality events.

Drought

Objective SAF-1.5 Protect the public health, safety, and general welfare of Camarillo Residents from drought.

Policy SAF-1.3k Regularly evaluate the City of Camarillo Urban Water Management Plan to prepare for increased drought conditions.

Policy SAF-1.3l Expand outreach to increase participation in community water conservation initiatives and rebates such as toilet use, lawn removal, drought-resistant landscaping, smart irrigation controllers, low-flow sprinkler heads, and more.

Policy SAF-1.3m Investigate the efficient use of recycled water with the Water Reclamation Upgrade Project.

Policy SAF-1.3n Promote drought-tolerant landscaping across all public and private properties by partnering with CBOs to increase participation in water conservation gardening.

11.3.2 Geologic and Seismic Hazards

Goal SAF-2: A community that is aware of and has planned for existing and potential geologic and seismic hazards.

Geologic Hazards (Soils, Landslides/Mudslides, and Subsidence)

Objective SAF-2.1 Decrease the potential risks associated with geologic hazards within the City of Camarillo, including landslides, debris flow, mudslides, subsidence, and soil expansion.

Policy SAF-2.1a Minimize geologic hazards by identifying and addressing potential hazards during the planning and engineering of proposed development and/or improvement projects.

Policy SAF-2.1b Require all new and future development to provide setbacks from potentially unstably areas, including potential debris flow channels, as identified through required engineering and geologic studies.

Policy SAF-2.1c Require drainage plans designed to direct runoff away from unstable areas for all new development and discourage surface water runoff where the area is unstable.

Policy SAF-2.1d Require the preparation of a geologic/geotechnical investigation (performed by a Certified Engineering Geologist and/or Geotechnical Engineer) for all new development or redevelopment projects located in areas of potential hazards. That investigation should include adequate analysis and appropriate mitigation of potential hazards to the satisfaction of the City Engineer or their designer. Special consideration should be given to terrain, soils, slope stability, and erosion issues, where applicable.

Seismic Hazards

Objective SAF-2.2 Reduce the potential effects of seismic hazards on existing and new developments within the City of Camarillo.

Fault Rupture

Policy SAF-2.2a Review development projects involving construction within Earthquake Fault Hazard Zones (as depicted on the State of California, Earthquake Fault Hazards Map for County of Ventura in accordance with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act and the policies and criteria established by the State).

Policy SAF-2.2b Consider the designation of land located within Earthquake Fault Hazard Zones and potentially active fault areas for less dense or intensive uses, such as Open Space or Agricultural, where feasible.

Policy SAF-2.2c Design roadways, streets, highways, utility conduits, and oil and gas pipelines, to avoid crossing active faults where feasible. When such location is unavoidable, the design should include measures to reduce the effects of any fault movement as much as possible.

Policy SAF-2.2d Locate new critical facilities, special occupancy structures, or hazardous materials storage facilities outside of active fault zones unless demonstrated that the facility is not subject to fault rupture hazard.

Policy SAF-2.2e Require hazard mitigation, project redesign, elimination of building sites to avoid seismic hazards, and the delineation of building envelopes, building setbacks and foundation requirements, as deemed necessary, to minimize seismic hazards for new development and redevelopment.

Policy SAF 2.2f Require all developers and/or subdividers of a parcel or parcels in an area of a known fault hazard to prepare a fault hazard investigation study to determine the feasibility of development and mitigation measures such as setbacks.

Seismic Shaking

Policy SAF-2.2g Continue to adopt and enforce the most current version of the California Building Code relating to earthquake resistant design for all new and future development to ensure the use of the most up to date seismic requirements within the State of California.

Policy SAF-2.2h Require roadway engineering standards that meet or exceed seismic requirements of the California Building Code to reduce potential damage and maintain emergency access in the event of an earthquake.

Policy SAF-2.2i Continue to investigate options for seismic retrofitting of older buildings that do not meet current seismic standards and pursue funding via state grant programs to make such updates.

Liquefaction

Policy SAF-2.2j Require analysis for development within areas susceptible to secondary seismic impacts (liquefaction, landsliding, subsidence, etc.) to determine the potential risk to these hazards and identification of mitigation measures, to the satisfaction of the City Engineer or their designee.

11.3.3 Flooding

Goal SAF-3: A community carefully planned and protected from flooding hazards.

Floodplain Hazards

Objective SAF-3.1 Provide adequate flood control mitigation to reduce the potential risk associated with floodplain hazards within the City of Camarillo.

Policy SAF-3.1a Design and construct appropriate surface drainage and flood control facilities to prepare for and mitigate climate change flooding hazards, as funding permits.

Policy SAF-3.1b Prevent incompatible land uses and incompatible development within the 100-year and 500-year floodplains and prohibit residential development within the regulatory floodway.

Policy SAF-3.1c Encourage land uses in the regulatory floodway to open space, agriculture, or passive to low intensity recreational uses, subject to the approval of the Planning Director, City Flood Plain Administrator, or their designee.

Policy SAF-3.1d Coordinate with the Ventura County Watershed Protection District or other appropriate watershed protection agencies to evaluate the effectiveness of existing regional and local flood control facilities.

Policy SAF-3.1e Identify natural drainage courses and designate drainage easements to allow for their preservation, or for the construction of necessary drainage facilities to protect community health, safety, and welfare. Use natural materials when possible or encourage the most environmentally preferred option and limit concreate channelization to the extent possible.

Policy SAF-3.1f Develop and maintain floodplain inundation evacuation plans in cooperation with the Ventura County Watershed Protection District and Ventura County Fire Protection District.

Policy SAF-3.1g Promote low impact development techniques such as pervious paving, on-site groundwater recharge, rainwater harvesting, minimization of building footprints, and bioretention to improve defensive measures against storm events and storm water pollution. Ensure compliance with the City's Post-Construction Stormwater Management Plan to ensure that hydrological and ecological functions are mitigated for new development.

Policy SAF-3.1h Require the developers and/or subdividers of a parcel or parcels in an area of known flood hazards to prepare the applicable studies required by FEMA to remove the parcel or parcels from the flood hazard area.

Policy SAF-3.1i Continue to enforce City Municipal Code Section 16.34.120 to ensure new construction utilizes methods to reduce losses to potential flooding, prevent alterations to natural floodplains, and prevent or regulate the construction of flood barriers.

Dam Inundation Hazards

Objective SAF-3.2 Ensure land use regulations and emergency response plans focus on reducing potential damage resulting from inundation associated with dam failure.

Policy SAF-3.2a Coordinate with the Ventura County Watershed Protection District, Army Corps of Engineers, and California Division of Safety of Dams on updated mapping of dam inundation areas within the city as new studies and projects are completed.

Policy SAF-3.2b Develop dam failure evacuation plans in cooperation with the Ventura County Fire Protection District and Ventura County Office of Emergency Services and update the City's Emergency Operations Plan with new evacuation plans.

PolicySAF-3.2c Discourage critical and essential uses within designated dam inundation areas.

Tsunami Hazards

Objective SAF-3.3 Support tsunami response and recovery efforts within Ventura County in the event of a tsunami occurring along the California coastline.

Policy SAF-3.3a Identify supporting activities and resources within the City's Emergency Operations Plan that can assist jurisdictions within the Ventura County Operation Area directly impacted by tsunami inundation.

Policy SAF-3.3b Identify potential areas for emergency response and recovery coordination activities, as well as areas where affected populations can receive shelter and assistance, if necessary.

Policy SAF-3.3c Provide educational materials on City website and public facilities to educate residents about tsunami identification, evacuation procedures, and preparedness.

11.3.4 Fire Hazards[22]

Goal SAF-4: Minimize risk of wildfire hazards and potential impacts to the community and ecosystem.

Objective SAF-4.1 Ensure that development in fire hazard areas is designed and constructed in a manner that minimizes risk to life and property due to increased frequency and severity of wildfires due to climate change.

Policy SAF-4.1a Ensure that new and existing developments have adequate water supply and access for fire protection and evacuation purposes and comply with fire flow requirements as provided by Ventura County Fire Prevention.

Policy SAF-4.1b Include fire-resistant building materials, fire-resistant vegetation, cleared fuel reduction zones, and/or a long-term comprehensive fuel management program into the design of any project in a fire hazard area.

Policy SAF-4.1c Require that all new residential subdivisions provide adequate access for emergency vehicles and resident evacuation.

Policy SAF-4.1d Require that all homes have visible street addresses and signage and impose parking limitations to ensure that access roads are not blocked by parked vehicles.

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[22] Policies herein are consistent with the requirements of California Government Code Section 65302(g) and are based on CAL FIRE's General Plan Safety Element Assessment and recommendations from CAL FIRE and the California State Board of Forestry and Fire Protection. Rincon did not develop original policies to mitigate wildfire.

Policy SAF-4.1e Assess all new developments located in or adjacent to wildland areas to determine their vulnerability to fire and/or potential as a source of fire, based on historical fire and projected changes in fire due to climate change.

Policy SAF-4.1f Encourage the use of development features such as roads and fuel modification zones to buffer homes, critical infrastructure, buildings and facilities, and natural and managed resources from wildland fire. Where feasible establish and maintain community fuel breaks and fuel modification/reduction zones, including public and private road clearance in neighborhoods in the Wildland Urban Interface.

Policy SAF-4.1g Require that all VHFHSZs are identified and listed in the City's municipal code along with defensible space ordinances in compliance with VCFD standards to mitigate fire hazards in these zones.

Policy SAF-4.1h Review and update as necessary the City's Emergency Operations Plan with every update to the Multi-Jurisdictional Hazard Mitigation Plan to evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios, in accordance with AB 747.

Policy SAF-4.1i Discourage new development to be located within a VHFHSZ. If new development cannot be located elsewhere, require wildfire risk to mitigated and on-site safety evaluations by accredited inspector.

Policy SAF-4.1j Require all new essential public facilities to be located outside the VHFHSZs, when feasible.

Policy SAF-4.1k Where feasible, evaluate re-development after a large fire and work with partnered agencies, such as the Ventura County Fire Protection District, to ensure that all re-development within the VHFHSZs complies with current VCFD fire code.

Objective SAF-4.2 Minimize risk associated with wildland and urban fires through preventive measures, maintenance, and education.

Policy SAF-4.2a Enforce Compliance of Ventura County's Defensible Space Ordinance 4907. Requirements of this ordinance include:

a. Zone 0 refers to the horizontal area up to five feet around the structure, including any outbuildings, attached decks, stairs, roofs, balconies, and stair landings. Ordinance 4907 requires private and public properties to remove vegetation from underneath decks, remove firewood, mulch, and wood chips, landscape roofs, and remove any new trees or artificial grass in this zone.

b. Zone 1 is measured from five to thirty feet around the structure. To comply with Ordinance 4907, the property must minimize the likelihood of a fire moving directly

towards the structure. It is recommended to modify fuels and create a discontinuity between planting groups that limits the pathway for fire to burn to the structure. This includes the removal of low-level vegetation that allows fire to spread upward (ladder fuels), mowing of annual grass down to a maximum height of 4 inches, and trimming of tree canopies regularly to keep their branches a minimum of 10 feet from other trees.

c. Zone 2 is measured from thirty to one hundred feet around the structure. Under Ordinance 4907, the minimum spacing between vegetation is three times the dimension of the plant. Spacing based on height of vegetation may require clearance outside the 100-foot zone or setting back vegetation and trees within Zone 2 away from the 100-foot line.

Policy SAF-4.2b Partner with Firewise Foundation, CAL FIRE, Ventura Resource Conservation District, Ventura County Wildfire Collaborative, and Ventura Regional Fire Safe Council to host educational workshops for property owners on defensible space, home hardening, and vegetation management based upon the most up-to-date science and State guidelines to reduce wildfire risk.

Policy SAF-4.2c Target education of most up-to-date evacuation routes to at-risk and vulnerable populations including older adults and individuals with chronic health conditions.

Policy SAF-4.2d Promote public safety education programs through the Fire Protection District, Ventura Regional Fire Safe Council, and other partners to reduce accidents, injuries and fires, as well as to train members of the public to respond to emergencies.

Policy SAF-4.2e Ensure that adequate equipment, staffing, training, and resources are provided to the Ventura County Fire Department and mutual aid organizations to meet current and future projected service demands and fire protection needs.

Policy SAF-4.2f Continue efforts to reduce fire hazards associated with older buildings, multi-family housing, and fire-prone industrial facilities throughout the city by regularly updating the City's municipal code to ensure alignment with the most up to date VCFD structure guidelines and by promoting: the replacement of old roofing materials with fire resistant materials (such as composition, metal or tile); installation of dual-pane windows with the exterior pane of tempered glass; building or remodeling walls with brick, cement, masonry, or stucco; and installation of non-combustible fencing.

Policy SAF-4.2g Ensure dedicated open space and undeveloped areas meet specifications for fire safety.

Policy SAF-4.2h Coordinate between the Ventura County Fire Protection District, City of Camarillo Public Works Department, City of Camarillo Water Division, and the Camrosa Water District to locate water supplies near and/or within VHFHSZs, where feasible.

Objective SAF-4.3 Coordinate with the Ventura County Fire Protection District to maintain an adequate level of service and protection for fire and emergency response within the community.

Policy SAF-4.3a Continue to coordinate fire protection services through the Ventura County Fire Protection District, CAL FIRE, and all other agencies and districts with fire protection powers.

Policy SAF-4.3b Ensure that Ventura County Fire Protection District provides adequate service and facilities for new developments as they occur.

Policy SAF-4.3c Coordinate with the Ventura County Fire Protection District to ensure adequate levels of fire suppression personnel and equipment are available for all areas of the city and all types of development. Regularly evaluate the City's fire suppression capacity and future water supply, as part of the next Ventura County Multi-Jurisdictional Hazard Mitigation Plan.

Policy SAF-4.3d Coordinate with the Ventura County Fire Protection District to review the Fire Department Unit Strategic Plan to help coordinate on priority projects within the City of Camarillo.

Policy SAF-4.3e Regularly pursue grant funding to fund the implementation of the General Plan Safety Element to ensure that measures and actions are successfully followed, and the city is adequately prepared for the increased severity and frequency of wildfires due to climate change.

Policy SAF-4.3f Ensure that, after a large fire, re-development of damaged property complies with the requirements of construction in the VHFHSZ and includes adequate provisions for emergency access, vegetation management, and firefighting, in compliance with current fire codes.

Policy SAF-4.3g Explore local partnerships (e.g. Ventura Regional Fire Safe Council, Ventura County Resources Conservation District, etc.) to get continuous funding for wildfire planning efforts (e.g. City of Camarillo Community Wildfire Protection Plan).

11.3.5 Hazardous Materials and Waste

Goal SAF-5: Residents and businesses are adequately protected from hazardous materials and hazardous waste.

Objective SAF-5.1 Protect the community from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy SAF-5.1a Promote the handling of hazardous wastes and hazardous materials so that waste reduction through alternative technology is the first priority, followed by recycling and on-site treatment, with disposal as the last resort.

Policy SAF-5.1b Coordinate with the Ventura County Fire Protection District on the response procedures associated with a release or threatened release of a hazardous material within the city.

Policy SAF-5.1c Locate potentially hazardous facilities and operations in areas that would reduce exposure of the public to a significant risk of injury, loss of life, or property damage.

Policy SAF-5.1d Raise public awareness of appropriate disposal for household hazardous waste and publicize collection events and locations.

Policy SAF-5.1e Promote the use of integrated pest management techniques to keep City properties free of herbicides and pesticides.

Policy SAF-5.1f Encourage and educate residents and businesses to implement integrated pest management principles and reduce or discontinue the use of pesticides and herbicides on their property.

Policy SAF-5.1g Require proponents of projects on sites with the potential for soil and/or groundwater contamination to perform soil and groundwater contamination assessments, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, CUPA, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).

Objective SAF-5.2 Minimize threats to public health and safety and to the environment posed by a release of hazardous materials.

Policy SAF-5.2a Require new development that will generate hazardous wastes or utilize hazardous materials to identify hazardous waste reduction, recycling, and storage areas on site plans.

Policy SAF-5.2b Ensure that land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials are located and operated to reduce risk to other land uses.

Policy SAF-5.2c Periodically review and amend the appropriate ordinances which regulate the storage and handling of hazardous materials to conform to the standards and definitions of the State and other regulatory agencies.

Policy SAF-5.2d Continue to monitor the operations of businesses and individuals that handle hazardous materials through the planning and business permit processes.

Policy SAF-5.2e Evaluate transportation routes for the movement and transport of hazardous materials within and through the city.

Policy SAF-5.2f Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other sensitive land uses to the greatest extent possible.

Policy SAF-5.2g Actively coordinate with the operators of existing pipelines (oil, gas, etc.) to ensure existing development in close proximity to these facilities are protected from future incidents to the greatest extent possible.

Objective SAF-5.3 Promote Interagency Collaboration, Training, and Coordination of Hazardous Materials Response and Clean Up.

Policy SAF-5.3a Support Caltrans and California Highway Patrol efforts to ensure safe transportation of hazardous materials on freeways.

Policy SAF-5.3b Coordinate with Ventura County Fire Protection District to ensure trained personnel are ready to operate at the level of Hazardous Materials First Responder, as deemed necessary within the City of Camarillo.

Policy SAF-5.3c Work with the appropriate local, State, and Federal agencies to identify previously unidentified contaminated sites in the city, particularly on sites with a high likelihood of past contamination, such as old gas stations or industrial sites, and work with the property owners and applicable agencies to remediate them.

Policy SAF-5.3d Develop an educational awareness program for residents and businesses about the dangers of hazardous materials and proper disposal methods.

Policy SAF-5.3e Maintain cooperative relationships with the Ventura County Environmental Health Department, CUPA, and the Regional Water Quality Board to ensure an informed and coordinated response to

chemical emergencies, especially those that have contaminated groundwater.

11.3.6 Aircraft Hazards

Goal SAF-6: A community thoughtfully planned and compatible with existing airport facilities.

Objective SAF-6.1 Facilitate safe development within the vicinity of Camarillo Airport.

Policy SAF-6.1a Coordinate with the Ventura County Department of Airports and the Airport Land Use Commission (also known as the Ventura County Transportation Commission) on future development projects associated with or located in the vicinity of Camarillo Airport.

Policy SAF-6.1b Review development and redevelopment projects for consistency with the Ventura County Comprehensive Airport Land Use Plan (ACLUP).

Policy SAF-6.1c Refer discretionary development within the Airport Hazard Zones to the Airport Land Use Commission (also known as the Ventura County Transportation Commission) and the County of Ventura Department of Airports for consistency review with the Ventura County Airport Comprehensive Land Use Plan (ACLUP), as applicable per the study area boundaries shown on Exhibit 11-10a, Camarillo Airport Study Area.

Policy SAF-6.1d Require development projects within the Airport Hazard Zones to comply with Part 77 of the Federal Aviation Regulations (objects affecting navigable airspace).

Policy SAF-6.1e Ensure private airstrips and agricultural landing fields are sited outside of areas that would present significant hazard or an annoyance to existing or planned land uses and would not conflict with the flight paths of existing airports.

11.3.7 Emergency Response

Goal SAF-7: A community that is fully responsive to emergencies and disasters.

Objective SAF-7.1 Establish effective response and recovery efforts for major emergencies and/or disasters.

Policy SAF-7.1a Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, neighboring cities, and non-governmental partners to ensure effective preparation, response, and recovery services are available throughout the community, including vulnerable populations before, during, and after an emergency event.

Policy SAF-7.1b Maintain and regularly update an Emergency Operations Plan (EOP) in partnership with Ventura County, the State of California, and other agencies to include an assessment of current emergency service and projected emergency service needs, and goals or standards for emergency services training for City staff and volunteers.

Policy SAF-7.1c Support a safe, secure, and technologically advanced Emergency Operations Center (EOC).

Policy SAF-7.1d Conduct joint emergency and disaster preparedness exercises with Police, Fire, City employees, and other partnered agencies to test operational and emergency plans with other agencies. Consider the adequacy of emergency access under a range of emergency scenarios, including proximity to existing fire services and the capacity of existing services.

Policy SAF-7.1e As feasible, minimize evacuation challenges with single access residential neighborhoods and develop secondary access. If secondary access cannot be established, evaluate roadways and access points for compliance with Ventura County Fire Department standards for width and length to accommodate emergency access ingress and egress.

Policy SAF-7.1f Continue to educate the public, including vulnerable populations about the City's Emergency Operations Plan and updated evacuation routes for disaster events.

Policy SAF-7.1g Work with Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in formats to ensure it is widely accessible, especially to vulnerable populations.

Policy SAF-7.1h Coordinate with local medical service providers, schools, Homeowners Associations, businesses, and surrounding jurisdictions in the development of local preparedness plans.

Policy SAF-7.1i Work with community organizations, such as, but not limited to faith-based and community service organizations, to ensure response and recovery efforts are coordinated during and following a disaster so appropriate resources reach those in need, including vulnerable populations.

Policy SAF-7.1j Work with community organizations, such as, but not limited to faith-based and community service organizations, to ensure personal protective equipment is provided during and following an emergency, especially for vulnerable populations.

Policy SAF-7.1k In compliance with SB 99, ensure new development has at least two ingress and egress routes to ensure effective emergency response and community safety during emergency events.

11.4 Implementing Actions

The following list identifies recommended actions that the City, County Agencies, and private property owners can pursue in order to implement the Camarillo Safety Element.

a. **Continually review the Safety Element, Emergency Operations Plan, and Local Hazard Mitigation Plan and other applicable plans to ensure that new information/mapping is being incorporated in a timely manner.**

Responsibility: Community Development Department, Public Works Department, Police, VCFD, City Manager's Office

- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4, SAF-5, SAF-6, SAF-7

b. **Regularly update the Emergency Operations Plan as needed to comply with federal, state, regional, and local requirements.**

Responsibility: Police, VCFD, City Manager's Office

- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4, SAF-5, SAF-6, SAF-7

c. **Identify and apply for new grant or other funding sources on an annual basis to support the implementation of priority policies, measures, and actions from the Safety Element such as updating future emergency response, hazard mitigation initiatives, fuel break maintenance, defensible space, and more within the city.**

- Responsibility: Community Development Department, Public Works Department
- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4

d. **Develop programs that inform and educate the community, including vulnerable populations about potential risks, resources, roles, and responsibilities for addressing safety, including evacuation routes, and training programs in response to natural hazards and crime.**

- Responsibility: City Manager's Office, Public Works Department, Community Development Department, Police Department, VCFD
- Associated Goals: SAF-1, SAF-7

e. **Using the City's website, City publications, or other methods (such as pamphlets), provide public safety education/information, focusing on in-city natural or human-made hazards; the prevention of life or property-threatening events; and the appropriate preparation for and reaction to local or regional disasters by the public.**

- Responsibility: City Manager's Office, Community Development Department, Public Works Department, Police Department, VCFD
- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4, SAF-5, SAF-6, SAF-7

f. **Regularly review local, State, and Federal building codes and requirements to ensure the most up to date information is enforced within the city. Update the City's Municipal Code to reflect current information/requirements comply with seismic safety standards established by the California Building Code and Alquist-Priolo Earthquake Faulting Zone and ensure appropriate review requirements are included within existing ordinances.**

- Responsibility: Public Works Department, Community Development Department
- Associated Goals: SAF-1, SAF-2

g. **Regularly review the Ventura County Fire Protection District Fire Department Strategic Plan Fire and Fire Prevention Standards and Guidelines and ensure that the City's Municipal Code is updated to comply with standards 416, 418, 420, 421, and 423.**

Responsibility: Community Development Department, VCFD

- Associated Goals: SAF-4

h. **Monitor the Ventura County Fire Protection District's fire protection rating and cooperate with the Ventura County Fire Protection District in the correction of deficiencies by complying with VCFD Fire Prevention Guidelines for structure retrofitting requirements, landscape alterations, and defensible space maintenance.**

Responsibility: Community Development Department, Public Works Department, VCFD

- Associated Goals: SAF-4

i. **Coordinate infrastructure improvements aimed at reducing natural hazards and disasters via seismic, flooding, and wildfire retrofitting, defensible space maintenance, and more with the Ventura County and City of Camarillo Capital Improvements Program.**

Responsibility: Public Works Department, Community Development Department

- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4

j. **Maintain and update, as appropriate, a Master Plan of Drainage and Stormwater Management Plan for the City.**

Responsibility: Public Works Department, Stormwater Division

- Associated Goals: SAF-1, SAF-3

k. **As a component of the Emergency Operations Plan, develop evacuation plans and perform trainings with associated emergency agencies for flooding/dam inundation, wildfire, earthquake, and hazardous material spill scenarios and coordinate these plans with the City's identified evacuation routes.**

Responsibility: VCFD, Police Department, City Manager's Office

- Associated Goals: SAF-1, SAF-2, SAF-3, SAF-4, SAF-5, SAF-6, SAF-7

l. **Regularly coordinate disaster planning efforts with the Ventura County Office of Emergency Services, Ventura County Fire Department, Camarillo Police Department, Ventura County Sheriff's Office, neighboring jurisdictions in the County, and community organizations, including schools, and medical care providers.**

Responsibility: City Manager's Office, Ventura County Office of Emergency Services, Ventura County Fire Department, Camarillo Police Department, and Ventura County Sheriff's Office

- Associated Goals: SAF-1, SAF-7

m. **Coordinate code enforcement activities with the Ventura County Fire Protection District to ensure that developments located in the VHFHSZ incorporate and enforce VCFD standards for construction, fuel modification, retrofitting, and defensible space.**

- Responsibility: VCFD, Community Development Department
- Associated Goals: SAF-4

n. **Coordinate with the County of Ventura's Environmental Health Hazardous Materials Program, a Certified Unified Program Agency (CUPA), to update and maintain the County's hazardous materials database for all properties within the city that manufacture, store, and/or dispose of these materials. Coordinate with the County of Ventura's Environmental Health Hazardous Materials Program to annually update the list of sites contaminated with hazardous materials requiring cleanup activities (Brownfield Sites) within the city. Coordination with Environmental Protection Agency, Department of Toxic Substances Control, County of Ventura's Environmental Health Hazardous Materials Program, and Ventura County Fire Protection District when new sites are identified, or cleanup activities are initiated/completed is recommended.**

- Responsibility: Public Works Department, VCFD, Community Development Department
- Associated Goals: SAF-1, SAF-5

o. **Annually conduct emergency response drills and exercises with City staff and coordinating agencies to ensure adequate preparations and response activities are in place prior to an actual event.**

- Responsibility: City Manager's Office, Camarillo Police Department, VCFD, Ventura County Office of Emergency Services
- Associated Goals: SAF-1, SAF-7

p. **Provide information on available non-hazardous product alternatives, proper storage, management, and disposal of hazardous wastes, including the City's Household Hazardous Waste Program, on the City's website, at City Hall, and other public facilities.**

- Responsibility: Public Works Department, Community Development Department
- Associated Goals: SAF-5

q. **Review any proposed updates or modifications to the Ventura County Airport Comprehensive Land Use Plan and/or Camarillo Airport Master Plan as they pertain to the City and provide comments/input, as appropriate.**

- Responsibility: City Manager's Office, Community Development Department, Public Works Department
- Associated Goals: SAF-6

r. **Pursue grant funding to develop an Urban Heat Adaptation Plan to adequately prepare for extreme heat events by implementing strategies such as expanding the urban tree forest, employing cool pavement and roofing technology, and encouraging air-conditioning alternatives.**

- Responsibility: Community Development Department, Public Works Department
- Associated Goals: SAF-1

s. **Coordinate with local wildfire prevention agencies and groups such as the Ventura County Regional Fire Safe Council and the Ventura County Fire Department to pursue grant funding for a Camarillo Community Wildfire Protection Plan.**

- Responsibility: Community Development Department, Ventura County Fire Department, Ventura County Regional Fire Safe Council
- Associated Goals: SAF-4

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Safety Element Survey

June 3, 2024, 8:19 AM

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Safety Element Survey

Public input opportunity: help identify safety concerns related to natural and man-made hazards to guide the City's Safety Element Update.

Summary Of Responses

As of June 3, 2024, 8:19 AM, this forum had:		Topic Start	Topic End
Attendees:	66	April 15, 2024, 1:48 PM	June 3, 2024, 8:17 AM
Responses:	51		
Hours of Public Comment:	2.6		

QUESTION 1

Which environmental hazards concern you most? Please rank the following from highest concern to lowest concern.

1. Wildfire
2. Drought
3. Earthquakes
4. Extreme Heat Days
5. Worsening Air Quality
6. Flooding
7. Landslide

QUESTION 2

If a major natural disaster occurred today, such that all services were cut off from your home (e.g., electricity, gas, water, sewer), and you were unable to leave or access a store for up to 72 hours, do you have an emergency kit with essential items prepared?

	%	Count
Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.	41.2%	21
Yes, but I am unsure if my emergency kit is sufficient.	33.3%	17
No, I don't have an emergency kit.	25.5%	13

QUESTION 3

Safety Element Survey

Public input opportunity: help identify safety concerns related to natural and man-made hazards to guide the City's Safety Element Update.

What is your preferred method(s) of obtaining notifications and information during a natural disaster (e.g., wildfire, flood, extreme heat event)? Select all that apply.

	%	Count
VC Alert (readyventuracounty.org)	80.4%	41
VC Emergency website (vcemergency.com)	47.1%	24
City of Camarillo website (cityofcamarilllo.org)	27.5%	14
City email notification (cityofcamarillo.org/notifyme)	51.0%	26
Online news	45.1%	23
Social Media	35.3%	18
TV news	33.3%	17
Radio	31.4%	16
Word of mouth	7.8%	4
Other	2.0%	1

QUESTION 4

In your opinion, which strategies are most important to evaluate as part of the Safety Element Update?

	%	Count
Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)	34.0%	17
Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)	72.0%	36
Explore drainage improvements and green infrastructure to reduce flooding during storms	40.0%	20

	%	Count
Enhance education to residents on how to create defensible space around homes	28.0%	14
Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)	50.0%	25
Other	2.0%	1

QUESTION 5

In what ways do you participate in the public planning process? Select all that apply.

	%	Count
Respond to community surveys	84.3%	43
Attend community workshops	23.5%	12
Attend public meetings (ie City Council, Planning Commission, Public Hearings)	23.5%	12
Submit public comment on proposed plans and policies	25.5%	13
I don't participate	19.6%	10
Other	2.0%	1

QUESTION 6

What is your relationship to Camarillo? Please check all that apply.

	%	Count
Resident, I own a home in Camarillo	82.4%	42
Resident, I rent in Camarillo	11.8%	6

	%	Count
Business Owner in Camarillo	3.9%	2
Employee in Camarillo	7.8%	4
None of the above	5.9%	3

QUESTION 7

What age range do you fall within?

	%	Count
18-26 years	2.0%	1
27-45 years	7.8%	4
46-57 years	23.5%	12
58-75 years	52.9%	27
Over 75 years	13.7%	7

QUESTION 8

To sign up for e-mail notifications related to the Climate Action Plan & Safety Element Update, please enter your email address below.

Answered	32
Skipped	19

Survey Questions

QUESTION 1

Which environmental hazards concern you most? Please rank the following from highest concern to lowest concern.

· Flooding
· Earthquakes
· Landslide
· Wildfire
· Extreme Heat Days
· Drought
· Worsening Air Quality

QUESTION 2

If a major natural disaster occurred today, such that all services were cut off from your home (e.g., electricity, gas, water, sewer), and you were unable to leave or access a store for up to 72 hours, do you have an emergency kit with essential items prepared?

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.
· Yes, but I am unsure if my emergency kit is sufficient.
· No, I don't have an emergency kit.

QUESTION 3

What is your preferred method(s) of obtaining notifications and information during a natural disaster (e.g., wildfire, flood, extreme heat event)? Select all that apply.

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media
· TV news
· Radio
· Word of mouth
· Other

QUESTION 4

In your opinion, which strategies are most important to evaluate as part of the Safety Element Update?

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)
· Other

QUESTION 5

In what ways do you participate in the public planning process? Select all that apply.

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies
· I don't participate
· Other

QUESTION 6

What is your relationship to Camarillo? Please check all that apply.

· Resident, I own a home in Camarillo
· Resident, I rent in Camarillo
· Business Owner in Camarillo
· Employee in Camarillo
· None of the above

QUESTION 7

What age range do you fall within?

· Under 18 years
· 18-26 years

- 27-45 years
- 46-57 years
- 58-75 years
- Over 75 years

QUESTION 8

To sign up for e-mail notifications related to the Climate Action Plan & Safety Element Update, please enter your email address below.

Individual Responses

Name not available
April 27, 2024, 9:23 AM

Question 1

1. Earthquakes
2. Worsening Air Quality
3. Wildfire
4. Flooding
5. Drought
6. Landslide
7. Extreme Heat Days

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· Online news
· Social Media

Question 4

· Explore drainage improvements and green infrastructure to reduce flooding during storms

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo
· Employee in Camarillo

Question 7

· 27-45 years

Question 8

No response

DAVID BEATTIE
April 27, 2024, 9:31 AM

Question 1

1. Drought
2. Extreme Heat Days
3. Worsening Air Quality
4. Wildfire
5. Earthquakes
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

dpbeattie@verizon.net

Safety Element Survey

Public input opportunity: help identify safety concerns related to natural and man-made hazards to guide the City's Safety Element Update.

Name not available
April 27, 2024, 3:27 PM

Question 1

1. Wildfire
2. Flooding
3. Extreme Heat Days
4. Earthquakes
5. Drought
6. Landslide
7. Worsening Air Quality

Question 2

· No, I don't have an emergency kit.

Question 3

· Social Media

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· I don't participate

Question 6

· Resident, I rent in Camarillo

Question 7

· 46-57 years

Question 8

No response

Name not available
April 27, 2024, 6:45 PM

Question 1

1. Drought
2. Extreme Heat Days
3. Flooding
4. Wildfire
5. Worsening Air Quality
6. Earthquakes
7. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)

Question 6

· Resident, I own a home in Camarillo
· Employee in Camarillo

Question 7

· 46-57 years

Question 8

No response

Name not available
April 28, 2024, 12:21 AM

Question 1

No response

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media
· TV news
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

lou2spns@gmail.com

Name not available
May 1, 2024, 11:12 AM

Question 1

1. Extreme Heat Days
2. Worsening Air Quality
3. Drought
4. Wildfire
5. Earthquakes
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· Online news

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· I don't participate

Question 6

· None of the above

Question 7

· 46-57 years

Question 8

No response

Name not shown
May 1, 2024, 3:27 PM

Question 1

1. Drought
2. Earthquakes
3. Extreme Heat Days

4. Worsening Air Quality
5. Wildfire
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media
· TV news
· Word of mouth

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops
· Other - volunteer with DART

Question 6

· Resident, I own a home in Camarillo
· Business Owner in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available

May 1, 2024, 4:16 PM

Question 1

1. Earthquakes
2. Drought
3. Wildfire
4. Extreme Heat Days
5. Worsening Air Quality
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 1, 2024, 4:18 PM

Question 1

1. Earthquakes
2. Extreme Heat Days
3. Worsening Air Quality
4. Drought
5. Flooding
6. Wildfire
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· Online news
· Social Media
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

sswhitacre@aol.com

Name not available
May 1, 2024, 4:28 PM

Question 1

1. Worsening Air Quality
2. Wildfire
3. Landslide
4. Earthquakes
5. Drought
6. Flooding
7. Extreme Heat Days

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

bulger1974@gmail.com

Name not available
May 1, 2024, 4:41 PM

Question 1

1. Wildfire
2. Extreme Heat Days
3. Worsening Air Quality
4. Drought
5. Earthquakes

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City email notification (cityofcamarillo.org/notifyme)
· TV news

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes

Question 5

· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

judystahl@gmail.com

Name not available
May 1, 2024, 4:46 PM

Question 1

1. Drought
2. Earthquakes
3. Worsening Air Quality
4. Wildfire

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 1, 2024, 8:01 PM

Safety Element Survey

Public input opportunity: help identify safety concerns related to natural and man-made hazards to guide the City's Safety Element Update.

Question 1

1. Earthquakes
2. Extreme Heat Days
3. Worsening Air Quality
4. Drought
5. Wildfire
6. Flooding
7. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· Online news
· Social Media
· Radio

Question 4

· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

dalyfun87@gmail.com

Name not available
May 1, 2024, 9:03 PM

Question 1

1. Wildfire
2. Earthquakes
3. Extreme Heat Days
4. Landslide
5. Drought
6. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· Social Media

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo
· Business Owner in Camarillo
· Employee in Camarillo

Question 7

· 46-57 years

Question 8

No response

Name not available
May 1, 2024, 10:34 PM

Question 1

1. Drought
2. Earthquakes
3. Extreme Heat Days

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

ctmcaleer@aol.com

Name not available
May 2, 2024, 7:16 AM

Question 1

1. Drought
2. Earthquakes
3. Extreme Heat Days
4. Wildfire
5. Flooding
6. Landslide
7. Worsening Air Quality

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· City email notification (cityofcamarillo.org/notifyme)
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 2, 2024, 12:30 PM

Question 1

No response

Question 2

· No, I don't have an emergency kit.

Question 3

· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

lewispatricia@icloud.com

Name not available
May 2, 2024, 3:08 PM

Question 1

1. Extreme Heat Days
2. Worsening Air Quality
3. Wildfire
4. Drought
5. Earthquakes
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City email notification (cityofcamarillo.org/notifyme)
· TV news
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

arlene.miro07@gmail.com

Name not available
May 4, 2024, 4:32 PM

Question 1

No response

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

Lscrockett@roadrunner.com

Name not available

May 11, 2024, 8:27 AM

Question 1

1. Earthquakes
2. Wildfire
3. Extreme Heat Days
4. Worsening Air Quality
5. Drought
6. Flooding
7. Landslide

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· Online news
· TV news

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms

Question 5

· Respond to community surveys
· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available

May 11, 2024, 8:52 AM

Question 1

1. Wildfire
2. Earthquakes

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· Online news
· TV news

· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)

Question 5

· Respond to community surveys
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 11, 2024, 9:13 AM

Question 1

No response

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· TV news

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops

Question 6

· Resident, I rent in Camarillo

Question 7

· 58-75 years

Question 8

Katamashiro@aol.com

Name not available
May 11, 2024, 9:37 AM

Question 1

1. Wildfire
2. Extreme Heat Days
3. Drought
4. Earthquakes
5. Worsening Air Quality
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)

· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

wetpaintfarms@gmail.com

Name not available
May 11, 2024, 9:51 AM

Question 1

1. Earthquakes
2. Extreme Heat Days
3. Drought
4. Wildfire
5. Worsening Air Quality
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

csbertok@hotmail.com

Name not available
May 11, 2024, 9:58 AM

Question 1

1. Extreme Heat Days
2. Drought
3. Worsening Air Quality
4. Wildfire
5. Earthquakes
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· Online news

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· None of the above

Question 7

· 46-57 years

Question 8

No response

Name not available
May 11, 2024, 10:04 AM

Question 1

1. Landslide
2. Flooding
3. Drought
4. Wildfire
5. Earthquakes
6. Worsening Air Quality
7. Extreme Heat Days

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· TV news
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 11, 2024, 10:07 AM

Question 1

1. Earthquakes
2. Flooding
3. Wildfire
4. Drought
5. Landslide
6. Extreme Heat Days
7. Worsening Air Quality

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)

· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Social Media
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Other - funds to reduce earthquake insurance.

Question 5

· Respond to community surveys
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

changtoufue@outlook.com

Name not available
May 11, 2024, 10:28 AM

Question 1

1. Earthquakes
2. Drought
3. Worsening Air Quality
4. Wildfire
5. Extreme Heat Days
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)

Question 4

No response

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

No response

Name not available
May 11, 2024, 10:33 AM

Question 1

1. Wildfire
2. Drought
3. Worsening Air Quality
4. Earthquakes
5. Extreme Heat Days
6. Landslide
7. Flooding

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

Khunter@csulb.edu

Landy Johnson
May 11, 2024, 10:54 AM

Question 1

1. Wildfire
2. Landslide
3. Worsening Air Quality
4. Extreme Heat Days
5. Drought
6. Flooding
7. Earthquakes

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Social Media
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

landyjoh@gmail.com

Name not available
May 11, 2024, 10:56 AM

Question 1

1. Earthquakes
2. Wildfire
3. Drought
4. Flooding
5. Extreme Heat Days
6. Worsening Air Quality
7. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· TV news
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms

Question 5

· Respond to community surveys

Question 6

· Resident, I rent in Camarillo

Question 7

· 58-75 years

Question 8

griffin.pamela.s@gmail.com

Name not available
May 11, 2024, 11:08 AM

Question 1

1. Earthquakes
2. Drought
3. Worsening Air Quality
4. Extreme Heat Days
5. Wildfire
6. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

rvrieger@rmcsolutions.com

Name not available
May 11, 2024, 11:14 AM

Question 1

1. Wildfire
2. Drought
3. Extreme Heat Days
4. Worsening Air Quality
5. Earthquakes
6. Flooding
7. Landslide

Question 2

· No, I don't have an emergency kit.

Question 3

· City of Camarillo website (cityofcamarilllo.org)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· TV news
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

kathydahlgren@gmail.com

Name not available
May 11, 2024, 12:57 PM

Question 1

No response

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

mebrown39@hotmail.com

Name not available
May 11, 2024, 1:15 PM

Question 1

1. Extreme Heat Days
2. Earthquakes
3. Wildfire
4. Drought
5. Flooding
6. Landslide
7. Worsening Air Quality

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media
· TV news
· Other - Text

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)

Question 5

· Respond to community surveys
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

al4250@sbcglobal.net

Name not available
May 11, 2024, 1:38 PM

Question 1

1. Worsening Air Quality
2. Earthquakes
3. Extreme Heat Days
4. Drought
5. Wildfire
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· City email notification (cityofcamarillo.org/notifyme)
· TV news

Question 4

· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

No response

Name not available
May 11, 2024, 7:24 PM

Question 1

1. Wildfire
2. Landslide
3. Worsening Air Quality
4. Drought
5. Earthquakes
6. Extreme Heat Days
7. Flooding

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· City email notification (cityofcamarillo.org/notifyme)
· TV news
· Radio

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

dswhite317@gmail.com

Name not available

May 11, 2024, 7:27 PM

Question 1

1. Wildfire
2. Earthquakes
3. Flooding
4. Extreme Heat Days
5. Drought
6. Worsening Air Quality
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Online news
· TV news

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

nodimbulb@aol.com

Katharine Simmons

May 12, 2024, 6:07 AM

Question 1

No response

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)

Question 4

· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

kay56094@gmail.com

Name not available

May 12, 2024, 11:20 AM

Question 1

1. Wildfire
2. Extreme Heat Days
3. Worsening Air Quality
4. Drought
5. Earthquakes
6. Flooding
7. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)

Question 5

· Respond to community surveys
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

creeksidehiker@aol.com

Name not available

May 13, 2024, 7:49 AM

Question 1

1. Earthquakes
2. Wildfire
3. Extreme Heat Days
4. Drought
5. Worsening Air Quality
6. Landslide
7. Flooding

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)

· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media
· TV news

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

6868leanne@gmail.com

Name not available
May 13, 2024, 9:27 PM

Question 1

1. Worsening Air Quality
2. Flooding
3. Drought
4. Wildfire
5. Earthquakes
6. Landslide
7. Extreme Heat Days

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Social Media

Question 4

· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Submit public comment on proposed plans and policies

Question 6

· Resident, I rent in Camarillo
· Employee in Camarillo

Question 7

· 27-45 years

Question 8

Mahoney.ry@gmail.com

Name not available
May 13, 2024, 9:34 PM

Question 1

1. Drought
2. Wildfire
3. Flooding
4. Extreme Heat Days
5. Earthquakes
6. Landslide
7. Worsening Air Quality

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Social Media
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

No response

Name not available
May 17, 2024, 11:46 AM

Question 1

1. Earthquakes
2. Wildfire
3. Drought
4. Worsening Air Quality
5. Extreme Heat Days
6. Flooding
7. Landslide

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City of Camarillo website (cityofcamarilllo.org)
· Online news
· TV news
· Radio

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

Rosalie@rdre.ca

Name not available
May 18, 2024, 4:03 PM

Question 1

No response

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· City email notification (cityofcamarillo.org/notifyme)
· Online news
· Word of mouth

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· Over 75 years

Question 8

eve@evelowerealtor.com

Name not available
May 18, 2024, 11:52 PM

Question 1

1. Extreme Heat Days

Question 2

· No, I don't have an emergency kit.

Question 3

· City email notification (cityofcamarillo.org/notifyme)

Question 4

· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· 46-57 years

Question 8

Gubemills@hotmail.com

Name not available
May 20, 2024, 4:19 PM

Question 1

No response

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· City of Camarillo website (cityofcamarilllo.org)
· Social Media

· TV news
· Word of mouth

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys
· Attend community workshops
· Attend public meetings (ie City Council, Planning Commission, Public Hearings)
· Submit public comment on proposed plans and policies

Question 6

· Resident, I own a home in Camarillo

Question 7

· 58-75 years

Question 8

Lorivilla17617@gmail.com

Name not available
May 22, 2024, 9:05 AM

Question 1

1. Extreme Heat Days
2. Wildfire
3. Worsening Air Quality
4. Drought
5. Landslide
6. Flooding
7. Earthquakes

Question 2

· No, I don't have an emergency kit.

Question 3

· Social Media

Question 4

· Explore a funding program for properties that are at risk of impacts from natural disasters (floods, earthquakes, landslides, wildfire, or extreme heat events)
· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· Attend community workshops

Question 6

· None of the above

Question 7

· 18-26 years

Question 8

mireille.vargas@ventura.org

Name not available
May 22, 2024, 11:21 AM

Question 1

1. Drought
2. Wildfire
3. Earthquakes
4. Flooding
5. Landslide
6. Worsening Air Quality
7. Extreme Heat Days

Question 2

· Yes, but I am unsure if my emergency kit is sufficient.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Online news
· Social Media

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes

Question 5

· Respond to community surveys

Question 6

· Resident, I rent in Camarillo

Question 7

· 27-45 years

Question 8

No response

Name not available
May 22, 2024, 12:53 PM

Question 1

1. Worsening Air Quality
2. Wildfire
3. Drought
4. Earthquakes
5. Extreme Heat Days
6. Flooding
7. Landslide

Question 2

· No, I don't have an emergency kit.

Question 3

· VC Alert (readyventuracounty.org)

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Enhance education to residents on how to create defensible space around homes

Question 5

· I don't participate

Question 6

· Resident, I rent in Camarillo

Question 7

· 58-75 years

Question 8

No response

Name not available
May 22, 2024, 12:57 PM

Question 1

1. Drought
2. Extreme Heat Days
3. Wildfire
4. Worsening Air Quality
5. Earthquakes
6. Flooding
7. Landslide

Question 2

· Yes, I have a well-stocked emergency kit that could sustain my household for up to 72 hours.

Question 3

· VC Alert (readyventuracounty.org)
· VC Emergency website (vcemergency.com)
· Online news
· Social Media
· Word of mouth

Question 4

· Explore land use policies to mitigate potential hazards (fault zones, floodplains, fire hazard severity zones, and hillsides)
· Explore drainage improvements and green infrastructure to reduce flooding during storms
· Maintain resilience hubs in the community that can serve as cooling centers and resource distribution hub before, during, and after natural disasters (e.g., extreme heat days and poor air quality days)

Question 5

· Respond to community surveys
· I don't participate

Question 6

· Resident, I own a home in Camarillo

Question 7

· 27-45 years

Question 8

No response







City of Camarillo

Safety Element Update

Climate Change Vulnerability Assessment

March 2024

Prepared by
Rincon Consultants, Inc

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1 Introduction

1.1 Background on Climate Change

This report evaluates how climate change may impact vulnerable populations, natural and managed resources, buildings and facilities, and infrastructure and critical services in Camarillo. This report is consistent with Government Code § 65302 (as amended by Senate Bill (SB) 379) which requires cities, counties, and unincorporated areas across California to prepare a Climate Change Vulnerability Assessment to inform updates to the Safety Element of the General Plan. Understanding Camarillo's vulnerabilities to climate change provides a foundation to develop required climate adaptation goals, policies, and implementation programs for the Safety Element.

Causes of Climate Change

Climate change is caused by the addition of excess greenhouse gases (GHGs) to the atmosphere, which traps heat near the earth's surface raising global average temperatures creating the greenhouse effect. This increase in average temperatures across the globe affects precipitation patterns, the severity of wildfires, the prevalence of extreme heat events, water supply, and ocean temperatures and chemistry (NASA 2024). According to the Intergovernmental Panel on Climate Change (IPCC), GHGs are now higher than they have been in the past 400,000 years, raising carbon dioxide levels from 280 parts per million to 410 parts per million in the last 150 years (IPCC 2021). The dramatic increase in GHGs is attributed to human activities beginning with the industrial revolution in the 1800s, which represented a shift from an agrarian and handicraft-based economy to one dominated by industry and machine manufacturing (NASA 2024).

1.2 Camarillo Snapshot

Camarillo is located along Highway 101 in western Ventura County and encompasses approximately 20 square miles at the base of the Conejo Grade within the Oxnard Plain. The city is located approximately 8 miles from the coastline and Pt. Mugu entrance to the Naval Base Ventura County. Camarillo is home to California State University Channel Islands, which was opened in 2002. The economy of Camarillo is made up of a mix of educational and health services, and agriculture. The largest employer in Camarillo is the Pleasant Valley School District. The City's local economy is comprised of many small to medium-sized businesses with 500 or less employees. Since being incorporated as a city in 1952 there has been a steady rate of growth with the current population of Camarillo at approximately 115,000 full-time residents (Ventura County LHMP 2022).

1.3 Report Overview

1. **Introduction** provides a lexicon of terms used throughout the report and describes the methodology and key data sources used to prepare the Climate Change Vulnerability Assessment.
2. **Climate Hazards** outlines climate drivers, relevant climate hazards, historical hazards events, how hazards are expected to change, and includes figures mapping climate hazards spatially across Camarillo.
3. **Sensitivity** identifies populations and assets most at risk to climate change.
4. **Adaptive Capacity** summarizes plans, policies, and programs that help Camarillo cope with climate hazard events.
5. **Vulnerability Analysis** describes potential impacts for each hazard based on sensitive community, natural, and built assets, with consideration given to their adaptive capacity. The chapter includes vulnerability scores of low, medium, or high for each population group and asset. See Vulnerability Scoring Methodology section below for more detail.
6. **Conclusion** presents the key findings of this report.

1.4 Lexicon

Several words and phrases are used throughout the plan to illustrate climate vulnerabilities within Camarillo.

- **Adaptation.** The process of adjustment to actual or expected climate and its effects, either to minimize harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate (IPCC, 2012).
- **Adaptive Capacity.** Camarillo's ability to cope with and adjust to the impacts of climate change (Cal OES 2020).
- **Asset.** A resource, structure, facility, or service that is relied on by a community.
- **Cascading Impact.** Climate hazard caused impacts that compromise infrastructure or disrupt critical services (i.e., power supply or water conveyance) broadening the scope of impact past a singular subject to reliant subsystems and populations (Collins et al. 2019).
- **Climate Driver.** A change in the climate which acts as the main source of change for subsequent climate hazards. Climate drivers relevant to the county and discussed in this report are temperature and precipitation.
- **Climate Hazard**. A dangerous or potentially dangerous condition created by the effects of the local climate (Cal OES 2020). Climate hazards of concern for Camarillo are extreme heat and warm nights, drought, wildfire, landslides, riverine and stormwater flooding, and air quality.
- **Compounding Risk.** When two or more extreme events or average events occur simultaneously and increase the scope of impact or severity of the event; an additional risk brought about by increased frequency of events from climate change (Seneviratne et al. 2012).
- **Impact.** Effects on natural and human systems including effects on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to the interaction of climate hazards and the vulnerabilities of the system or asset effected (IPCC 2012).
- **Mitigation.** An act or sustained actions to reduce, eliminate, or avoid negative impacts or effects (Cal OES 2020).
- **Resilience.** The capacity of an entity (an individual a community, an organization, or a natural system) to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience (Cal OES 2020)
- **Sensitivities**. The degree to which a species, natural system, community, asset, or other associated system would be affected by changing climate conditions (Cal OES 2020).
- **Vulnerable Populations.** Vulnerable populations experience heightened risk and increase sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts (Cal OES 2020).
- **Vulnerability.** The propensity or predisposition to be adversely affected (IPCC 2012).

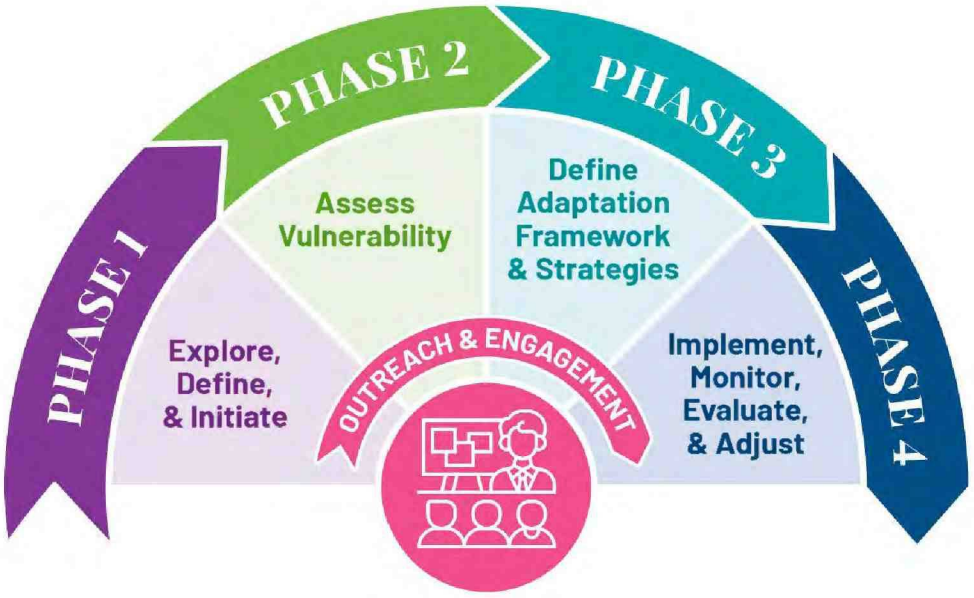
1.5 Vulnerability Assessment Methodology

The following section details state guidance, methods, and sources used in the production of this report.

California Adaptation Planning Guide Phases

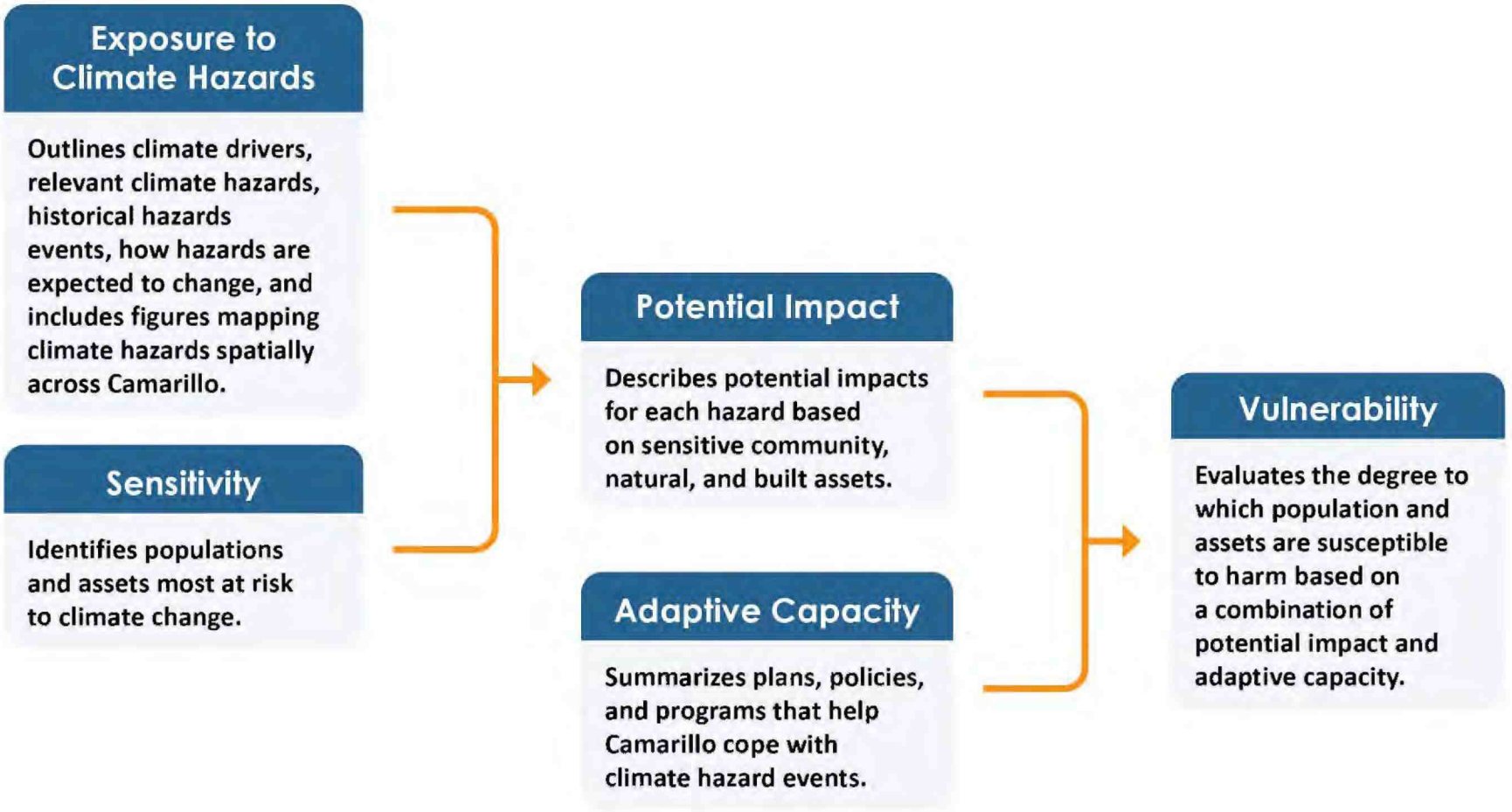
The City of Camarillo Climate Change Vulnerability Assessment follows the vulnerability assessment process recommended by the California Governor's Office of Emergency Services (Cal OES), as documented in the 2020 California Adaptation Planning Guide (Cal APG). The adaptation planning process outlines by the Cal APG consists of four phases, illustrated in Figure 1, with Phase 2 detailing the vulnerability assessment process (Cal OES, 2020). The City of Camarillo Climate Change Vulnerability Assessment is prepared consistent with Phase 2 of the Cal APG and is composed of the following parts found in Figure 2.

Figure 1 California Adaptation Planning Phases to Assessing Vulnerability



Source: 2020 California Adaptation Planning Guide

Figure 2 Vulnerability Assessment Flow Diagram



Key Data Sources

The following data sources and tools, many of which are recommended within the Cal APG, were used in preparation of this report.

- **Cal-Adapt** is an online tool that presents historic and modeled projections based on 10 different global climate models. The tool was developed and is maintained by the University of California with oversight from the California Energy Commission (CEC). This tool is used to present projection data related to minimum and maximum temperature, precipitation, extreme heat, warm nights, drought, and wildfire.
- **California's Fourth Climate Change Assessment** was developed by the CEC and other State of California coordinating agencies to present up-to-date climate science, projections and potential impacts associated with climate change. The CEC and coordinating agencies developed nine regional reports to provide regional-scale climate information to support local planning and action. The Los Angeles Region Summary Report (2018) presents an overview of climate science, regional projections, specific strategies to adapt to climate impacts, and key research gaps needed to spur additional progress on safeguarding the Los Angeles Region (including Camarillo) from climate change. The Los Angeles Region Summary Report was used to understand regional changes that may affect Camarillo both directly and indirectly.
- **Ventura County Multi-Jurisdictional Hazard Mitigation Plan** presents information on existing processes and plans in place that address the County and Camarillo's ability to prepare for climate change impacts and informed the adaptive capacity discussion of this report. The Multi-Jurisdictional Hazard Mitigation Plan (2022) was also used to identify recent historical events.
- **The California Healthy Places Index (HPI)** is an online mapping tool that reports on community conditions that are known to predict health outcomes and life expectancy. The tool was prepared by the Public Health Alliance of Southern California, a collaborative of local health departments in Southern California. HPI displays 25 community characteristics at various legislative boundaries, including census tracts and city and county boundaries. The community characteristics relate to the following identified Policy Action Areas: economic, education, housing, health care access, neighborhood, clean environment, transportation, and social factors. HPI applies a relative percentile score across all census tracts in California using statistical modeling techniques based on the relationship of the Policy Action Areas to life expectancy at birth. Low percentile scores reflect unhealthy conditions. HPI was used to prepare the social sensitivity index score as described in more detail below. HPI is a useful in providing both big picture and localized insights into community health HPI was used to prepare the social sensitivity index score as described in more detail below. HPI is useful in providing both big picture and localized insights into community health. HPI was updated in the Spring of 2022 to include data averages from the U.S. Census 2015-2019 ACS.
- **U.S. Census, 2015-2019 American Community Survey (ACS)** presents demographic data by census tract and was used to supplement the HPI percentile score. U.S. Census data was used to identify the percentage of the Camarillo population that corresponds to each vulnerable group.
- **CalEnviroScreen4.0** uses a variety of statewide indicators to characterize pollution burden (the average of exposures and environmental effects) and population characteristics (the

average of sensitive populations and socioeconomic factors). The model scores each of the indicators using percentiles and combines the scores to determine a CalEnviroScreen score for a given census tract relative to others in the state. Designated disadvantaged communities are those communities that scored within the highest 25 percent of census tracts across California (CalEnviroScreen percentile scores of 75 or higher), in addition to other parameters relating to income status.

Data Limitations

The limitations of this report and analysis stem from gaps in data availability and completeness of data methods. Census data can miss portions of the population (e.g., unhoused populations) and general demographic information may not accurately capture populations vulnerable to climate change (Cantwell 2021). Federal Emergency Management Agency (FEMA) 100-year and 500-year flood plains do not account for climate change projections, flood zones are instead based on historical information. The California Department of Forestry and Fire Protection (CAL FIRE) Very High Fire Hazard Severity Zones (VHFHSZ) are based on vegetation, fire history, and terrain but also has similar limitations, projections of future fire hazard zones are not included (OSFM 2024). Extrapolating landslides and air quality hazard exposure data in the context of climate change is difficult for many reasons including compounding effects and therefore expected, exposures are likely to be underestimated.

The data presented in Cal-Adapt tools are projections, or estimates, of the future. The limitation in these projections is that the long-term behavior of the atmosphere is expressed in averages – for example, average annual temperature, average monthly rainfall, or average water equivalent of mountain snowpack at a given time of year. The averages discussed often downplay the extremes by which daily weather events occur and when presented as an average, only show moderate changes within the climate. For example, using averages can result in an omission of the frequency of extremes. For example, in the case of extreme weather events, atmospheric rivers may increase, while low-moderate intensity weather events decrease through the end of the century. In instances of modeled precipitation projections, an average maintains a quantification similar to historic levels which does not account for anticipated fluctuations in extremes (CEC 2024).

Vulnerable Communities Identification

Vulnerable population indicators are included in the report according to the following methodology, which determines the significance of the population in the city of Camarillo. The list of vulnerable populations considered in this assessment originates from the Southern California Climate Adaptation Planning Guide (SCAG APG). Each population statistic from the SCAG APG list is identified for the city from the U.S. Census American Community Survey (ACS). If the data is not available for the population, the Healthy Places Index (HPI) is used or the CalEnviroScreen resource is considered (more information can be found in the Key Data Sources section). A vulnerable population statistic is considered significant if the U.S. Census statistic is larger than the state average for that same population group. If the statistic originates from the HPI, it is considered significant between the 0-25 percentile for unhealthy conditions (in comparison to other cities in the state). If the statistic is acquired from CalEnviroScreen, it is considered significant above the 75th percentile.

Vulnerability Scoring Methodology

Vulnerability scoring is a valuable step in the climate vulnerability assessment process because it identifies which assets and populations face the highest threat to climate hazards. This can aid in the prioritization of adaptation actions. The vulnerability score is a combination of the impact and the adaptive capacity score. The impact and adaptive capacity scores are developed using a qualitative methodology outlined in the Cal APG, as seen in Table 1. Impact and adaptive capacity scores are identified for every asset and population for each climate hazard. The vulnerability score is calculated by combining the two scores as demonstrated in Table 2. The range of vulnerability scores spans between 1 through 5 with 4-5 indicating the highest vulnerability.

Table 1 Impact and Adaptive Capacity Scoring Rubric

Score	Impact	Adaptive Capacity
Low	Impact is unlikely based on projected exposure; would result in minor consequences to public health, safety, and/or other metrics of concern.	The population or asset lacks capacity to manage changes; major changes would be required.
Medium	Impact is somewhat likely based on projected exposure; would result in some consequences to public health, safety, and/or other metrics of concern.	The population or asset has some capacity to manage climate impact; some changes would be required.
High	Impact is highly likely based on projected exposure; consequences to public health, safety, and/or other metrics of concern.	The population or asset has high capacity to manage climate impact; minimal to no changes are required.

Source: Cal OES 2020

Table 2 Vulnerability Score Matrix

Potential Impacts				
	High	3	4	5
	Medium	2	3	4
	Low	1	2	3
		High	Medium	Low
		Adaptive Capacity		

Source: Cal OES 2020

2 Exposure to Climate Hazards

Climate change is a global phenomenon that can impact local health, natural resources, infrastructure, emergency response, and many other aspects of society. Projected changes to the climate are dependent on location. The Cal-Adapt tool provides climate data from global scale models that have been localized (downscaled) to 3.7 mile by 3.7-mile grids (CEC 2024). The data in Cal-Adapt is combined with information from the California Fourth Climate Change Assessment to model future changes in specific types of hazards within this assessment. Projections throughout this section are outlined by two separate Representative Concentration Pathways[1] (RCP) (CEC 2024).

- RCP 4.5 is a medium emissions scenario where global emissions peak by the year 2040.
- RCP 8.5 is a high emissions scenario in which global emissions continue to rise through the end of the 21st century.

Projections are forecasted to mid-century (2035-2064) and end-century (2070-2099) as 30-year averages to be compared to a modeled historical baseline (1961-1990) (CEC 2024).

This section presents information on temperature and precipitation, which are characterized as climate drivers. Subsequently, this section provides information on projected changes to natural hazards, including extreme heat, drought, wildfire, landslides, air quality, and riverine and stormwater flooding, which result from changes to climate drivers.

2.1 Climate Drivers

In Camarillo, the climate drivers of concern include temperature and precipitation. All projections are pulled from the Cal-Adapt Local Climate Change Snapshot tool and supplemented with the Los Angeles regional information found in the California Fourth Climate Change Assessment Los Angeles Regional Report (CEC 2024, Hall et al. 2018).

Temperature

Camarillo's historical (1961-1990) average maximum temperature is 73.3°F and average minimum temperature is 48.6°F. Camarillo mid-century projection for average maximum temperatures shows a 3.4°F (RCP 4.5) to 4.2°F (RCP 8.5) increase. The mid-century projection for average minimum temperatures shows a 3.1°F (RCP 4.5) to 3.9°F (RCP 8.5) increase in maximum temperatures. The end of the century projections for average maximum temperatures are expected to increase in Camarillo by approximately 4.4°F (RCP 4.5) to 7.0°F (RCP 8.5). The end of the century projections for average minimum temperatures are expected to increase by approximately 4.1°F (RCP 4.5) to 6.8°F (RCP 8.5) (CEC 2024). Temperature increases affects extreme heat and warm nights, drought, wildfire, and air quality (Hall et al. 2018).

[1] Representative Concentration Pathways[1] (RCP) is a greenhouse gas concentration (not emissions) trajectory adopted by the Intergovernmental Panel on Climate Change (IPCC).

Precipitation

Precipitation across the Ventura County region is highly variable, with some areas averaging 8 inches annually and others up to 38 inches (County of Ventura 2022). The observed 30-year average annual precipitation is 14.7 inches. Annual precipitation projections for Camarillo under RCP 8.5 demonstrate a 0.2-inch decrease by mid-century and 0.1-inch increase by end-century in annual precipitation totals (CEC 2024). Despite small changes in average precipitation, dry and wet extremes are both expected to increase in the future. By the late-21st century, the wettest day of the year is expected to increase across most of the Los Angeles region, with some locations experiencing 25-30 percent increases under RCP8.5 (Hall et al. 2018). There will be more dry periods punctuated by increased precipitation intensities of the largest storms or wet periods, producing little net change in precipitation totals but more extreme conditions (Hall et al. 2018). Precipitation changes are expected to affect wildfire, drought, landslides, riverine and stormwater flooding, and air quality.

2.2 Hazards

This section outlines projected changes for the following climate hazards:


Extreme Heat and Warm Nights


Drought


Wildfire

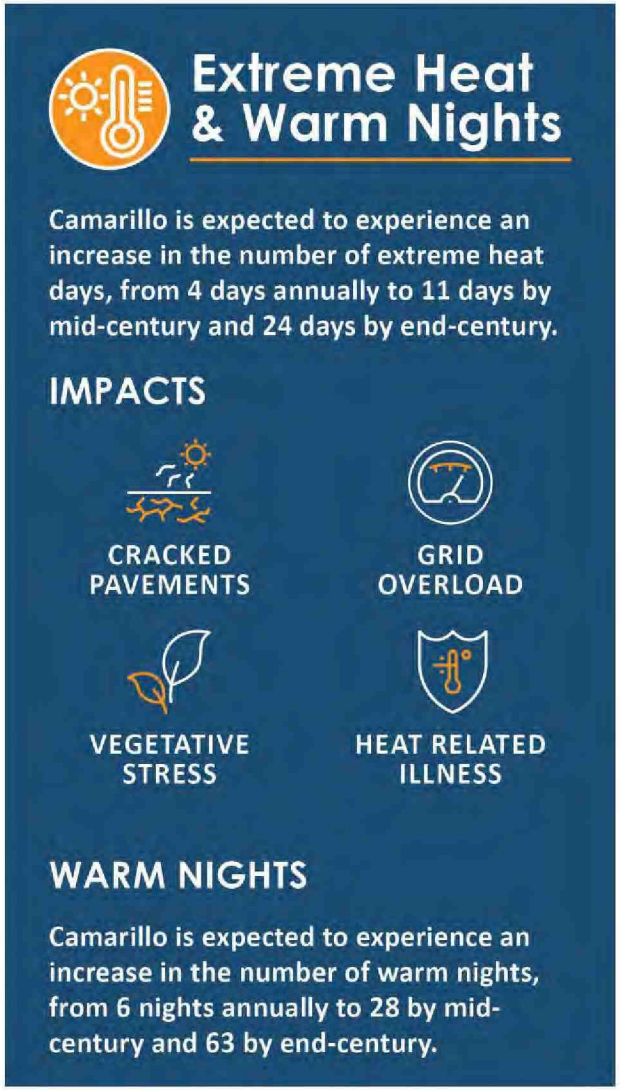

Landslides


Riverine and Stormwater Flooding


Air Quality

Extreme Heat and Warm Nights

Extreme heat events are defined as days in which the daily maximum temperature exceeds the 98thpercentile value of the historical average. For Camarillo, the threshold temperature is 92.1°F (CEC, 2022). Exposure to extreme heat can cause direct heat-related illness (heat cramps, heat exhaustion, and heat stroke) and death, and can also exacerbate certain existing medical conditions (Hall et al. 2018). Increased frequency of extreme heat days can result in increased public health risks, particularly to vulnerable populations like older adults, young children, and individuals with underlying chronic diseases, through heat-related illnesses and increased vector-borne illnesses. Warm nights can further exacerbate the risk of heat illness because they affect the body's ability to cool after a day of heightened temperatures. In Camarillo, a warm night is when the daily minimum temperature is above the threshold temperature of 63.4°F. Camarillo has a historic average of 4 extreme heat days annually, which is projected to increase to 11 days by mid-century and 24 days by the end of the century under RCP 8.5. Camarillo has historically experienced 6 warm nights a year and is projected to experience a mid-century total of 28 nights (RCP 8.5) and an end-century total of 30 (RCP 4.5) to 63 nights (RCP 8.5) (CEC 2024). Extreme heat can also damage roadways, overload electrical grid systems, and result in vegetation die-off or stress. Future climate changes, especially increases in extreme heat, are expected to disproportionately burden low-income residents and communities of color across the region (Hall et al. 2018).



Drought

Climate change will increase the likelihood that low-precipitation years will coincide with above-average temperature years. Warming temperatures increase seasonal dryness and the likelihood of drought due to decreased supply of moisture and increased atmospheric demand for moisture as evaporation from bare soils and evapotranspiration from plants increases. The increased moisture loss from soils and vegetation amplifies dryness during periods without precipitation. The Southern California region is prone to periods of extreme drought and has experienced severe dry conditions between 2011-2015 (Hall et al. 2018). Extremely dry years are projected to increase over Southern California, potentially a doubling or more in frequency by the late-21st century (Hall et al. 2018).

The duration of dry spells, or the number of consecutive days with precipitation totals less than 1mm, is projected to vary based on emissions scenario. Like patterns in precipitation some of the annual variability is obscured within 30-year averages. Despite this, the clear trend is for maximum lengths of dry spells to increase through the end of century (CEC 2024). The modeled historical average maximum length of a dry spell for Camarillo is 157 days. The mid-century projections show an increase in the length of the average maximum dry spell between 8 days (RCP 4.5) and 9 days (RCP 8.5). Subsequently, the end of century projections shows an increase between 7 days (RCP 4.5) and 16 days (RCP 8.5).

Drought can affect vulnerable populations as well as economic productivity throughout Camarillo. Vulnerabilities for natural and managed resources can include stressed vegetation and habitat depletion while populations may be more vulnerable to heat stress and dehydration (Hall et al. 2018).

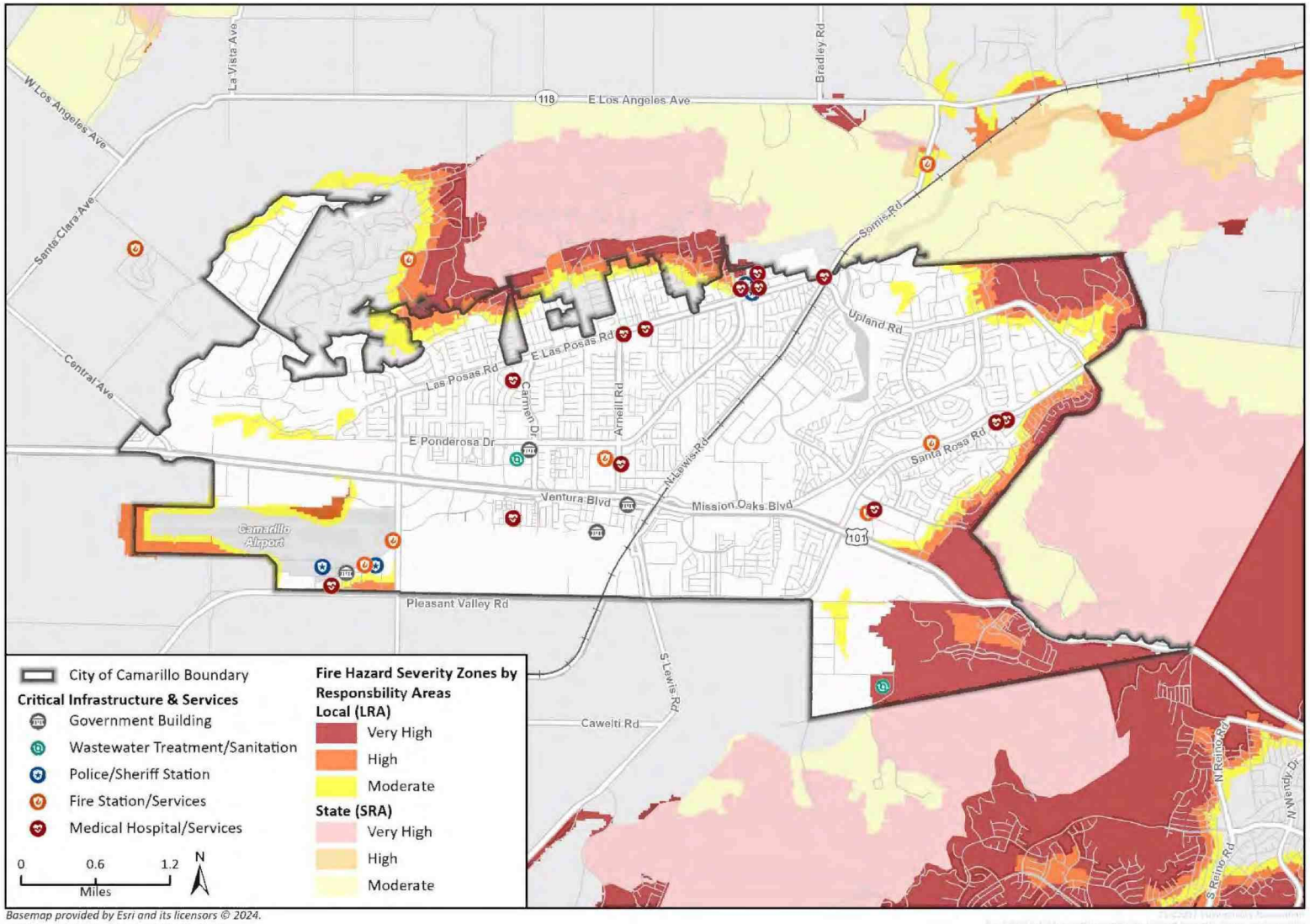


Wildfire

In Southern California, the occurrences of wildfires and the average burned area are projected to increase by the mid-21st century under RCP 8.5 (Hall et. al 2018). This trend is projected to occur in Camarillo through mid and end-century projections (CEC 2024). Wildfire events are a product of temperature increases compounded with precipitation declines creating wildfire prone conditions. Ventura County's wildfires are influenced by Santa Ana Winds, which are responsible for the region's most destructive wildfires. Nearly 80% of wildfires occur during the summer and fall, with a quarter of annual wildfires occurring during Santa Ana events (Hall et al. 2018). Areas in Camarillo that are at significant risk to wildfire are located along the northern, eastern, and northeastern portions of the city. These areas are categorized as CAL FIRE Very High Fire Hazard Severity Zones (VHFHSZ), shown in Figure 3. There are several critical facilities within the VHFHSZ including transportation infrastructure assets along Highway 101. The St. John's Hospital in the northern portion of the city is adjacent to VHFHSZ. Several roads and residential areas are also located within the city's fire zones including State Highway 101 in the southeastern portion of the city. Wildfires can create risk of injury, death, or financial hardship if personal property is damaged as well as physical damage to all other assets creating cascading risks for vulnerable populations when infrastructure is damaged or off-line. The 2017 Thomas Fire burned 281,893 acres in both Ventura County and Santa Barbara County, though Camarillo did not incur any structural damage, and was only indirectly impacted due to smoke and by providing mutual aid and evacuation centers. In 2018, the Hill Fire started in the Camarillo area and burned 4,531 acres (County of Ventura 2022).



Figure 3 Wildfire Hazard Severity Zones in Camarillo



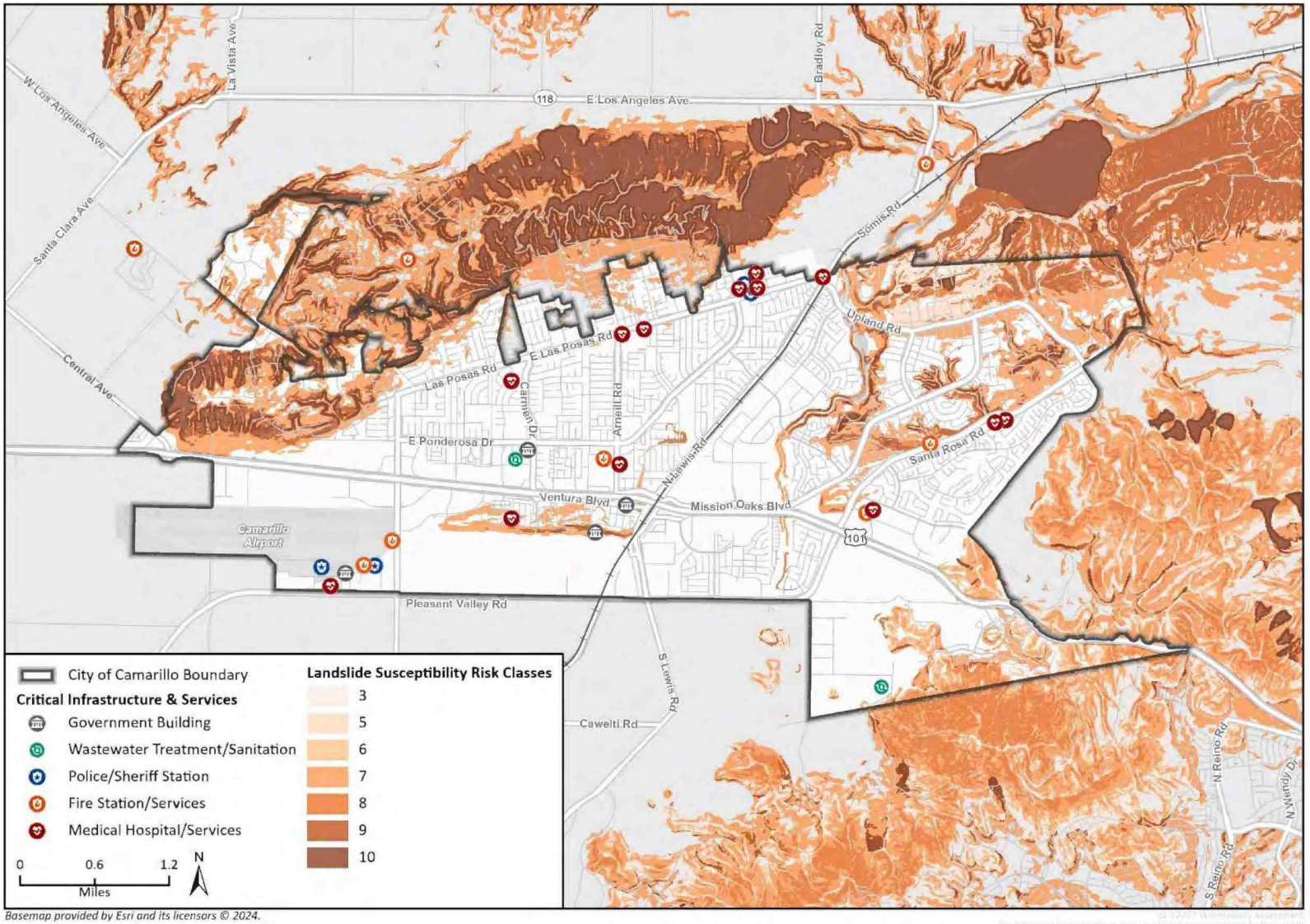
Basemap provided by Esri and its licensors © 2024.
Additional data provided by CAL FIRE, 2007.

Landslides

The Ventura Region is projected to experience increases to wildfire exposure and precipitation extremes and subsequently landslide-prone conditions (CEC 2024). Landslide risks in Camarillo occupy regions that overlap with wildfire zones, and along sloped areas in the hills north of the city. The Ventura County Multi-Jurisdictional Hazard Mitigation Plan Exposure Assessment details past natural hazard events and specific assets at risk within Camarillo to landslides, as well as the number of people affected in the city. Figure 4 shows landslide susceptibility in Camarillo, with the highest risk areas being situated in the northern portion of the city. Specifically, landslide risk is significant in the region north of Ventura Boulevard and west of Las Posas Road, as well as in the region east of North Lewis Road and north of Mission Oaks Boulevard.



Figure 4 Landslide Susceptibility in Camarillo



Basemap provided by Esri and its licensors © 2024.
Additional data provided by CGS, Map Sheet 58, 2015.

Riverine and Stormwater Flooding

Climate change may cause low-lying areas throughout Camarillo to experience more frequent flooding and could increase the extent of 100-year floods. Riverine flooding is projected to increase as precipitation extremes increases (CEC 2024). Figure 5 maps the 100- and 500-year floodplains within Camarillo. Stormwater systems may be overwhelmed more frequently as more extreme rain events occur, causing localized flooding which could impact properties and close streets. Numerous facilities and infrastructure occupy 100-year or 500-year floodplains in Camarillo including several parks, a hospital, fire stations within and adjacent to floodplains, several schools, and wastewater facility are in existing flood plains.

Flooding impacts directly create physical damages from inundation (Hall et. al 2018). Flooding can also cascade into power, wastewater, and storm drainage infrastructure, exacerbating public health concerns.

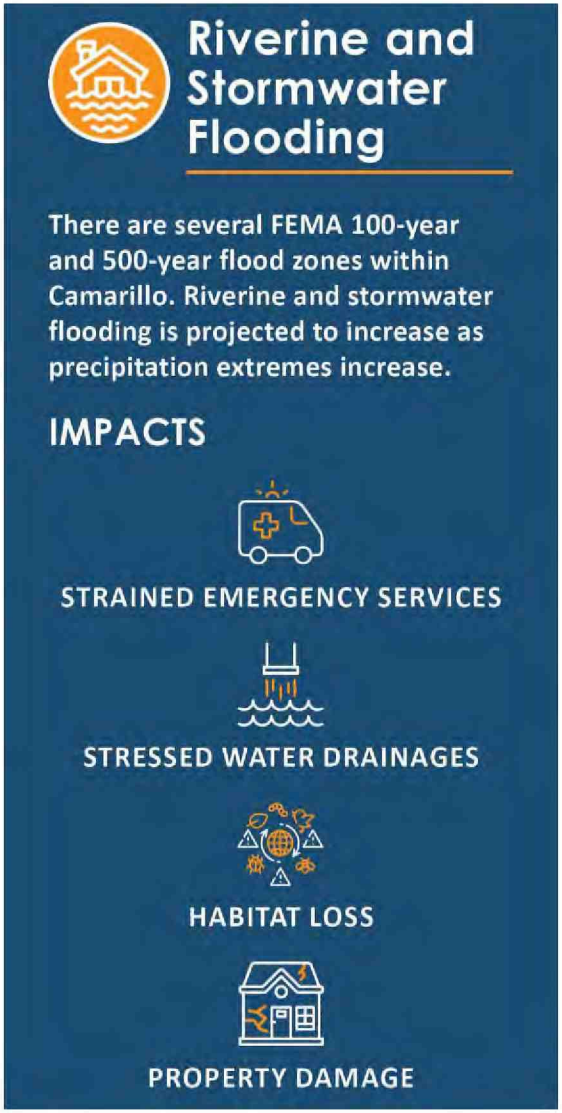
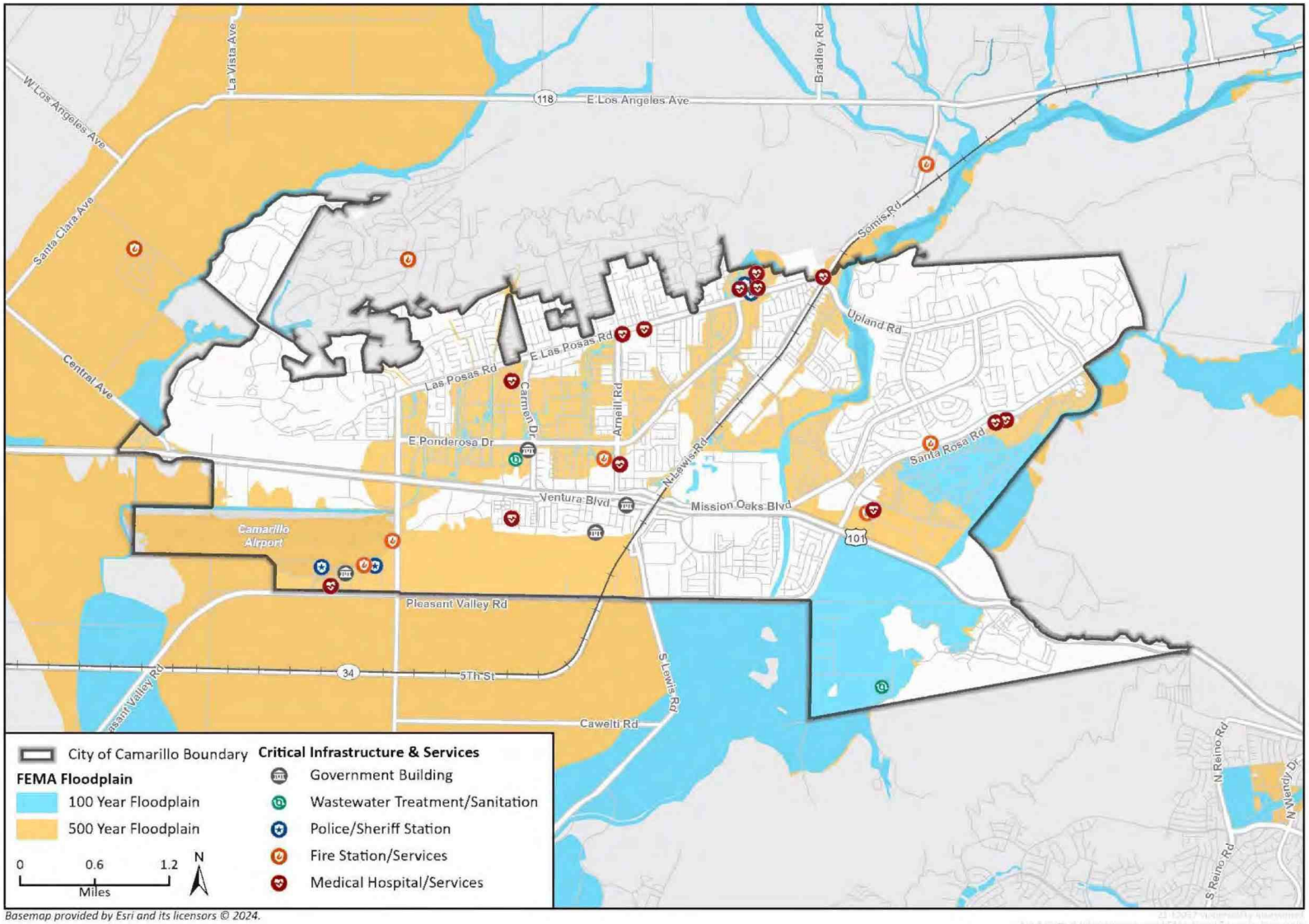


Figure 5 100 and 500 Year Floodplain in Camarillo

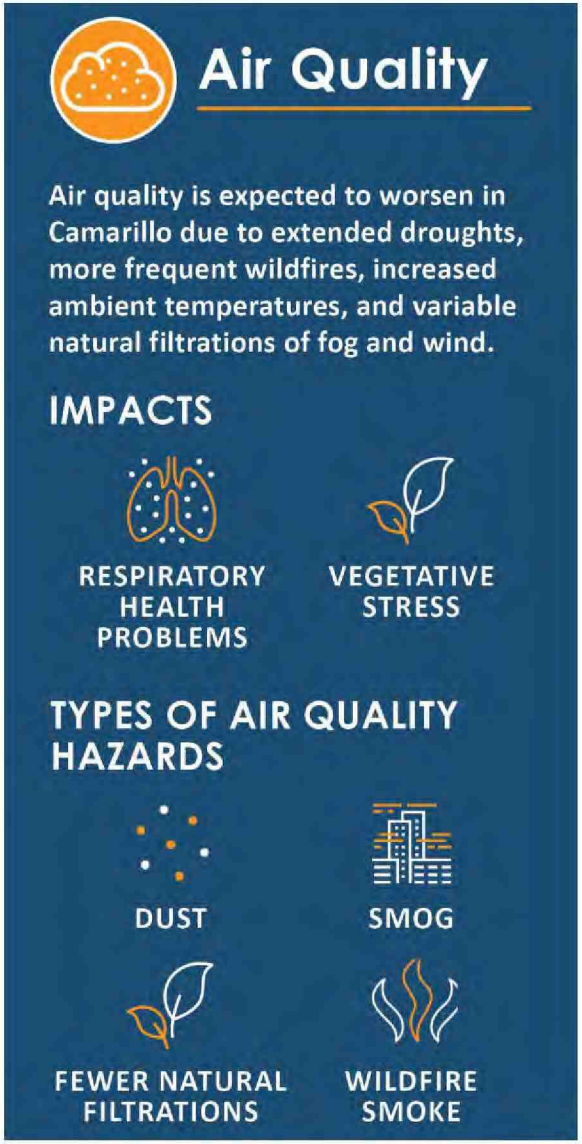


Basemap provided by Esri and its licensors © 2024.
Additional data provided by FEMA, 2021.

Air Quality

Worsening air quality due to climate change can create respiratory issues for vulnerable populations and impact indoor areas without adequate air filtration systems. There are several types of air quality decline sources found below:

- **Dust.** Increased temperature leads to lack of soil moisture and increased dry, dusty conditions (Hall et al. 2018).
- **Smog.** Increases in ambient temperature can lead to higher rates of smog also referred to as ozone. Ground-level ozone specifically will be experienced at higher rates leading to raised cardiovascular and respiratory morbidity and mortality rates (CDPH 2014). Ground-level ozone has also been shown to have particularly disproportionate adverse impacts on populations experiencing houselessness and lower median income (PNAS 2021). Camarillo will experience increases in ozone concentrations in parallel to temperature increases.
- **Fewer Natural Filtrations.** Precipitation variability and long periods of dry spells lead to less reliable air quality for the entire region. Moisture in the air can filter pollutants and provide for overall improved conditions (Hall et al. 2018).
- **Wildfire Smoke.** Temperature, severe wildfire conditions, and the area burned by wildfires throughout the state has increased and will continue to increase. Higher temperatures accompanied by an increase in the incidence and extent of large wildfires will lead to increased wildfire smoke exposure and associated toxins, air pollution, and particulate matter (Hall et. al 2018).



3 Sensitivity

Populations and assets are affected by climate change depending on their sensitivity to climate hazards. This section identifies sensitive populations and assets within Camarillo. Potential impacts from the climate hazards of concern on sensitive populations and assets are presented in the Vulnerability Analysis section.


Vulnerable Populations


Natural and Managed Resources


Buildings and Facilities


Infrastructure and Critical Services

3.1 Vulnerable Populations



While all people in a community will experience climate change, some may be more affected than others. For example, older adults and young children may be more at-risk to heat illness during an extreme heat event. Several factors influence sensitivity to climate hazards including an individual's health, age, and ability, societal disadvantages, inequities in access to health care, economic opportunity, education and other resources, and inequities found in basic needs and exposure to environmental stressors (Cal OES 2020). Vulnerable populations experience heightened risk to climate change and have fewer resources to adapt and recover from climate change impacts. Camarillo has several vulnerable populations that will be disproportionately impacted by climate change. These include those listed in Table 3 below.

- **Individuals with high outdoor exposure**. People experiencing houselessness and outdoor workers.
- **Under-resourced individuals.** Renters and individuals without a computer.
- **Individuals facing societal barriers.** Communities of color.
- **Individuals with chronic health conditions or health related sensitivities.** Older adults, children, individuals with disabilities (physical and cognitive), and Military Veterans.

Table 3 Vulnerable Populations in Camarillo

Population	Population Description	Percentage of Population or Households
People experiencing houselessness	Individuals who currently lack fixed, regular, and adequate housing	0.07%
Outdoor workers	Individuals older than 16 who work outdoors	7%
Unemployed	Individuals without active employment	17.1%
Older adults	Individuals 65 years or older	20.4%
Children	Individuals 5 years and younger	6.2%
Miliary Veterans	Individuals who have served but are not currently serving in the US Armed Forces	6.4%
Communities of color	All individuals that do not identify as white	25.4%
Renters	Housing units that are renter occupied	34.8%
Individuals with disabilities	Individuals with access and functional needs (physical and mental)	12.9%
Households without broadband internet	Households without access to broadband internet.	10.2%

Source: The percentages used in this table were acquired from the California Healthy Places Index 3.0, U.S. Census, 2015-2019 American Community Survey (ACS), Ventura County 2022 Homeless Count, and CalEnviroScreen 4.0.

3.2 Natural and Managed Resources



Natural and managed resources within Camarillo as detailed in the Open Space and Conservation Element of the General Plan include agriculture and open space, water, watersheds, air and arable soil, soil quality, and the foothill recreational areas (City of Camarillo 2006). Prime agricultural land is primarily along the southern city border, between highway 101 and Pleasant Valley Road. Natural watercourses include the Calleguas Creek, Conejo Creek, and the Revolon/Beardsley Wash, all of which provide groundwater and aquifer recharge as well as storm runoff. The City offers recreational areas, primarily in the foothills, as well as municipal and regional parks (City of Camarillo 2006). These various resources provide habitat and improve air and water quality, and are sources of community resilience, recreation, and economic productivity to the city. They are spread throughout the city and face various levels of exposure to climate hazards.

3.3 Buildings and Facilities



Climate change is expected to amplify extreme weather and climate hazards in Camarillo. A jurisdiction's vulnerability increases when buildings and facilities are not designed, operated, and/or maintained to function effectively under extreme weather conditions or can be damaged by extreme weather conditions. The following buildings and facilities would be particularly sensitive to climate change: municipal buildings, educational facilities, and residential and commercial developments.

3.4 Critical Infrastructure and Services



Within Camarillo there is a large array of critical infrastructure and services that are vulnerable to climate change. Assets within this category include water services, wastewater, solid and hazardous waste and recycling, fire services, emergency Services, medical services, utilities and major utility corridors, public transportation, roadways, and active transportation routes. The Camarillo Airport is in the southwestern region of the city, and contains other critical services, such as the Hazardous Materials unit.

4 Adaptive Capacity

Adaptive capacity is the ability to adjust to the consequences of climate change. This section summarizes the ways in which the City currently manages for the negative impacts of climate change. Types of adaptive capacity include adjustments in behavior, resources, and technologies. The City of Camarillo has actively taken steps to increase the county's adaptive capacity. Existing policies, plans, programs, and institutions that increase the city's resilience to climate change impacts are organized by climate hazard and listed in Table 4, Table 5, Table 6, and Table 7. The Adaptive capacity findings are overlayed with impacts of each climate hazard on different asset categories to produce a vulnerability score for each asset in the Vulnerability Analysis section (section 5).

4.1 Extreme Heat and Warm Nights

Table 4 lists programs, plans, and policies that help communities become more resilient to an increase in extreme heat and warm nights.

Table 4 Program, Plans, and Policies to Manage Impacts of Increased Temperature

Existing and Planned Programs, Plans, and Policies	Objectives
Ventura County Cooling Centers	Ventura County maintains designated cooling centers for county residents, especially those more susceptible to heat related illness. The location in Camarillo is the Camarillo Public Library, which operates as a cooling center in response to extreme heat events.
Ventura County Contingency Plan for Heat/Cold Weather Events (County of Ventura 2020)	This plan describes the roles, responsibilities of County agencies and disaster-related organizations and potential issues associated with an extended weather emergency. Additionally, this plan was developed to ensure effective support and interagency coordination in accordance with the following laws and guidelines including Emergency Services Act (ESA) and Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).
Southern California Edison (SCE) Medical Baseline Allowance Program (SCE 2022)	SCE provides additional electricity at discounted rates to customers with a qualifying medical need. This program often allows heat sensitive individuals to continue operating space cooling equipment more consistently.

4.2 Riverine and Stormwater Flooding, and Droughts

Table 5 lists programs, plans, and policies that help increase the community's resilience to droughts and riverine and stormwater flooding.

Table 5 Programs, Plans, and Policies to Manage Precipitation Impacts

Existing and Planned Programs, Plans, and Policies	Objectives
Calleguas Municipal Water District (CMWD 2020).	The CMWD Urban Water Management Plan includes descriptions of the CMWD services to its retail water purveyors to deliver water supply to Camarillo, projected water demands, and supply reliability during normal water years, single-dry years, and five consecutive dry years.
City of Camarillo Urban Water Management Plan (Camarillo UWMP 2020).	The Camarillo Urban Water Management Plan includes descriptions of CMWD water supply sources, projected water demands, and supply reliability during normal water years, single-dry years, and five consecutive dry years. The City of Camarillo supplies most of the water for residents and the remaining residents are served by the Camrosa Water District, Pleasant Valley County Water District, Pleasant Valley Mutual Water Company, and Crestview Mutual Water Company. The plan includes a short chapter discussing the impacts of climate change on the water system with limited strategies for mitigation and adaptation.
Camrosa Water District (CWD) Urban Water Management Plan (Camrosa Water District 2020). Calleguas Municipal Water District (CMWD).	The CWD Urban Water Management Plan includes descriptions of CMWD water supply sources, projected water demands, and supply reliability during normal water years and periods of drought. The plan includes a discussion of the impacts of climate change on the system.
Ventura County Integrated Regional Water Management Plan (County of Ventura 2019)	Integrated Regional Water Management (IRWM) is a paradigm for managing water and related resources on a regional scale. IRWM "regions" have been formed across California to develop plans that identify water management challenges, resolve conflicts over the best use of resources, bridge gaps in data, find common ground, and seek innovative solutions among stakeholders. Ultimately the goal is implementation of projects and programs that efficiently address water management priorities. The plan highlights the need to consider the impacts of climate change on water management.

4.3 Wildfires, Landslides, and Air Quality

Table 6 lists programs, plans, and policies that help increase the community's resilience to wildfires.

Table 6 Programs, Plans, and Policies to Manage Wildfire Impacts

Existing and Planned Programs, Plans, and Policies	Objectives
Ventura County Fire Hazard Reduction Program (FHRP) (VCFD 2022)	The Ventura County Fire Hazard Reduction Program is managed by the Ventura County Fire Department to comply with AB 38 which requires real estate sales of property within a High or Very High Fire Hazard Severity Zone to involve an inspection by local fire authorities to demonstrate compliance with state and local laws regarding defensible space and vegetation management. The Ventura County Fire Department's Ordinance is designed to minimize fire danger by controlling the density and placement of flammable vegetation. The goal is to maintain trees and vegetation that benefit a property, and to remove hazardous vegetation that provides a combustible fuel supply for wildfire.
Ventura Community Wildfire Protection Plan (Ventura Land Trust 2022)	The County's Community Wildfire Protection Plan (CWPP) identifies wildfire risks and clarifies priorities for funding and programs to reduce impacts of wildfire on communities at risk. Some actions include vegetation management, wildfire safety education programs, and establishment and maintenance of evacuation routes.
Ventura County Fire Department's Fire Prevention Bureau (VCFD 2022)	The Ventura County Fire Department's Fire Prevention Bureau works to ensure safety of communities as an all-hazard full-service agency and provides requirements for rebuilding of structures that were damaged or destroyed. The Bureau's responsibilities include working with property owners to establish defensible space as part of the Fire Hazard Reduction Program and conduct public education events.
Southern California Edison (SCE) Wildfire Mitigation Plan (SCE 2023)	The SCE Wildfire Mitigation Plan details the various mitigation efforts the utility is making to reduce the risk of and increase resilience to wildfire. These efforts include risk assessment and mapping, situational awareness and forecasting, public safety power shutoffs, grid hardening, vegetation management, grid operations and protocols, and emergency preparedness. This Plan takes into consideration climate change impacts on wildfire and resilience.
Ventura County Wildfire Action Plan (Ventura County Fire Department 2016)	The Ventura County Wildfire Action Plan ("Ready, Set, Go!") is a guide for making homes resistant to wildfires and preparations for leaving in an emergency wildfire situation. The guide includes information on how to establish defensible space, home hardening, and how to conduct a Family Disaster Plan checklist.
Southern California Edison (SCE) Public Safety Power Shutoff (PSPS) Customer Care Programs fact sheet (SCE 2022)	SCE operates a notification system to alert customers at least 1 to 2 days prior of a Public Safety Power Shutoff during periods of elevated wildfire risk. During a PSPS, SCE provides various supportive services to customers with qualifying needs including backup power systems rebates and incentives, transportation (Community Crew Vehicles), and community resource centers providing back up power to essential services such as pharmacies, grocery stores, and gas stations.

4.4 Multiple Climate Hazards

Table 7 lists programs, plans, and policies that help increase the community's resilience to multiple climate hazards including hazards outlined previously and in conjunction with others.

Table 7 Programs, Plans, and Policies to Manage Multiple Climate Hazard Impacts

Existing and Planned Programs, Plans, and Policies	Objectives
Ventura County Multi-Jurisdictional Hazard Mitigation Plan (County of Ventura 2022)	The Plan assesses hazards within the County and identifies mitigation strategies that reduce or eliminate long-term risks to people and property from those hazards. Climate hazards planned for include drought, flood, landslides, extreme heat, severe storms, and wildfire. The Plan outlines goals and objective to mitigate risk to vulnerable populations and physical assets across Ventura County.
City of Camarillo Emergency Operations Plan (EOP) (City of Camarillo 2021)	The City's EOP details a comprehensive emergency management system which enables a planned response to a wide variety of disaster situations. The high-level goals of the EOP are 1) to provide effective life safety measures, reduce property loss, and protect the environment; 2) to provide for the rapid resumption of impacted businesses and community services; 3) the provide accurate documentation and records required for cost recovery efforts. While the plan does not address climate change directly, it establishes a framework of response to multiple hazards exacerbated by climate change including flooding, drought, wildfire, and landslides.
City of Camarillo Emergency Operations Plan (City of Camarillo 2021)	Camarillo's Emergency Operations Plan details protocols to prevent, protect, mitigate, respond, and recover from the effects of disasters. The plan includes and Emergency Operations Center for the effective management of emergency situations during a major emergency or disaster and identifies lines of authority and responsibility. The plan reviews potential hazards to impact the city including wildfires, flooding, dam failure, earthquakes, and landslides.
Ventura County Emergency Response Team (CERT) Program (VCFD 2021)	The CERT program trains volunteers in basic first aid, light search and rescue, and small fire suppression, and are closely associated with Ventura County's Fire Department. CERT volunteers may assist neighbors and other emergency personnel in times of emergency, and support evacuations along with other responsibilities. The City of Camarillo has CERT Coordinator and provides local educational programs as described above.
Ventura County Alert Program (County of Ventura 2022)	The County of Ventura uses an emergency notification system for residents to send alerts if there is an emergency in a community. The alert system can be used to alert a home or business using the address, landline, cell phone, email, and TTY device to receive emergency alerts in English and Spanish.
Camarillo General Plan Safety Element (City of Camarillo 2013)	The Camarillo General Plan Safety Element provides policy direction that supports laws and regulation of future development that will minimize the risk of personal injury, loss of life, property damage, and environmental damage associated with natural and human-caused hazards. The Safety Element does not include goals related to climate adaptation and resilience, and policies that will support the community's capacity to better withstand the impacts associated with climate change. However, this Climate Change Vulnerability Assessment will inform updates to the Safety Element of the General Plan.

5 Vulnerability Analysis

The following section outlines the impacts each climate hazard has on vulnerable population groups and assets as described in the Sensitivity section (section 3). Existing plans, policies, and programs that contribute to the adaptive capacity of the assets outlined in the Adaptive Capacity section (section 4) is summarized throughout. An impact score and an adaptive capacity score is identified for each asset and climate hazard type producing the overall vulnerability score. Vulnerable populations in the City of Camarillo include the following:

- People experiencing houselessness
- Outdoor workers
- Older adults
- Children
- Renters
- Communities of color
- Military Veterans
- Individuals with disabilities (physical and cognitive)
- Individuals without a computer

The following sections discuss these vulnerable populations, within the subgroups delineated blow, their disproportionate risk to climate hazards in the city, and why there is a connection between specific populations and each relevant climate hazard risk. The vulnerable groups are as follows:

- **Individuals with high outdoor exposure.** People experiencing houselessness and outdoor workers.
- **Under-resourced individuals.** Renters and individuals without a computer.
- **Individuals facing systemic discrimination.** Communities of color.
- **Individuals with chronic health conditions or health related sensitivities.** Older adults, children, individuals with disabilities (physical and cognitive), and Military Veterans.

5.1 Vulnerable Populations



Individuals with high outdoor exposure including people experiencing houselessness and outdoor workers face disproportionate direct exposure to climate hazards, causing them to be extremely vulnerable to the effects of climate change. Individuals in these groups often live in homes that are less protected against climate hazards, lack a permanent residence, or don't have shelter altogether. People experiencing houselessness may not have access to healthcare coverage or financial resources to address health concerns either caused by or exacerbated by climate hazards.

Under-resourced individuals often do not have access or the ability to afford resources needed to prepare for, cope with, and recover from climate change impacts. People in this group often face financial barriers and limited access to resources when preparing for and recovering from climate change hazards. Under-resourced individuals often lack the financial resources to evacuate from a climate hazard and/or find an affordable place to evacuate to. Households without a computer may not receive emergency alerts or governmental guidance before or during a climate hazard event, leaving them in dangerous situations during evacuation scenarios (Gamble and Balbuls 2016).

Individuals facing systemic discrimination also face additional impacts of climate change. Communities of color are more likely to live in high hazard risk areas and less likely to be homeowners, which leaves them vulnerable to climate hazards.

Individuals with chronic health conditions or health related sensitivities are socially and physiologically vulnerable to climate change impacts and hazards. Older adults and individuals with disabilities may have limited or reduced mobility, mental function, or communication abilities, making it difficult to evacuate during or prepare for a climate hazard event (CDPH 2020). They may also have medical needs for electricity which may be impacted during a public safety power shutoff or climate hazard event. Individuals in these groups are more likely to have pre-existing medical conditions or chronic illnesses that may exacerbate the risk of illnesses and medical problems from climate hazards. Children are socially and physiologically vulnerable to climate hazards with limited understandings of climate hazards and insufficient resources to independently prepare for and safely respond during a climate hazard event. Children, especially young ones, are reliant on their parental figures to ensure their health, safety, and wellbeing (CDPH 2020). Children also have vulnerable physical characteristics because they have not fully physiologically developed and are therefore more vulnerable to health effects of climate change impacts (Kenney et al. 2014). Military Veterans are more likely to be low-income and experience houselessness after their service, which also makes them vulnerable to preparing and responding to climate hazards (Olenick et al. 2015).

Potential Impacts

Extreme Heat and Warm Nights

People experiencing houselessness, older adults, and young children are at risk to health impacts from extreme heat. People experiencing houselessness are exposed to health-related impacts associated with extreme heat because they have limited access to shelter and air conditioning. The primary health impacts to these populations are heat-related illnesses, such as heat stress, heat stroke, and dehydration, which can be life-threatening (CDPH 2020).

Under-resourced individuals may not be able to pay for adequate air conditioning or fans, increasing their exposure to extreme heat. Under-resourced individuals are less likely to receive medical care for illnesses triggered or exacerbated by extreme heat. Households without a computer may not receive heat advisory warnings or governmental guidance, causing them to experience health impacts from extreme heat exposure (CDPH 2017). Communities of color often live in housing with insufficient protection from extreme heat events and limited or no affordable air conditioning. The primary health impacts to these populations are heat-related illnesses, such as heat stress, heat stroke, and dehydration, which can be life-threatening (CDPH 2020).

Individuals with chronic health conditions or health related sensitivities are particularly at risk to heat related illnesses during extreme heat events. Individuals with disabilities, older adults, and

children may have difficulty turning on air conditioning or traveling to cooling centers during extreme heat events. Extreme heat conditions can exacerbate certain disabilities, and other respiratory and cardiovascular conditions, potentially causing heat-related illnesses such as heat stress, heat stroke and dehydrations, which can be-life threatening (CDPH 2020). Children are still physiologically developing which means that they are less able to regulate their bodies during extreme heat events (Kenney et al. 2014).

Drought

People experiencing houselessness are at risk to drought conditions and associated cascading impacts. During prolonged drought conditions, people experiencing houselessness may have difficulty accessing clean and affordable drinking water (Gamble and Balbuls 2016).

During periods of prolonged drought, under-resourced individuals are more likely to experience the cost burden associated with increased water rates (Feinstein et al. 2017). These individuals may struggle to access clean and affordable drinking water which may cause dehydration and/or exacerbate underlying health conditions and illnesses (Gamble and Balbuls 2016). Droughts often trigger cascading economic impacts through the agricultural sector, decreasing job availability and leaving under-resourced individuals particularly vulnerable to financial hardships (Howitt et al. 2015).Communities of color are at risk to drought conditions and associated cascading impacts and may face systemic and/or cultural barriers when seeking to access affordable and clean drinking water, which may cause dehydration and/or exacerbate underlying health conditions and illnesses (Gamble and Balbuls 2016).

Individuals with chronic health conditions or health related sensitivities are at risk to drought conditions and associated cascading impacts. Prolonged drought conditions can lead to water scarcity and individuals may need to rely on poor quality water supplies. Children and older adults are especially at risk to dehydration as their bodies are not able to regulate as well (Kenney et al. 2014). Dehydration may exacerbate underlying health conditions and illnesses.

Wildfire

People experiencing houselessness are particularly at-risk during wildfire events as they often suffer from respiratory conditions, mental illness, and chronic health conditions that may be exacerbated from physical contact with wildfire or smoke inhalation. People experiencing houseless have limited access to shelter and do not have access to transportation to evacuate from burning areas. They may also have their personal belongings destroyed or damaged during a wildfire event (CDPH 2017). After wildfires, there are additional issues of displacement and needs for temporary shelters for uprooted communities.

Under-resourced individuals may experience injuries or death from smoke inhalation or burns and are less likely to receive medical treatment (CDPH 2017). These individuals may have their belongings and homes damaged by a wildfire. If this occurs, under-resourced individuals are likely to suffer from the cost burden associated with losses or damage. Households without a computer may not receive communications and evacuations to safely evacuate from hazard areas. Renters have limited control over home hardening and improvements that may protect against fire and smoke. Subsequently, they may experience economic and health impacts and a greater loss of belongings than homeowners (Gamble and Balbuls 2016).

Communities of color are more likely to live in wildfire hazard zones and in housing with insufficient protection against wildfire.

Individuals in these groups have may face systematic and/or cultural barriers to access resources to safely evacuate hazard areas (Gamble and Balbuls 2016). Individuals in these groups may experience injuries or death from smoke inhalation or burns (CDPH 2017).

Individuals with chronic health conditions or health related sensitivities may experience injuries or death from smoke inhalation or burns (CDPH 2017). Older adults and Military Veterans are vulnerable to health impacts from wildfire smoke and pollutants because they are more likely to have underlying respiratory and/or cardiovascular conditions and illnesses. Children may experience respiratory health impacts from wildfire smoke because their respiratory systems are not fully developed and are sensitive to stressors. Individuals with disabilities, children, and older adults may have difficulty evacuating from wildfires, increasing the risk of health impacts from wildfire smoke inhalation or fire burns (EPA 2022).

Landslides

Vulnerable populations living in areas with high landslide risk may be subjected to disproportionate negative impacts during landslide and debris flow events. People experiencing houselessness have limited access to shelter and do not have access to transportation to evacuate in the event of a landslide. They may also have their personal belongings destroyed or damaged during a wildfire event (CDPH 2017).

Under-resourced individuals may experience injuries during a landslide event and are less likely to receive medical treatment (CDPH 2017). These individuals may have their belongings and homes damaged by a landslide. If this occurs, under-resourced individuals are likely to suffer from the cost burden associated with losses or damage. Households without a computer may not receive communications and evacuations to safely evacuate from hazard areas. Renters have limited control over home hardening and improvements that may protect against debris-flow related damage. Subsequently, they may experience economic and health impacts and a greater loss of belongings than homeowners (Gamble and Balbuls 2016).

Communities of color are more likely to be situated in wildfire scar zones or landslide prone areas (Gamble and Balbuls 2016).

Landslides may limit access to transportation systems, healthcare centers, and emergency response to those that are injured or in need or consistent medical care, such as those with chronic health conditions or illnesses. Children, older adults, and individuals with disabilities may not be able to safely evacuate landslide hazard areas.

Riverine and Stormwater Flooding

People experiencing houselessness are disproportionately at risk to health impacts during flood events because they often live in flood hazard areas and do not have access to transportation to evacuate inundated areas. They may also have their personal belongings destroyed or damaged during a flood event (Ramin and Svoboda 2009).

Under-resourced individuals may experience injuries or death from high velocity flooding and are less likely to receive medical treatment (CDPH 2017). Individuals in these groups may experience cost burdens if their belongings and homes are damaged from floodwater inundation. Households without a computer may not receive communications and emergency alerts to safely evacuate from hazard areas (CDPH 2020). Renters have limited control over home improvements that may protect against flood damage. Subsequently, they may experience economic and health impacts

and a greater loss of belongings than homeowners (Gamble and Balbuls 2016).

Communities of color are more likely to live in flood hazard areas and in housing with insufficient protection against riverine and stormwater flooding. They may face systematic and/or cultural barriers when seeking access to the resources needed to safely evacuate hazard areas (Gamble and Balbuls 2016).

Older people and children are particularly at risk to injury and/or death from high velocity flooding (CDPH 2017). Riverine and stormwater flooding may also limit access to transportation systems, healthcare centers, and emergency response to those that are injured or in need or consistent medical care, such as those with chronic health conditions or illnesses. Children, older adults, and individuals with disabilities may not be able to safely evacuate floodwater hazard areas.

Air Quality

People experiencing houselessness are disproportionally vulnerable to poor air quality because they are outdoors and are directly exposed to air pollutants (CDPH 2017). They may experience exacerbation or development of respiratory diseases and conditions, such as asthma and chronic obstructive pulmonary disease, and respiratory infections, which in some cases may be life-threatening (Ramin and Svoboda 2009).

Under-resourced individuals may be disproportionally impacted by poor air quality because their housing may lack sufficient air filtration and they may not be able to afford supplemental air filtration equipment (Gamble and Balbuls 2016). Individuals in these groups may experience the development or exacerbation of respiratory illnesses and are less likely to receive medical treatment (CDPH 2017).

Communities of color are vulnerable to health impacts associated with poor air quality because their housing may lack sufficient air filtration and they may not be able to afford supplemental air filtration equipment (Gamble and Balbuls 2016).

Children are extremely vulnerable to health impacts from poor air quality because their respiratory system has not fully developed yet (CDPH 2017). Older adults and Military Veterans are vulnerable to health impacts from poor air quality because they are more likely to have underlying respiratory and/or cardiovascular conditions.

Adaptive Capacity for Vulnerable Populations

Camarillo has plans, policies and programs in place that protect vulnerable populations across all climate hazards. The level of enforceability, implementation, and efficacy varies based on the hazard type.

Camarillo has many plans and policies in place to address extreme heat and its impacts on vulnerable populations. The city has a cooling center at the Camarillo Public Library, which operates in response to extreme heat events. Other extreme heat related plans include the Ventura County Contingency Plan for Heat/Cold Weather Events includes public safety power shut offs in the case of extreme heat conditions that may exacerbate wildfire potential. These shutoffs may negatively impact vulnerable populations such as older adults and children, who may rely on at-home cooling systems to avoid heat-related health issues. The program does include various support services to customers with qualifying needs to receive backup power systems, rebates and incentives, transportation, and access to essential services.

The Southern California Edison Medical Baseline Allowance Program provides additional electricity at discounted rates to customers with a qualifying medical need, and often allows heat sensitive

individuals to continue operating their space-cooling equipment at home.

Plans concerning stormwater flooding and drought mainly address infrastructure resilience and water reliability and drainage, in turn helping vulnerable populations. The City provides most of the water to residents, and the City of Camarillo Urban Water Management Plan includes a discussion of climate change impacts to the water system as well as strategies for mitigation and adaptation. The Calleguas Municipal Water District Urban Water Management Plan also includes plans for supply reliability during drought conditions. Additionally, the City operates the North Pleasant Valley Desalter Facility (Facility) which transforms unusable, brackish groundwater into a local source of high-quality and affordable drinking water while also removing damaging salts from the regional watershed. This Facility increases the City's resilience to drought by diversifying the water supply and doubling the City's local potable water supply. In addition, this Facility provides enhanced affordability and water rate stability for customers through this drought-resistant local water source. Plans and projects like these can serve as a form of drought and flooding resilience. The Ventura County Multi-Jurisdiction Hazard Mitigation Plan assigns a medium capacity to the City residents' ability to adapt to climate impacts. The plan acknowledges that vulnerable populations within the City may not be able to relocate or protect their home in the case of a flood but provides no guidance on how to address vulnerable populations in the case of flooding events (Ventura County 2022).

There are many programs, plans, and policies in place to mitigate wildfire impacts in Camarillo:

- Ventura County Fire Hazard Reduction Program (FHRP)
- Ventura County Fire Department's Fire Prevention Bureau
- Southern California Edison's (SCE) Wildfire Mitigation Plan
- Ventura County Wildfire Action Plan
- SCE Public Safety Power Shutoff

Vulnerability Score for Vulnerable Populations

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Extreme Heat and Warm Nights	High	Medium	**4- High**
Drought	High	High	**3- Medium**
Wildfire	High	Medium	**4- High**
Landslides	Medium	Low	**4- High**
Riverine and Stormwater Flooding	Medium	Medium	**3- Medium**
Air Quality	High	Low	**5- Very High**

Vulnerable populations in Camarillo are most vulnerable to extreme heat/warm nights, drought, wildfire, landslides, and air quality.

5.2 Natural and Managed Resources



Primary vulnerabilities for natural and managed resources are associated with climate hazard-caused stress and physical damage to resource types within this asset group. Compounding climate hazards stress natural ecosystems beyond their capacity to absorb individual climate hazards. Wildlife will seek out more conducive habitats during climate events such as extreme heat or drought, which can tend to be where people recreate (USDA 2018). Recreational areas are also placed under increased risk via climate projections creating additional stress and competing needs for safe habitats. Impacts related to habitat shifts are exacerbated compared to larger areas as densely populated and limited lands presents issues with re-seeding or re-habitation. Natural and managed resources are highly vulnerable to the effects of climate change in Camarillo.

Potential Impacts

Extreme Heat and Warm Nights

The impacts to natural and managed resources in Camarillo during extreme heat and warm nights are similar to the impacts experienced by vulnerable populations. Wildlife under these conditions face heat stress and heat related illness as well as disrupted reproductive cycles, and compounding risks associated with early and extended seasonal temperature increases (Backlund 2008). Because it is seasonally warmer earlier in the year species can emerge early with no food source and potentially face an untimely cold front, which increases mortality rates. Timing of seasonal warmth may not overlap with food sources and extreme heat may stress dependent vegetation communities and wildlife (Dale 1997, Hamerlynck 1995, Maclean et al. 2011). Plants are more likely to experience heat stress and drying, habitat ranges may shift, and native species may be outcompeted by invasive species capable of surviving the harsh conditions. Some pests can proliferate more easily with warmer temperatures (Hamerlynck 1995), and some plants and animals ill-suited to the new warmer conditions may suffer increased mortality rates (Hall et al. 2018). Natural resources are highly exposed to extreme heat and warm nights. Both mid- and end- of century projections depict dramatic increases in extreme heat days (CEC 2024).

Higher temperatures will decrease the snowpack and raise the snowline, decreasing one of the most important surface water reserves for agriculture (Hall et al. 2018). Extreme heat and warm nights can result in declines in crop yields because of heat stress and anomalous warmth during periods that are typically cooler (Parker et al. 2020). Lower crop yields can increase costs and ultimately decrease agriculture profitability.

Drought

Impacts from drought involve risks associated with water scarcity and availability for reliant natural resources. Drought will disrupt habitats and will decrease the resiliency of wildlife. Extended or variable drought conditions effect the amount and duration of water available in ephemeral and permanent sources, which impacts plants and wildlife dependent on those aquatic resources (Burkett and Kusler 2000).

Like extreme heat and warm nights, drought is linked to declines in crop yields, increasing costs, and decreasing crop profitability. Drought can result in regional losses of crops and can stress the

statewide water supply. Many crops grown in Camarillo, such as avocados, lemons, grapefruits are dependent on high depths of water and subsequently higher water intensity needs.

Wildfire

The largest direct impacts to natural resources are caused by wildfires. The severity and frequency of wildfires can lead to long term habitat conversions, or vegetative communities that no longer support reliant species, and the landscape provides minimal alternative habitats (Bell et al. 1999, Coop et al. 2020). As discussed within the Exposure to Climate Hazards section, extreme wildfire risk days in Camarillo are projected to increase through the end of the century (CEC 2024).

Figure 3 depicts the delineation of Very High Fire Hazard Severity Zones (VHFHSZ) which both border and fully encompassing areas with natural resources including some of the city's prime agricultural land. Given the projected expansion of wildfire prone areas, larger areas of croplands may be within fire hazard severity zones in the future due to climate change. Wildfires can destroy crops and disrupt rangeland operations while wildfire smoke may stress the health of crops and livestock.

Landslides

Landslide susceptibility is limited and the likelihood of landslides occurring is determined by precipitation and wildfire occurring sequentially (Hall et al. 2018). In the event of a landslide there is potential for loss of lands, habitat, and disruption of waterbodies in areas of debris flow. Wildlife and plants face a compounding risk when presented with landslide events. Figure 4 shows landslide susceptibility in Camarillo, with the highest risk areas being situated in the northern portion of the city. Specifically, landslide risk is significant in the region north of Ventura Boulevard and west of Las Posas Road, as well as in the region east of North Lewis Road and north of Mission Oaks Boulevard. Some of the areas with high landslide susceptibility overlap with prime agricultural land or other natural resources in the city.

Riverine and Stormwater Flooding

The major impacts of flooding on natural and managed resources are the damage and destruction that occurs because of related erosion, as well as the degradation of water quality, which impacts survival rates of aquatic species and fish (Talbot et al. 2018). One way that stormwater flooding reduces water quality is by causing algae blooms which lead to plant and wildlife health issues within wetlands and waterbodies (EPA 2022). Other impacts include damage from inundation in storm flooded areas including natural habitats and public and private land surrounding waterbodies in the city. Riverine and stormwater flooding will mostly affect sensitive species of plants and wildlife that are based in low-lying areas of the city, specifically those adjacent to the creeks in the area.

Agricultural operations situated within the FEMA flood zones in Camarillo susceptible to the impacts riverine and stormwater flooding. These operations have the potential to be disrupted during flood events, and inundation is likely to result in crop yield reductions. Agricultural worker's residences could also be damaged by floodwater inundation (VCAC 2020).

Air Quality

The direct effects of poor air quality on natural resources relates to plant and wildlife health as increased air pollutants are correlated with increased stress and mortality rates. Impacts from air quality can further impact natural resources since air quality declines correspond with other hazards (such as wildfire and extreme heat events), which compounds risks.

The direct impacts of air quality on crop yield within Camarillo of concern is that smoke damage may render crops unsaleable, or poor air quality may impact harvest ability.

Adaptive Capacity for Natural and Managed Resources

There are no relevant plans programs or policies directly increasing the adaptive capacity of Camarillo natural and managed resources to the climate hazard of extreme heat.

Related to wildfire, there are existing programs and plans outlined in the Ventura County Community Wildfire Protection Plan. The plan identifies natural and managed resources that are susceptible to wildfire and plans for vegetation management as a mitigation effort. Implementation of planning efforts, such as emergency notification and alert systems, exists within the 2020 Urban Water Management Plan, the 2022 Ventura County Multi-Jurisdictional Hazard Mitigation Plan, and the City of Camarillo Emergency Operations Plan to provide awareness of natural and managed resources impacts around climate hazards.

Indirect planning exists around adaption for natural resources around flooding and drought including the Ventura County Integrated Regional Water Management Plan: Integrated Flood Management Planning Report, Calleguas Municipal Water District (CMWD) Urban Water Management Plan, and the City of Camarillo Urban Water Management Plan.

Vulnerability Score for Natural Resources

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Extreme Heat/Warm Nights	High	Low	**4- High**
Drought	High	Low	**4- High**
Wildfire	High	Medium	**4- High**
Landslides	High	Low	**4- High**
Riverine and Stormwater Flooding	High	Medium	**4- High**
Air Quality	Medium	Medium	**3- Medium**

Natural and managed resources in Camarillo are most vulnerable to extreme heat/warm nights, drought, wildfire, and landslides.

5.3 Buildings and Facilities

Vulnerabilities within this asset category primarily concern physical exposure and damages related to climate hazards. Impacts associated with operations of critical services are discussed under Critical Infrastructure and Services (section 5.4).

Potential Impacts

Extreme Heat and Warm Nights

Extreme heat could impact occupants of buildings and facilities that are not adequately weatherized for increased temperatures.

Drought

Drought will have minimal impact on the physical structures of buildings and facilities across Camarillo.

Wildfire

The structures and buildings that occupy wildfire hazard zones are at risk of structural damage from wildfires. Wildfire hazard zones may expand by end of century which could lead to more facilities at risk of structural damage. There are many several critical facilities in Camarillo's wildfire hazard zones shown in Figure 3.

Landslides

Landslide susceptibility in Camarillo overlaps with sloped wildfire hazard zones, in the Camarillo and Las Posas hills (CDOC 2021). Impacts to buildings and facilities as outlined in the Multi-Jurisdiction Hazard Mitigation Plan encompass some residential neighborhoods as well as some commercial developments.

Riverine and Stormwater Flooding

There is some risk of riverine and stormwater flooding to the physical structures outlined under this asset category. The location of floodplains in Figure 5 show a risk of impact based on the 100- and 500-year flood plains, primarily to residences along East Ponderosa Drive, Santa Rosa Road, and along the Calleguas Creek Bed. Commercial buildings below Ventura Boulevard, such as the Camarillo Premium Outlets, are within the 500-year floodplain and are subject to flooding damage.

Air Quality

The impact of reduced air quality will have a similar effect as extreme heat for buildings and facilities. The ability to filter air will greatly affect the reliant subsystems, services, and populations reliant on the buildings and facilities. The direct impact on structures is low.

Adaptive Capacity for Buildings and Facilities

Camarillo has completed some existing adaptive capacity efforts to increase the weatherization of buildings and facilities throughout the city. The Ventura County Fire Hazard Reduction Program is managed by the Ventura County Fire Department to comply with AB 38 which requires real estate sales of property within a High or Very High Fire Hazard Severity Zone to involve an inspection by local fire authorities to demonstrate compliance with state and local laws regarding defensible space and vegetation management. The Ventura County Fire Department's Ordinance is designed to minimize fire danger by controlling the density and placement of

flammable vegetation. The goal is to maintain trees and vegetation that benefit a property, and to remove hazardous vegetation that provides a combustible fuel supply for wildfire. The 2013 Camarillo General Plan Safety Element and the Ventura County Emergency Operations Plan mention structural resilience and contain planned responses to emergencies that include reducing property loss.

Vulnerability Score for Buildings and Facilities

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Extreme Heat/Warm Nights	Medium	Low	**4-High**
Drought	Low	Low	**3-Medium**
Wildfire	High	Medium	**4-High**
Landslides	Medium	Medium	**3-Medium**
Riverine and Stormwater Flooding	Medium	Medium	**3-Medium**
Air Quality	Medium	Low	**4-High**

Buildings and facilities in Camarillo are most vulnerable to extreme heat/warm nights, wildfire, and air quality.

5.4 Critical Infrastructure and Services



Overall vulnerabilities associated with this asset category involve structural preparedness and service reliability in the face of climate change. This section is mainly concerned with the cascading impacts physical damages to buildings and facilities can have on services and infrastructure.

Potential Impacts

Extreme Heat and Warm Nights

As temperatures increase, roadways, active transportation routes, and railroads are vulnerable to heat-related damages such as buckled highways, railroad tracks and premature deterioration of infrastructure (Hall et al. 2018). Additional impacts from extreme heat are associated with increased emergency service calls which could strain medical services. Electrical infrastructure could be overwhelmed by demand and result in blackouts or energy providers could conduct power safety shutoffs to avoid impacts to electrical facilities. Power outages have significant impacts on communication networks, water conveyance, and vulnerable populations. The ability for emergency services to fully function is a cascading impact of power outages which can place additional strain on services during extreme heat events.

Drought

Drought can impact water reliability and water infrastructure. All emergency services depend on water, particularly firefighters who require adequate water supply for fire suppression. Water providers within the county will encounter increased difficulty as drought impacts general service reliability. Drought impacts can create service strain for emergency and medical services. Cracked pavements from drought, compounded with extreme heat, affects roadways and transportation routes.

Wildfire

There are some critical facilities located in the Very High Fire Hazards Severity Zones (VHFHSZ) as shown in Figure 3 such as those along Santa Rosa Road, or in the northern portion of the city, along East Las Posas Road and Upland Road. Additionally, the Camarillo Airport is situated near moderate to high fire hazard zones, placing the airport and the neighboring critical facilities at risk of wildfire damage. These facilities and services are at risk of structural damage from wildfire. Infrastructure and dependent populations experience additional cascading impacts around power outages from downed utility lines, power safety shut offs and grid overload. All forms of power outages can affect how critical services are able to perform their needed functions during a hazard.

Utility lines have the potential to be damaged in high-risk locations, resulting in oil and gas leaks and power outages. Certain high wind conditions can often trigger wildfires, especially when power lines are downed or damaged (Hall et al. 2018). Power safety shut offs in response to wildfire risk can affect service reliability of power. Increased frequency of wildfires can place strain on fire and emergency services. Evacuation routes could be disrupted during a wildfire event limiting emergency responders and ability for people to evacuate as well.

Landslides

Risk of landslides in Camarillo is significant in the region north of Ventura Boulevard and west of Las Posas Road, as well as in the

region east of North Lewis Road and north of Mission Oaks Boulevard. This leaves critical facilities and services, such as those along Las Posas Road and Santa Rosa Road vulnerable, including the police station, a fire station, and several medical facilities.

Riverine and Stormwater Flooding

Impervious surfaces can impede the absorption of water and augment stormwater flooding in areas of Camarillo. There is risk of damage from increased extreme precipitation events including erosion, washouts, and sinkholes. Storm drainage and flood protection services for the city may be impacted by these events. Water supply for fire suppression as well as wildfire-caused declines in water quality are additional cascading impacts. Critical facilities, located below Ventura Boulevard, near the Camarillo airport are located within the 500-year floodplain. This includes two fire stations, a police station, a medical facility, and a government building. The airport and the related critical services will also be vulnerable during flood events. Additionally, there are several critical facilities in flood zones along Santa Rosa Road, East Las Posas Road, and East Ponderosa Drive that are vulnerable to flood and storm related damages.

Air Quality

Higher incidence of unsafe air quality generated by increased smog, dust and wildfire smoke can create general strain on existing critical infrastructure and services through increased rates of hospitalization and emergency and medical services (CDPH 2020).

Adaptive Capacity for Critical Services and Infrastructure

The relevant existing plans, policies, and programs for Camarillo are mainly multi-hazard based. All multi-hazard plans, programs and systems are designed to address service and infrastructure failings and contingencies. The City of Camarillo Urban Water Management Plan includes a discussion of the impacts of climate change on the water system, with minimal strategies for adaptation and mitigation. Additionally, there is discussion in the City of potential uses for Desalination facilities in the future, but there are currently none operating or under construction. However, as mentioned under *Adaptive Capacity for Vulnerable Populations,* the City operates the North Pleasant Valley Desalter Facility which transforms unusable, brackish groundwater into a local source of high-quality and affordable drinking water, while also removing damaging salts from the regional watershed. This Facility increases the City's resilience to drought by diversifying the water supply and doubling the City's local potable water supply. In addition, this Facility provides enhanced affordability and water rate stability for customers through this drought-resistant local water source. Plans and policies that are relevant to critical infrastructure and services are found below:

- Ventura County Multi-Jurisdictional Hazard Mitigation Plan
- Ventura County Emergency Operations Plan (EOP)
- Ventura County Emergency Response Team
- Camarillo Emergency Operations Center
- Ventura County Alert Program
- Camarillo General Plan Safety Element

Cascading risks of services not being provided, and power dependencies are addressed in relation to wildfire and other climate related hazards throughout these plans and programs.

Vulnerability Score for Critical Infrastructure and Services

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Extreme Heat	High	Medium	**4-High**
Drought	High	High	**3- Medium**
Wildfire	High	Medium	**4- High**
Landslides	High	Low	**5- Very High**
Riverine and Stormwater Flooding	High	Medium	**4-High**
Air Quality	Medium	Low	**4-High**

Critical infrastructure and services in Camarillo are most vulnerable to extreme heat/warm nights, drought, wildfire, landslides, riverine and stormwater flooding, and air quality.

6 Conclusion

This report evaluates how climate change may impact vulnerable community members, natural resources, critical facilities, buildings, services, and infrastructure in Camarillo. The report provides a list of vulnerable population groups and assets for which adaptation policies and programs should be developed and implemented to increase community resilience. Vulnerability is based on the combination of potential impacts and adaptive capacity, as identified in the Vulnerability Analysis section of the report.

A list of asset categories and related vulnerability scores is provided on the next page. Highly vulnerable assets are discussed below:

- All sensitive population groups identified are highly vulnerable to many climate hazards including extreme heat and warm nights, wildfire, landslides, and air quality.
- Natural and managed resources are highly vulnerable to extreme heat and warm nights, drought, wildfire, and landslides.
- Buildings and facilities in Camarillo are highly vulnerable to extreme heat and warm nights, wildfire, and air quality.
- Critical infrastructure and services are highly vulnerable to all climate hazards, including extreme heat/warm nights, wildfire, landslides, riverine and stormwater flooding, and air quality.

This report establishes a foundation for identifying adaptation policies and programs that can increase resilience in Camarillo. The City of Camarillo Safety Element Update will include policies and programs to increase the resilience of the population groups and asset categories with the highest vulnerability to climate change.

Vulnerability Score for Population Groups and Assets

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Vulnerable Populations			
Extreme Heat/Warm Nights	High	Medium	**4- High**
Drought	High	High	**3- Medium**
Wildfire	High	Medium	**4- High**
Landslides	Medium	Low	**4- High**
Riverine and Stormwater Flooding	Medium	Medium	**3- Medium**
Air Quality	High	Low	**5- Very High**
Natural and Managed Resources			
Extreme Heat/Warm Nights	High	Low	**4- High**
Drought	High	Low	**4- High**
Wildfire	High	Medium	**4- High**
Landslides	High	Low	**4- High**
Riverine and Stormwater Flooding	High	Medium	**3- Medium**
Air Quality	Medium	Medium	**3- Medium**
Buildings and Facilities			
Extreme Heat/Warm Nights	Medium	Low	**4-High**
Drought	Low	Low	**3-Medium**
Wildfire	High	Medium	**4-High**
Landslides	Medium	Medium	**3-Medium**
Riverine and Stormwater Flooding	Medium	Medium	**3-Medium**
Air Quality	Medium	Low	**4-High**

Climate Hazard	Impact Score	Adaptive Capacity Score	Vulnerability Score
Critical Infrastructure and Services			
Extreme Heat/Warm Nights	High	Medium	**4- High**
Drought	High	High	**3- Medium**
Wildfire	High	Medium	**4- High**
Landslides	High	Low	**5- Very High**
Riverine and Stormwater Flooding	High	Medium	**4- High**
Air Quality	Medium	Low	**4- High**

This assessment is a starting point for identifying adaptation policies and programs that can increase resilience in the city of Camarillo. The City of Camarillo Safety Element Update will include policies and programs that provide resilience benefits to the population groups and asset categories in Camarillo with the highest vulnerability.

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FEHR PEERS

Memorandum

Date: October 31, 2023

To: Hannah Mize, Rincon Consultants

From: Nico Boyd and John Muggridge

Subject: City of Camarillo Evacuation Capacity Analysis

LA22-3379

Fehr & Peers has completed an assessment of the effect that a wildfire necessitating evacuation for the east part of the City of Camarillo (City) may have on emergency evacuation travel demand in the City. This assessment is being conducted in consideration of the new Assembly Bill 747 (AB 747) which is a requirement for Safety Element Updates that occur after January 2022 and requires that Safety Elements be reviewed and updated to identify evacuation routes and their capacity, safety, and viability.

This document is intended to provide an assessment of roadway capacity under an evacuation event affecting the east side communities of Camarillo Springs, Leisure Village, and Upland in the City of Camarillo. Please note that emergency evacuation can occur due to any number of events. Additionally, fire and other hazard movement is unpredictable as is individual behavior related to evacuation events. As such, this assessment is intended to provide the City with a broad "planning level" assessment of the capacity of the transportation system during an evacuation scenario; it does not provide guarantees as to the adequacy of the system nor can it guarantee that the findings are applicable to any or all situations.

Moreover, as emergency evacuation assessment is an emerging field, there is no established standard methodology. We have adopted existing methodologies in transportation planning that, in our knowledge and experience, we believe are the most appropriate.

Background

AB 747 requires that the Safety Element be reviewed and updated to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. This is now a requirement for all safety elements or updates to a hazard mitigation plan completed after January 2022. This study is intended to provide the City with a broad planning level assessment of the capacity of the transportation

system during an evacuation event affecting the east side of the City, specifically the communities of Camarillo Springs, Leisure Village, and Upland.

Approach

Because the east side of the City of Camarillo is located adjacent to undeveloped land in the foothills of the Santa Monica Mountains where fire risk is relatively high, evacuation of the communities there requires access to the US-101 freeway to proceed west toward the City of Oxnard. In consultation with City staff, Fehr & Peers identified the transportation analysis zones (TAZs) in the Ventura County Transportation Model (VCTM) that correspond with the Camarillo Springs, Leisure Village, and Upland Communities, as these communities are most likely to require evacuation if a fire were to erupt to the east of the City. Following the identification of the corresponding TAZs in the VCTM, Fehr & Peers identified evacuation routes and access points to those routes connecting the three communities to the US-101 freeway. These routes are described below (see **Appendix A** for the City's Evacuation Route Map):

- Primary Evacuation Routes:
    - Camarillo Springs Road – Camarillo Springs Road is a north-south road that provides access from the Camarillo Springs community, located south of the US-101 freeway in the southeast corner of the City, to the US-101 freeway to the north.
    - Santa Rosa Road – Santa Rosa Road is a north-south road that connects the Upland community in the northeast corner of the City and the Leisure Village community at the eastern edge of the City to the US-101 freeway to the south.
- Secondary Evacuation Routes:
    - Pleasant Valley Road – Pleasant Valley Road is a east-west road along the southern boundary of the City that provides access from the Camarillo Springs community west toward Lewis Road, which in turn provides access to the US-101 freeway.
    - Lewis Road – Lewis Road is a north-south road located in the center of the City that provides access to the US-101 freeway.
- Other Potential Evacuation Routes:
    - Las Posas Road – On the west side of the City, Las Posas Road is a north-south road that provides access from Pleasant Valley Road to the south to the US-101 freeway to the north.
    - Flynn Road – Flynn Road is a north-south road located east of Lewis Road that provides access from the Upland community to the north to the US-101 freeway to the south.
- The US-101 is a freeway that runs through the city limits and serves as the primary evacuation route for vehicles traveling west toward the City of Oxnard and the Pacific coast.

Twenty roadway segments were analyzed as key roadways to access the US-101 freeway from the three identified communities on the east side of the City:

1) Lewis Road from Adolfo Road to US-101 freeway
2) Lewis Road from Las Posas Road/Upland Road to Adolfo Road
3) Upland Road from Lewis Road to Flynn Road
4) Upland Road from Flynn Road to Woodcreek Road
5) Upland Road from Woodcreek Road to Mission Oaks Boulevard
6) Upland Road from Mission Oaks Boulevard to Santa Rosa Road
7) Santa Rosa Road from Upland Road to Oak Canyon Road
8) Santa Rosa Road from Oak Canyon Road to Woodcreek Road
9) Santa Rosa Road from Woodcreek Road to Los Pueblos Drive
10) Santa Rosa Road from Los Pueblos Drive to Adolfo Road
11) Santa Rosa Road from Adolfo Road to US-101 Freeway
12) Pleasant Valley Road/Santa Rosa Road from US-101 Freeway to Pancho Road
13) Pleasant Valley Road from Pancho Road to Lewis Road
14) Pleasant Valley Road from Lewis Road to Las Posas Road
15) Las Posas Road from Pleasant Valley Road to Ventura Boulevard
16) Las Posas Road from Ventura Boulevard to Daily Drive
17) Flynn Road from Upland Road to Adolfo Road
18) Flynn Road from Adolfo Road to Mission Oaks Boulevard/US-101 Freeway
19) Camarillo Springs Road from Ridge View Street/Adohr Lane to the US-101 Freeway
20) Adohr Lane from Pancho Road to Ridge View Street

This assessment was completed under existing (2022) PM peak hour conditions with and without evacuation traffic. To compare evacuation travel demand to typical PM peak hour traffic volumes on the twenty study roadway segments, Fehr & Peers obtained weekday PM peak hour traffic counts from the City for key intersections located along the roadway segments and used these volumes to impute the volumes traveling on each segment.

Evacuation access from the aforementioned east side communities was assessed by reviewing the vehicle travel demand on each roadway during an evacuation event. To estimate evacuation travel demand for each study segment, land use and socioeconomic data were aggregated by transportation analysis zones (TAZs) from the Ventura County Transportation Model (VCTM). The VCTM is a useful starting point for estimating travel demand as it provides socioeconomic information, such as population, employment, and number of households, and the TAZs represent distinct areas of the city that can be used to estimate vehicle travel demand along each study roadway segment during an evacuation event. The process for developing the evacuation travel demand estimates is explained in further detail below.

Evacuation Assessment

A capacity assessment was performed for an emergency evacuation scenario in which the Santa Ana Winds cause a wildfire necessitating evacuation for the east side communities of Camarillo Springs, Leisure Village, and Upland. For this assessment, it was assumed that all residents and employees in the affected communities would need to evacuate towards the US-101 freeway and travel west toward the City of Oxnard and the Pacific coast. In addition, it was assumed that only land uses in the City of Camarillo would be under an evacuation order.

The first step in the evacuation assessment was to identify the number of residents, households, and employees in the VCTM TAZs that correspond with the Camarillo Springs, Leisure Village, and Upland communities to inform estimates of evacuation demand. The VCTM was also used to identify vehicle availability by household size, which informed the conversion of residential person trips into evacuation vehicle trips. For employment trips, all workers employed in the VCTM TAZs that correspond with the evacuation communities were assumed to travel alone in their own vehicle during the evacuation event. **Table 1** summarizes the socioeconomic information from the VCTM that was used to develop estimates of vehicle trips during an evacuation scenario. **Table 2** summarizes the total number of residential PM peak hour vehicle evacuation trips that were assumed in the evacuation assessment by TAZ.

Table 1: Camarillo Evacuation Socioeconomic Data Summary

TAZ/Community	Population	Households	Employees
60119201 / Upland	1,684	621	-
60117101 / Leisure Village	4,113	1,507	216
60117201 / Leisure Village	3,854	1,421	199
60116401 / Camarillo Springs	2,543	940	312

Source: Ventura County Transportation Model data compiled by Fehr & Peers, 2023.

Table 2: Residential Vehicle Evacuation PM Peak Hour Trips by TAZ

TAZ/Community	Total Residential Vehicle Evacuation Trips
60119201 / Upland	1,081
60117101 / Leisure Village	2,675
60117201 / Leisure Village	2,416
60116401 / Camarillo Springs	1,582

Source: Ventura County Transportation Model data compiled by Fehr & Peers, 2023.

The second step in the evacuation assessment was to assign evacuation trips to evacuation routes based on location and proximity to the various routes available during an evacuation scenario. **Table 3** summarizes the proportion of evacuation trips that were assigned to each route by community/TAZ. For each community, the proportion of evacuation trips assigned to each route sums to 100%.

Table 3: Camarillo Evacuation Socioeconomic Data Summary

Community	TAZ	Route	% of Trips
Upland	60119201	Upland – Lewis – US-101	50%
Upland	60119201	Upland – Flynn – US-101	25%
Upland	60119201	Upland – Santa Rosa – US-101	25%
Leisure Village (north)	60117101	Santa Rosa – US-101	50%
Leisure Village (north)	60117101	Santa Rosa – Pleasant Valley – Las Posas – US-101	50%
Leisure Village (south)	60117201	Santa Rosa – US-101	50%
Leisure Village (south)	60117201	Santa Rosa – Pleasant Valley – Las Posas – US-101	50%
Camarillo Springs	60116401	Camarillo Springs – US-101	50%
Camarillo Springs	60116401	Ridge View – Adohr – Pleasant Valley – Las Posas – US-101	50%

The *Highway Capacity Manual (6th Ed)* was utilized to estimate roadway capacity during an evacuation event. Ideal saturation flow on a roadway is 1,900 vehicles per lane per hour. The per lane capacity applied in this assessment is based on a capacity of 950 vehicles per hour per lane to account for constraints at intersections due to typical weekday traffic signal timings and vehicle turning movements. The roadway capacities are shown in **Table 4**.

Table 4: Evacuation Capacity

Roadway	Outbound Lanes	Outbound Capacity (vehicles per hour)
Lewis Road from Adolfo Road to US-101 Freeway	1	950
Lewis Road from Las Posas Road/Upland Road to Adolfo Road	1	950
Upland Road from Lewis Road to Flynn Road	2	1,900
Upland Road from Flynn Road to Woodcreek Road	2	1,900
Upland Road from Woodcreek Road to Mission Oaks Blvd	2	1,900
Upland Road from Mission Oaks Blvd to Santa Rosa Road	2	1,900
Santa Rosa Road from Upland Road to Oak Canyon Road	2	1,900
Santa Rosa Road from Oak Canyon Road to Woodcreek Road	2	1,900
Santa Rosa Road from Woodcreek Road to Los Pueblos Drive	2	1,900
Santa Rosa Road from Los Pueblos Drive to Adolfo Road	2	1,900
Santa Rosa Road from Adolfo Road to US-101 Freeway	3	2,850
Pleasant Valley Road/Santa Rosa Road from US-101 Freeway to Pancho Road	2	1,900
Pleasant Valley Road from Pancho Road to Lewis Road	2	1,900
Pleasant Valley Road from Lewis Road to Las Posas Road	2	1,900
Las Posas Road from Pleasant Valley Road to Ventura Boulevard	2	1,900
Las Posas Road from Ventura Boulevard to Daily Drive	3	2,850
Flynn Road from Upland Road to Adolfo Road	2	1,900
Flynn Road from Adolfo Road to Mission Oaks Blvd/US-101 Freeway	2	1,900
Camarillo Springs Road from Ridge View Street/Adohr Lane to US-101 Freeway	2	1,900
Adohr Lane from Pancho Road to Ridge View Street	1	950

Source: Highway Capacity Manual 6th Edition, Transportation Research Board, 2016.

The final step in the evacuation assessment was to compare the travel demand during an evacuation event to the roadway capacity for the study roadway segments that would provide access to the US-101 for vehicles exiting the City. The roadway capacity, typical peak hour traffic volumes, and estimated evacuation demand were combined to compare the evacuation demand and volume-to-capacity ratio (V/C) for each study roadway segment. The total evacuation travel demand assumes that two-thirds (67%) will occur during a one-hour period based on consultation with public safety experts. The results of the evacuation analysis are shown in **Table 5**.

Table 5: Evacuation Analysis								
Roadway	**Background Traffic**	**Residential Evacuation Traffic**	**Employee Evacuation Traffic**	**Total Traffic**	**Lanes**	**Capacity (vehicles per hour)**	**Existing V/C Ratio**	**Evacuation V/C Ratio**
Lewis Road from Adolfo Road to US-101 Freeway	664	362	-	1,026	1	950	0.7	**1.1**
Lewis Road from Las Posas Road/Upland Road to Adolfo Road	490	362	-	852	1	950	0.5	0.9
Upland Road from Lewis Road to Flynn Road	765	362	-	1,127	2	1,900	0.4	0.6
Upland Road from Flynn Road to Woodcreek Road	962	543	-	1,505	2	1,900	0.5	0.8
Upland Road from Woodcreek Road to Mission Oaks Blvd	590	543	-	1,133	2	1,900	0.3	0.6
Upland Road from Mission Oaks Blvd to Santa Rosa Road	349	543	-	892	2	1,900	0.2	0.5
Santa Rosa Road from Upland Road to Oak Canyon Road	768	181	-	949	2	1,900	0.4	0.5
Santa Rosa Road from Oak Canyon Road to Woodcreek Road	914	1,077	72	2,063	2	1,900	0.5	**1.1**
Santa Rosa Road from Woodcreek Road to Los Pueblos Drive	914	1,077	72	2,063	2	1,900	0.5	**1.1**
Santa Rosa Road from Los Pueblos Drive to Adolfo Road	1,365	1,886	139	3,390	2	1,900	0.7	**1.8**
Santa Rosa Road from Adolfo Road to US-101 Freeway	1,854	1,886	139	3,879	3	2,850	0.7	**1.4**
Pleasant Valley Road/Santa Rosa Road from US-101 Freeway to Pancho Road	1,092	1,705	139	2,937	2	1,900	0.6	**1.5**
Pleasant Valley Road from Pancho Road to Lewis Road	1,369	2,515	206	4,090	2	1,900	0.7	**2.2**
Pleasant Valley Road from Lewis Road to Las Posas Road	402	2,515	206	3,123	2	1,900	0.2	**1.6**
Las Posas Road from Pleasant Valley Road to Ventura Boulevard	968	2,515	206	3,689	2	1,900	0.5	**1.9**
Las Posas Road from Ventura Boulevard to Daily Drive	968	2,515	206	3,689	3	2,850	0.3	**1.3**
Flynn Road from Upland Road to Adolfo Road	295	181	-	476	2	1,900	0.2	0.3
Flynn Road from Adolfo Road to Mission Oaks Blvd/US-101 Freeway	527	181	-	708	2	1,900	0.3	0.4
Camarillo Springs Road from Ridge View Street/Adohr Lane to US-101 Freeway	164	809	67	1,040	2	1,900	0.1	0.5
Adohr Lane from Pancho Road to Ridge View Street	607	809	67	1,483	1	950	0.6	**1.6**

As shown in **Table 5**, evacuation demand in the east side of the City would strain the capacity of many roadway segments along the identified evacuation routes. With the addition of evacuation traffic on top of the existing background traffic, slightly more than half of the roadway segments analyzed would exceed a V/C of 1.0, indicating that the evacuation demand would exceed the roadway capacity of these segments, and therefore, some vehicles would require longer than the peak hour following an evacuation order to evacuate the City.

The assessment assumes evacuation traffic would be evenly distributed across each evacuation roadway according to the route assignment percentages shown in **Table 3**. However, emergency scenarios are often unpredictable and driver behavior can be disorderly. Additionally, evacuation events are not linear in nature (e.g., even distribution during the evacuation time period), and it is anticipated that evacuees would vacate at a rate that more closely resembles a bell curve from the time that the evacuation order is issued. These are conditions which would affect the total evacuation operations estimated in our assessment that are beyond the scope of this study. There is also general unpredictability in operational issues such as traffic signal synchronization issues between City intersections and/or Caltrans ramps, power issues that would trigger traffic signals to operate in "red flash", or congestion along the US-101 that could further impede traffic flows.

Recommendations

Given the topographic constraints that would preclude evacuation to the north, south, or east, the City has limited options to manage evacuation demand from the east side of the City during an emergency scenario. However, as the City continues to prepare for emergency events, special considerations can be taken to facilitate emergency evacuation. Some considerations are provided below:

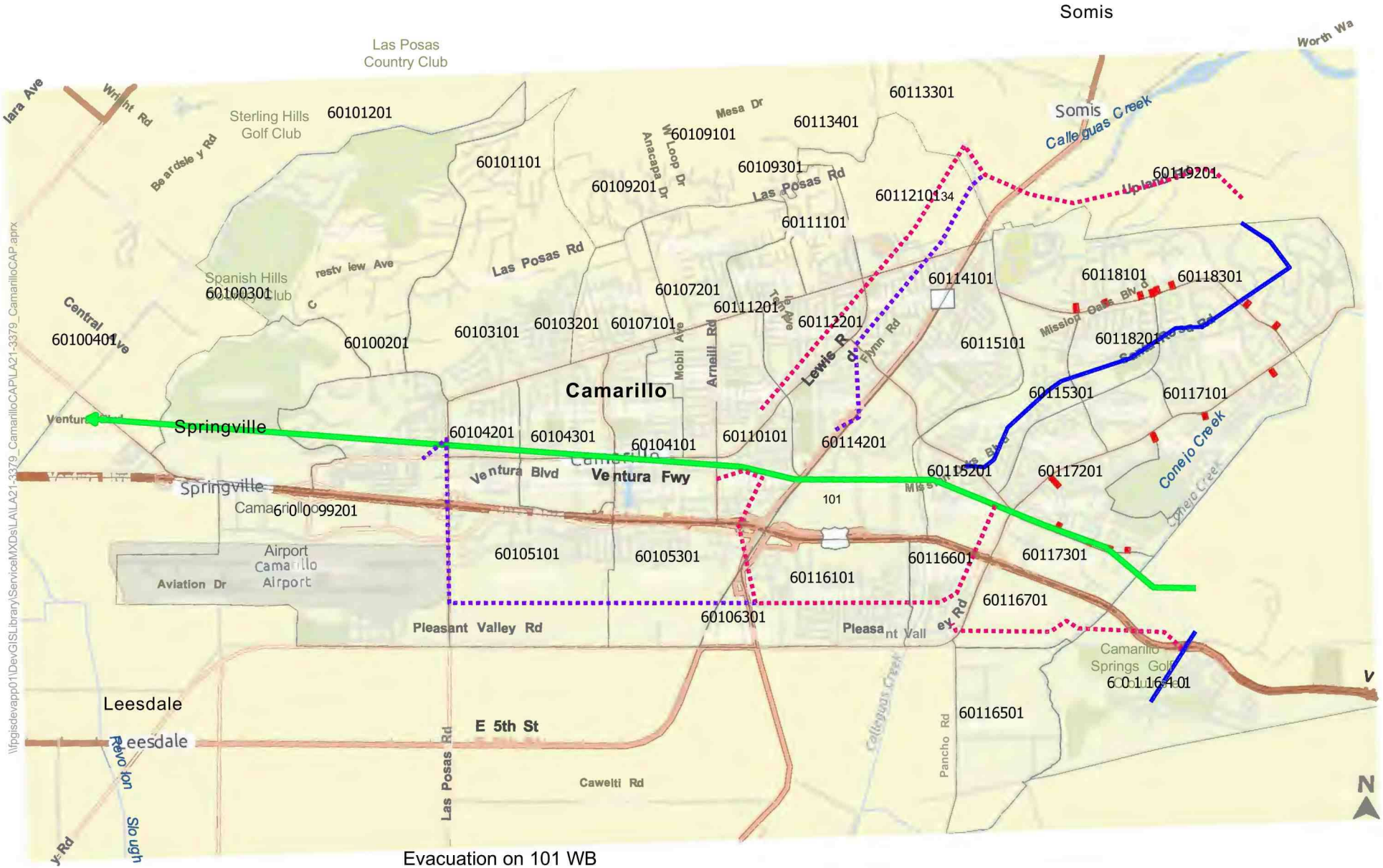
- Future roadway design, especially in areas that have less accessibility and on key evacuation routes, should consider evacuation capacity and consider design treatments such as painted medians (instead of raised medians) or other treatments that could assist in creating reversible lanes and facilitate additional capacity in an evacuation event scenario.
    - In evacuation events, painted medians could operate as additional egress lanes. For example, a four-lane roadway could operate with three egress lanes and one ingress lane (for emergency vehicles). The capacity of many roadway segments along the identified evacuation could effectively be doubled using this approach.
- Evacuation event signal timing should be periodically reviewed and updated to provide additional evacuation capacity.
    - In the assessment above, the roadway capacities are based on typical traffic signal operations and green time allocation in the City. Implementing a traffic signal timing

and coordination plan that prioritizes green time for the evacuation of vehicles to the US-101 freeway would provide additional roadway capacity and improve the V/C results reported in **Table 5**.

- Consider the needs of vulnerable populations in the city, such as senior housing facilities and schools, and others without access to a personal vehicle in City evacuation plans.

Attachment A

City of Camarillo Evacuation Route Map



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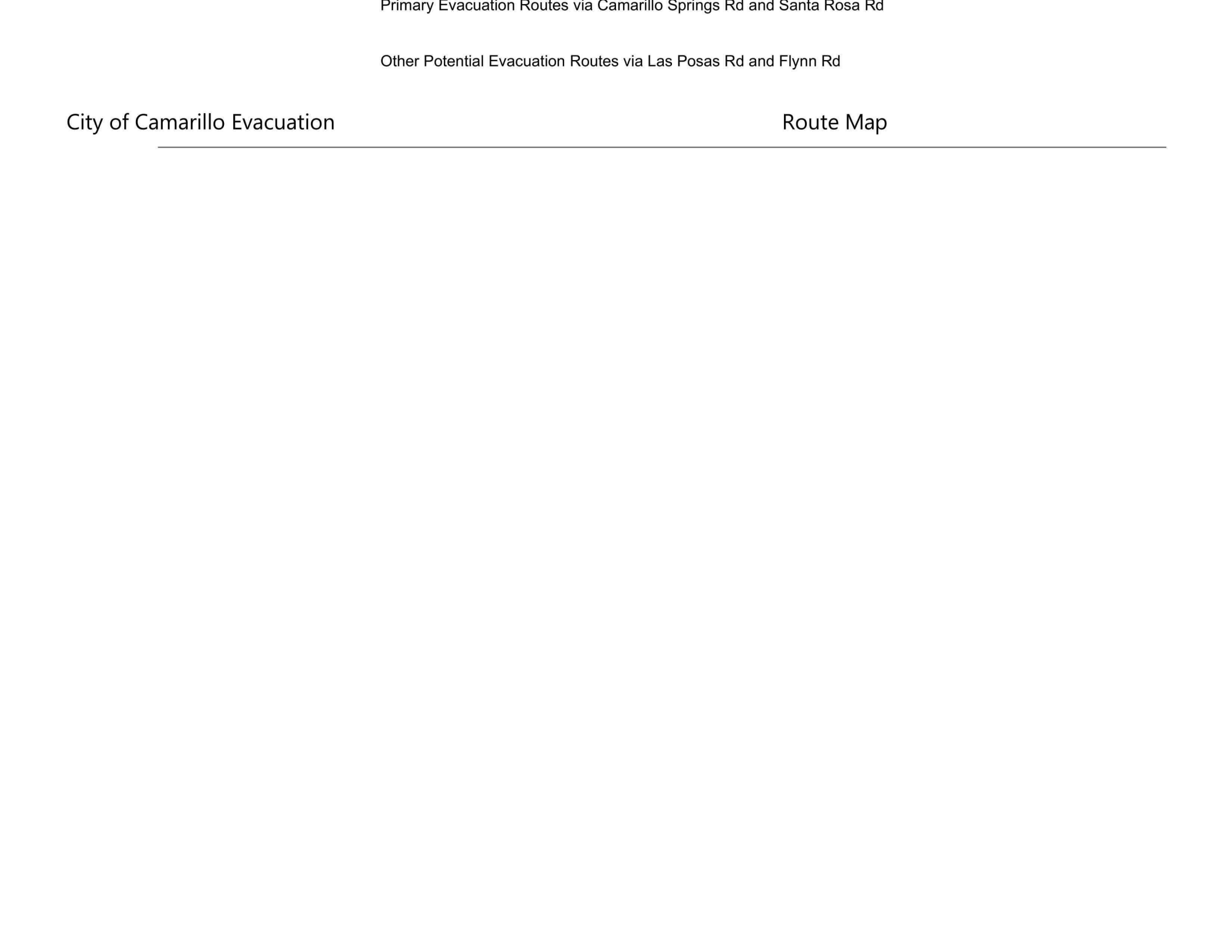
Evacuation on 101 WB

TAZs

Camarillo City Boundary

Secondary Evacuation Routes via Pleasant Valley Rd and Lewis Rd

Access Points



City of Camarillo Evacuation Route Map