



City of Porterville
Focused General Plan Update
Health and Safety Element Policy Review

January 2024



City of Porterville

Focused General Plan Update **Health and Safety Element Policy Review**

January 2024

Prepared For:

City of Porterville Community Development Department

291 North Main Street

Porterville, CA 93257

Prepared By:

PROVOST & PRITCHARD
CONSULTING GROUP

Table of Contents

Introduction and Purpose 1

 Legislative Context 1

 Climate Adaptation - SB 379 1

 Wildfire Risk - SB 1241 1

 Flooding - SB 5..... 1

 Military Readiness - SB 1458 and SB 1462 2

Climate Adaptation and Resiliency (SB 379)..... 2

 Background 2

 Legislative Context 2

 Scientific Context 2

 Mitigation vs. Adaptation 3

Climate Adaptation Planning 4

Vulnerability Assessment and Strategies..... 5

 Identified Hazards 6

 Hazard Profiles 7

 Asset Inventory 16

 Vulnerability and Potential Losses 18

 Capability Assessment 18

 Mitigation Strategy 20

 Summary and Recommendation 24

Wildfire Risk (SB 1241) 25

 Legislative Context 25

 Historical Fire Data 25

 Fire Hazard Severity Zones..... 25

 Summary and Recommendation 27

Flood Risk (SB 5) 27

 Legislative Context 27

 200-Year Flood Zones 28

 Flood Risk in Porterville..... 28

 Summary and Recommendations..... 29

Military Readiness (SB 1458 and SB 1462) 29
 Summary and Recommendations..... 30

List of Figures

Figure 1: Adaptation Planning Development 4
Figure 2: Porterville Dam Inundation 10
Figure 3: Porterville Fire Hazard Areas 13
Figure 4: Porterville Flood Zones 15
Figure 5: Fire Hazard Severity Zones 26
Figure 6: Very High Fire Hazard Severity Zone General Plan Land Use..... 27
Figure 7: Porterville Flood Zones 28
Figure 8: Military Facility Mapping 30

List of Tables

Table 1: Porterville Hazard Summary 8
Table 2: Porterville Assets..... 17
Table 3: LHMP Mitigation Strategies 20

Appendices

Appendix A: Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan Porterville Tables..... A-1
Appendix B: Adopted Health and Safety Element B-1

Introduction and Purpose

The purpose of this policy review paper is to provide an overview of the new general plan requirements for safety elements enacted since adoption of the Porterville 2030 General Plan in 2008, including climate adaptation (Senate Bill (SB) 379), wildfire risk (SB 1241), and flooding (SB 5). This paper also assesses the Health & Safety Element of the General Plan for compliance with the new requirements and identifies what updates are needed to the element going forward. Additionally, SB 1458 and SB 1462 have notification requirements for jurisdictions near military facilities; though these bills are not tied specifically to the Health & Safety Element, they are also addressed in this paper.

The City will be able to use this policy paper as a resource if any questions regarding compliance arise in the future.

Legislative Context

Brief summaries of relevant legislation are provided below. Additional information about the requirements of these bills, as well as a discussion of these issues in Porterville, is provided in subsequent sections.

Climate Adaptation - SB 379

SB 379 (Jackson), enacted October 8, 2015, requires cities and counties to address the impacts of climate change in their communities by including a vulnerability assessment of climate risks; a set of adaptation and resilience goals, policies, and objectives; and implementation measures in their general plans. The legislation permits jurisdictions to reference efforts completed for other plans, including local hazard mitigation plans, as part of their safety elements. The City of Porterville participated in the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan in 2023,¹ which will be included by reference in the updated Safety Element.

Wildfire Risk - SB 1241

SB 1241 (Kehoe), enacted September 13, 2012, requires jurisdictions to address fire risk in very high fire hazard severity zones and state responsibility areas. Jurisdictions must include historical data on wildfires; information regarding fire hazards in state responsibility areas and very high fire hazard severity zones; discuss structures, roads, utilities, and essential public facilities in these areas; and provide goals, policies, and implementation measures to protect the community from unreasonable wildfire risk.

Flooding - SB 5

SB 5 (Machado), enacted October 10, 2007, requires cities and counties in the Sacramento-San Joaquin Valley to address 200-year flooding in their general plans. To adequately address flooding, jurisdictions must discuss flooding data, provide goals and policies for the protection of lives and property that will reduce the risk of flood damage, and include related feasible implementation measures. Jurisdictions rely

¹ The Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan was completed in 2023 and adopted by Tulare County at that time. The City of Porterville anticipates formally adopting the Plan in early 2025.

on the Central Valley Flood Protection Board to provide mapping of 200-year flood zones. The Central Valley Flood Protection Board uses data from the 2002 Sacramento and San Joaquin River Basin Comprehensive Study, which does not indicate the presence of any 200-year flood zones in the Porterville Planning Area.

Military Readiness - SB 1458 and SB 1462

SB 1458 (Knight), enacted in September 2002, and SB 1462 (Kuehl), enacted in September 2004, require jurisdictions to consider the impact of new growth on military readiness activities carried out on military property within or adjacent to their planning areas. General plans are also required to identify existing and proposed military facilities. Amendments to a general plan must be referred to the US Armed Forces for review when proposed amendments are within or adjacent to military facilities or training routes. Implementation of these bills relies on mapping from the California Military Land Use Compatibility Analyst which was made available in 2014.

Climate Adaptation and Resiliency (SB 379)

Background

Legislative Context

In an effort to prepare for and mitigate climate change related impacts, new laws governing land use planning efforts have been enacted. SB 379 was passed in October of 2015 in reaction to increasing evidence that global climate change will have lasting impacts on the health and well-being of communities around the world.

SB 379 requires cities and counties to address climate change impacts either through their local hazard mitigation plan (LHMP) or general plan safety element. Jurisdictions must incorporate climate adaptation into their safety element once an LHMP is adopted on or after January 1, 2017, or, if they do not have an adopted LHMP, the safety element must be updated before January 1, 2022. These updates must include goals, policies, and objectives to address climate resilience in response to likely climate change vulnerabilities. These goals, policies, objectives, and implementation measures are based on a required vulnerability assessment. The vulnerability assessment will identify the risks that climate change poses to the jurisdiction by analyzing projected climactic shifts and the vital services, functions, and populations put at risk by those changes.

Scientific Context

The earth's climate has been warming for the past century. Scientific analysis of earth's historical climate shows that the climate system varies naturally over a wide range of timescales. In general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes. However, recent climate changes cannot be explained by natural causes alone.² It is understood that this warming trend is related

² (United States Environmental Protection Agency, 2017)

to anthropogenic³ releases of certain gases, known as greenhouse gases (GHG), into the atmosphere. GHGs absorb infrared energy that would otherwise escape from the Earth. As the infrared energy is absorbed, the air surrounding the Earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past two decades.

Recent scientific analysis completed by the Intergovernmental Panel on Climate Change (IPCC) confirms that human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history.⁴ This has led to atmospheric concentrations of carbon dioxide, methane, and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.⁴

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.⁵ Some of these impacts include changes in extreme weather, precipitation, and melting snow which affect water resources, impact crop yields, and change wildlife geographic ranges and migratory patterns.⁶

Even after implementing measures to minimize how much the climate will change, communities around the world will experience new challenges due to the shifting climate. These impacts will vary from place to place, as will their intensity. In order to prepare for these changes, communities must determine what impacts they are most likely to face.

Mitigation vs. Adaptation

In the wake of new legislation pertaining to climate adaptation, it is necessary to distinguish the types of planning efforts undertaken to address climate change. Local planning efforts address climate change in two separate yet related ways. The first is through the reduction of greenhouse gas (GHG) emissions, also known as mitigation. The second is through adaptation planning, which is the focus of the discussion relative to SB 379 within this policy paper. While these efforts are often pursued in parallel, there is a distinct difference between mitigation and adaptation. The purpose of mitigation is to slow the overall effects and consequences of climate change by reducing the amount of GHGs released into the atmosphere. Adaptation planning seeks to address the impacts of climate change on the vital structures, functions, and populations within a specific jurisdiction. Adaptation planning assesses climate change risks and provides coping strategies to help communities adapt to the changing environment regardless of how effectively GHG emissions may be curbed.

³ Resulting from the influence of human beings.

⁴ (Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014)

⁵ (Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014)

⁶ (Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014)

These parallel planning efforts are also handled through two different regulatory landscapes. Mitigation is often dealt with through environmental compliance documents regulated by the California Environmental Quality Act (CEQA), while adaptation planning is addressed through long range planning documents such as local hazard mitigation plans (LHMPs), general plans, or climate action plans.

Climate Adaptation Planning

The primary resource outlining best practices for climate adaptation planning is the California Adaptation Planning Guide (APG). The APG was developed by the California Emergency Management Agency (CEMA) and the California Natural Resources Agency (CNRA) in order to help guide climate adaptation planning at the local level. The guide is a four-part series which introduces the basis for climate adaptation planning, provides a step-by-step process for conducting local vulnerability assessments, and outlines strategies for creating local adaptation plans. The APG breaks down climate adaptation planning into nine distinct tasks categorized into two phases, as shown in **Figure 1**.

Figure 1: Adaptation Planning Development



(California Emergency Management Agency, California Natural Resources Agency, 2012)

Phase one of this process is conducting a vulnerability assessment. The vulnerability assessment identifies:

1. **Exposure** the community will experience due to the effects of climate change.
2. **Sensitivity** of key community structures, functions, and populations that are potentially susceptible to each exposure.
3. **Potential Impacts** likely to occur to the structures, functions, and populations within a community due to climate change exposures.
4. **Adaptive Capacity** of the community, or its ability to cope with and address projected impacts.
5. **Risk and Onset**, including necessary adjustments to address the likely occurrence and timing of the projected impacts.

These first five steps were completed as part of the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP), which will be incorporated into the Health & Safety Element by reference. The LHMP followed the recommended risk assessment methodology from the Federal Emergency Management Agency (FEMA), which includes the same considerations, although covered through four steps: identify hazards, profile hazard events, inventory assets, and estimate losses.

Phase two of the planning process is known as adaptation strategy development. This process includes steps six through nine:

6. **Prioritize Adaptive Needs** based on the findings in the vulnerability assessment.
7. **Identify Strategies** to address the highest priority adaptation needs.
8. **Evaluate and Prioritize** those strategies based on the projected onset of the impacts, cost, co-benefits, and feasibility.
9. **Phase and Implement** adaptation strategies and develop a monitoring system to assess effectiveness.

Climate adaptation strategies were also identified as part of the LHMP. These strategies, included in the LHMP and the updated Health & Safety Element by reference, were prioritized according to the potential benefits, hazard(s) addressed, timeline of implementation, and whether or not resources were currently available to implement the strategy. Additional policies beyond those included in the LHMP may be identified for the Health & Safety Element during the policy drafting process, but climate adaptation in Porterville is primarily addressed through the LHMP. The LHMP includes both the vulnerability assessment and adaptation strategies identified as vital parts of hazard mitigation planning. The following sections discuss these pieces as they were included in the LHMP, which does not completely align with the sections identified by CEMA and CNRA in the APG. However, all required considerations were addressed and are included in the following sections.

Vulnerability Assessment and Strategies

A vulnerability assessment was completed as part of the 2023 Tulare County Multi-Jurisdictional LHMP. This policy paper summarizes information included in the LHMP that is relevant to Porterville, but additional details can be found in the LHMP, which will be incorporated into the General Plan by reference. The LHMP can be found [here](#) on the Tulare County Resource Management Agency website.

Identified Hazards

A hazard identification assessment was completed as part of the Tulare County LHMP. It identified potential hazards that may impact Tulare County and its jurisdictions by assessing data from the following:

- California Office of Emergency Services,
- Stakeholders,
- National Climate Data Center NCDC Storm Events Database,
- FEMA Disaster Declaration Database,
- 2018 Tulare County MJ-LHMP, and
- 2020 State California Hazard Mitigation Plan.

Included Hazards

The Tulare County LHMP began with a list of hazards from the 2020 California State Hazard Mitigation Plan and the 2018 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan. These hazards include:

- Civil disturbance;
- Climate change;
- Dam failure;
- Drought and water shortage;
- Earthquake;
- Energy emergency;
- Flooding;
- Fog;
- Hazardous materials;
- Invasive species including aquatic, pest, and plant species;
- Landslides, mudslides, and debris;
- Levee failure;
- Pandemic;
- Severe winter storms;
- Severe weather and extreme heat;
- Terrorism;
- Tree mortality; and
- Wildfire.

These are hazards addressed on a County-wide scale. The LHMP also includes an Annex for the City of Porterville which discusses hazards at the city scale. Not all hazards are addressed at this more localized level, and only the hazards discussed at the City scale are included in the **Hazard Profiles** below.

Excluded Hazards

Several potential hazards were able to be excluded from the LHMP due to the limited likelihood of any impacts from such hazards in the County. These include:

- **Tsunami, Coastal Flooding, Erosion, and Sea Level Rise.** These hazards were excluded because Tulare County is not located on or near the coast.

- **Avalanches.** This hazard was excluded because Tulare County does not experience enough snowfall in populated areas to warrant it as a hazard.
- **Oil Spills, Well Stimulation, and Hydraulic Fracking.** These hazards were excluded because there are few pipelines or oil wells in the County that could contribute to an oil spill and well stimulation and hydraulic fracking are not occurring in the County.
- **Airplane Crashes.** This hazard was excluded because there have been few past occurrences in the County.

In addition to these hazards, some potential hazards were not analyzed in the LHMP because they are addressed in other planning documents or procedures in Tulare County. These hazards include air pollution, energy shortage and energy resilience, and cyber threats. Finally, additional hazards that are not impacted by climate change and are not relevant to the requirements of SB 379, including hazardous materials and pandemics, have also been excluded.

Hazard Profiles

The City of Porterville Annex prepared as part of the LHMP identified several hazards with the potential to impact the City. The frequency, extent, magnitude, and significance of each identified hazard was assessed, and the information is summarized in **Table 1** below. Frequency refers to the likelihood of the hazard occurring in a given year. Extent relates to the amount of the planning area that would likely be impacted by the hazard. Magnitude relates to the level of impact on the planning area. Significance is a subjective measure of how impactful the hazard could be on Porterville based on the combination of anticipated frequency, extent, and magnitude. Location specifies the anticipated area of impact.

Table 1: Porterville Hazard Summary

City of Porterville Hazard Summary					
Hazard	Frequency ¹	Extent ²	Magnitude ³	Significance	Location
<i>Climate Change</i>	Highly	Extensive	Catastrophic	High	Entire City
<i>Dam Failure</i>	Unlikely	Extensive	Catastrophic	High	Figure 2
<i>Drought</i>	Likely	Extensive	Catastrophic	High	Entire City
<i>Earthquake: Shaking</i>	Occasional	Extensive	Limited	Low	Entire City
<i>Energy Emergency⁴</i>	Occasional	Extensive	Critical	Medium	Entire City
<i>Extreme Heat</i>	Highly	Extensive	Critical	High	Entire City
<i>Fire⁵</i>	Unlikely	Limited	Limited	Low	Entire City
<i>Floods</i>	Highly	Extensive	Critical	High	Figure 4
<i>Fog</i>	Likely	Extensive	Limited	Low	Entire City
<i>Hazardous Materials</i>	Likely	Limited	Limited	Low	Entire City
<i>Landslide, Mudslide, and Debris</i>	Unlikely	Limited	Negligible	Low	Entire City
<i>Pandemic</i>	Likely	Extensive	Critical	Medium	Entire City
<i>Severe Storms and Wind</i>	Highly Likely	Significant	Limited	Medium	Entire City
<i>Wildfire⁵</i>	Unlikely	Limited	Limited	Low	Figure 5

1. Frequency.
 Highly Likely: Near 100% probability in next year
 Likely: Between 10 and 100% probability in next year or at least one chance in ten years
 Occasional: Between 1 and 10% probability in next year or at least one chance in 100 years
 Unlikely: Less than 1% probability in next 100 years
2. Extent.
 Limited: Less than 10% of planning area
 Significant: 10-50% of planning area
 Extensive: 50-100% of planning area
3. Magnitude.
 Catastrophic: More than 50% of area affected
 Critical: 25-50% of area affected
 Limited: 10-25% of area affected
 Negligible: Less than 10% of area affected
4. Energy emergency is listed in City of Porterville Hazard Summary table in LHMP but the LHMP does not discuss the hazard more deeply since it is considered in other planning efforts for the region.
5. Fire and wildfire are both discussed in the **Fire and Wildfire** section below.

Hazard profiles for each of the hazards identified in **Table 1**, except Energy Emergency as noted above, were prepared for the LHMP. Each profile provides a hazard description, discusses the potential impact extent, and considers past occurrences in Tulare County. These profiles can be read in full in the Risk Assessment section of the LHMP but are briefly summarized for Porterville below. The hazard profiles informed the strategies identified in the mitigation strategy section of the LHMP and listed in the **Mitigation Strategy** section below.

Climate Change

Climate change refers to long-term changes in weather patterns including temperature, rainfall, snow, and ocean and atmospheric conditions. Scientific analysis of earth’s historical climate shows that the climate

system varies naturally over a wide range of timescales. In general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes but more recent changes in climate can also be attributed to human activity, particularly greenhouse gas (GHG) emissions. GHGs absorb infrared energy that would otherwise escape from the Earth. As the infrared energy is absorbed, the air surrounding the Earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past two decades.

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Some of these impacts include changes in extreme weather, precipitation, and melting snow which affect water resources, impact crop yields, and change wildlife geographic ranges and migratory patterns.⁷

Location

Climate change has far-reaching, global impacts. As such, climate change is expected to affect the Porterville Planning Area and the entire County of Tulare.

Impacts

Impacts from climate change are expected to be extensive, especially considering its ability to exacerbate other hazards such as drought, extreme heat, and flooding, among other concerns. Effects to infrastructure and public health are anticipated due to climate change. More heat-related illness, increased demands on imported and well water, and long-lasting droughts are all expected impacts of climate change in Porterville.

Climate change costs are difficult to specify due to their likelihood to accrue over long time frames. No specific cost estimate is provided in the LHMP but increased costs to address temperature rise and loss of precipitation are expected to impact individuals, families, businesses, and government-owned facilities.

Dam Failure

High hazard dams are those where their failure is likely to result in loss of human life and economic damage. Dam failure may be caused by several events, including overtopping, earthquake, internal erosion, improper design, improper maintenance, negligent operation, and/or failure of upstream dams. Overtopping is the most common cause of dam failure in the United States.

Success Dam, designated as the Richard L. Schafer Dam in 2019, is located within two miles of the eastern boundary of Porterville. Construction of Success Dam was completed in 1961 and has a storage capacity of 82,300 acre-feet.⁸ The dam is owned and operated by the United States Army Corps of Engineers.

⁷ (Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014)

⁸ (California Department of Water Resources n.d.)

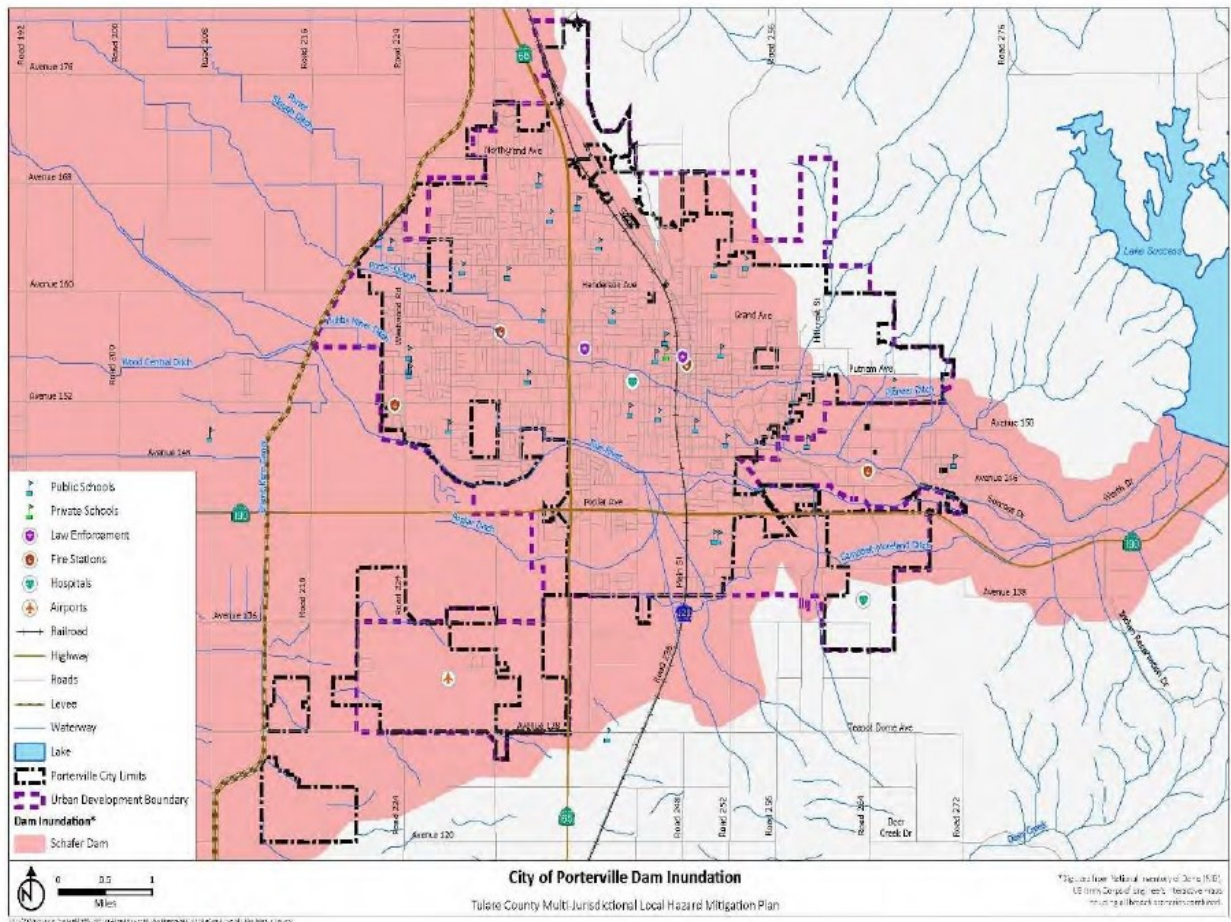
Location

Should Success Dam fail, a significant portion of the Porterville Planning Area would be impacted. A map of the dam inundation area was included in the LHMP and is shown in **Figure 2** below.

Impacts

If Success Dam were to fail, most of the western portion of the City would be inundated by more than 20 feet of water. Warning times for Porterville in the event of a failure would be less than 10 minutes. A rapid failure of Success Dam would result in catastrophic loss of life, injury, and property loss. The potential injury and death impacts from a short notice dam failure could be in the 10,000s with total losses within Porterville potentially exceeding \$1,000,000,000.

Figure 2: Porterville Dam Inundation



Map from Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan.

Drought

Droughts are unique emergency events due to their gradual nature. They occur slowly over multi-year periods, and it can be difficult to determine when droughts begin and end.

Location

Droughts are a regional phenomenon and will impact the Porterville Planning Area and the entire County of Tulare.

Impact

Drought has a variety of impacts including reduced crop productivity, increased fire hazard, reduced water levels, increased livestock and wildlife mortality, and water rationing, among other impacts. These impacts can also create secondary problems for communities, such as increased prices, unemployment, and/or reduced tax revenues.

Potential costs associated with drought are difficult to quantify due to their dependence on drought duration and severity. Water costs would be expected to increase during a drought while prolonged drought may result in reduced property values and tax revenues.

Earthquake

Earthquakes may cause structural damage, injury, and loss of life. Additionally, earthquakes may cause damage to infrastructure networks including water, power, gas, communication, and transportation. The degree of damage and the potential for impact depends on factors such as the magnitude, focal depth, and duration of the earthquake and/or the distance from the causative fault, among other factors.

Although California is seismically active due to its location on the boundary between two tectonic plates, the County of Tulare has limited potential for earthquake shaking. A pre-Quaternary fault, which has not historically been active, runs through the City of Porterville. More recently active (within the last 11,700 years) faults are located at Kern Canyon and near Bakersfield. Despite there being several faults within and near the County, the risks associated with earthquakes are considered low, a determination which is supported by seismic hazard mapping completed for the LHMP.

Location

While potential for significant impacts from earthquakes is low, the likely area of impact would be the Porterville Planning Area and the entire County.

Impact

Potential impacts within the County include damage to infrastructure, residences, and commercial buildings, as well as loss of life and injury.

It is difficult to anticipate the potential costs of an earthquake due to the extreme variation in damages based on the intensity of the earthquake. A weak earthquake, which is the more likely occurrence in Porterville, could result in little to no damage and a very low cost. However, an extreme earthquake, which although not likely is possible in Porterville, could result in loss of life and injury and millions of dollars in property damage.

Extreme Heat

Extreme heat events occur when temperatures remain ten degrees or more above the average high temperature for the region for at least two days and can last for several weeks. Extreme heat creates dangerous conditions by taxing the human body and can cause heat-related illnesses that can also lead to

death. Extreme heat may also compound other hazards, such as drought, wildfire, and tree and crop mortality.

Location

Extreme heat events are typically regional in nature and would impact the Porterville Planning Area and all of Tulare County. Although the Porterville Planning Area and the entire County are susceptible to extreme heat, lower elevations are more likely to experience these events.

Impact

Extreme heat events present serious health risks, especially for vulnerable populations such as older adults, children, and those with related health concerns. Increased temperatures, especially for extended periods of time, can increase heat-related mortality, cardiovascular mortality, respiratory mortality, and heart attacks. An individual's ability to thermo-regulate may also be stressed during an extreme heat event, leading to heat stress which can be fatal. Hospital admissions and emergency room visits increase during extreme heat events. Increased electricity usage and additional health care costs are anticipated during extreme heat events. While power costs affect commercial and residential properties, individuals and families are burdened by health care costs.

Fire and Wildfire

California is prone to wildfires due to its climate, terrain, and vegetation. Developed areas may also experience urban fire hazards such as a fire started by an electrical malfunction or similar accident. Fire conditions are influenced by temperatures, vegetation, humidity, and wind.

Fire risk in Tulare County depends on location. The middle and upper elevations are more susceptible to wildfire due to increased vegetation, limited roadways and access, and the likelihood of ignition events. Porterville has two fire stations, located on West Cleveland Avenue and North Newcomb Street. Additional fire response services are stationed at the Porterville Public Safety Facility on South Jaye Street. Tulare County Fire Department also operates fire stations outside the City limits and assists with fire response in Porterville through mutual and automatic aid agreements. A United States Forest Service Forest Supervisor's Office is located in Porterville and assists in monitoring wildfire conditions in the nearby Sequoia National Forest. Fire hazard areas were mapped in the LHMP, included as **Figure 3** below. Additional discussion of very high fire hazard severity zones can be found in the section below.

Location

Areas of impact from wildfires are typically higher in the middle and upper elevations and at the urban/wildland interface in high and very high fire severity zones, as shown in **Figure 3** below. These areas are more focused within the eastern portions of the planning area.

Non-wildfire risks are typically focused in developed areas and could have impacts throughout the Porterville Planning Area.

Impact

Wildfires can result in loss of life, injury, and structural damage and may also cause short- and long-term disruptions within the County to important networks such as transportation or utility infrastructure. Structures located near the urban/wildland interface are more susceptible to wildland fire. Impacts on low-

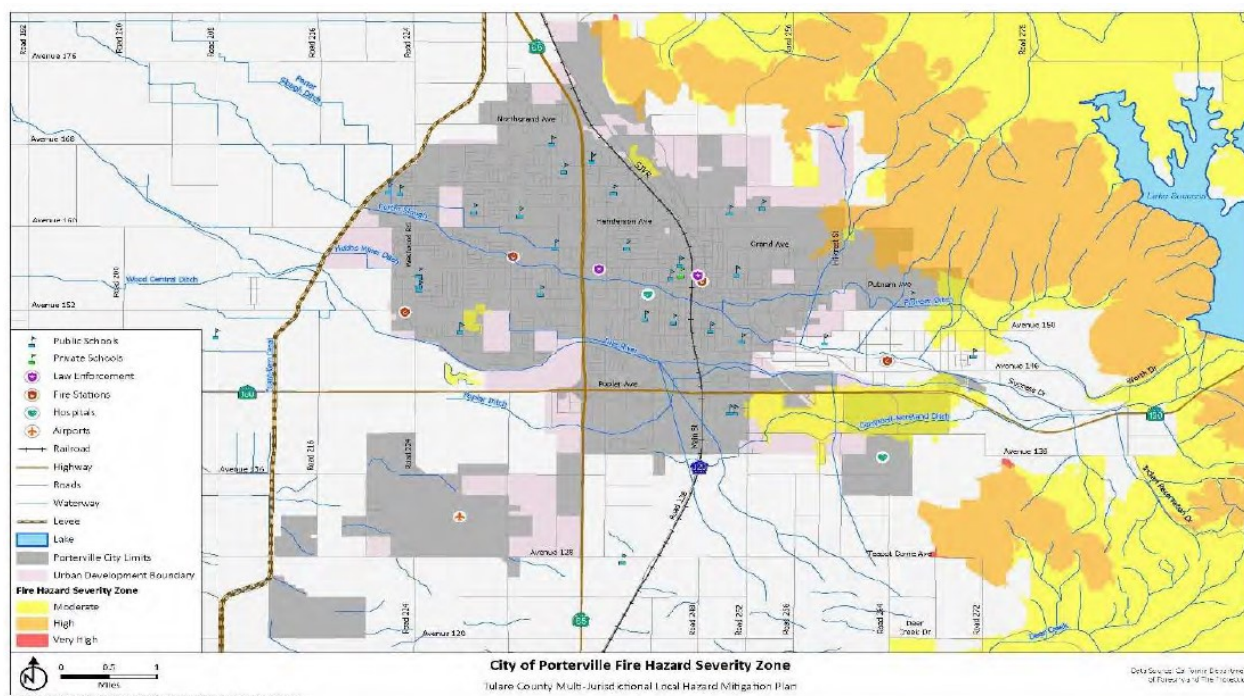
density communities such as Porterville would be limited. County residents may also be impacted by indirect effects from wildfires, even those burning significant distances away, as smoke travels across the state and reduces air quality.

As climate changes, temperatures increase, and precipitation decreases. As such, wildfires are expected to increase throughout California. A slight increase is anticipated for Tulare County, although the Cal-Adapt wildfire model does not consider landscape or fuel sources which would also impact the frequency and intensity of fires.

Costs related to wildfire hazards in Porterville would primarily be associated with emergency response efforts and damage to private property and would be expected to be less than \$10,000,000.

There may be additional fire hazards in Porterville that are not related to wildfire risks. However, structural fires such as these would not be associated with climate change impacts or the required SB 379 analysis. More information on fire response can be found in the Environmental Justice policy paper prepared for this focused General Plan update effort.

Figure 3: Porterville Fire Hazard Areas



Map from Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan.

Floods

Damaging flooding in Tulare County primarily occurs in developed areas with flood flows generally flowing west along defined stream channels, drainages, and watersheds. Most historical floods in Tulare County occurred along the Kings, Kaweah, and Tule Rivers. The most recent severe flooding events occurred in 1966 and 1969 along these rivers. Flooding along the Tule River also occurred in 2023, from January to March. Unusually heavy precipitation, increased stream flows, and Lake Success release requirements resulted in the overtopping of much of Tule River, causing erosion damage to the banks and impacting

properties along the river, reaching buildings and residences. As a temporary measure to protect homes and property, bank stabilization efforts began shortly after the flooding subsided. More permanent repairs were planned for the riverbank once the snow melted, water releases from Lake Success stopped, and river levels returned to normal. Tule River flooding has not been a historic concern for Porterville, but the recent flooding has caused some concern considering the potential for changes in the climate to impact the frequency of such events.

Location

Flood zones are present throughout the Porterville Planning Area but are generally limited to areas along existing drainage channels as shown in **Figure 4**, below. The figure shows 100 and 500-year flood zones, with 500-year flood zones referred to as FEMA Effective. Flood zones are generally located around the Tule River. Developed portions of the western side of the City are also within 500-year flood zones downstream of the Tule River. The Central Valley Flood Protection Board is responsible for mapping 200-year flood zones and have not indicated that any such flood zones are present in the Porterville Planning Area.

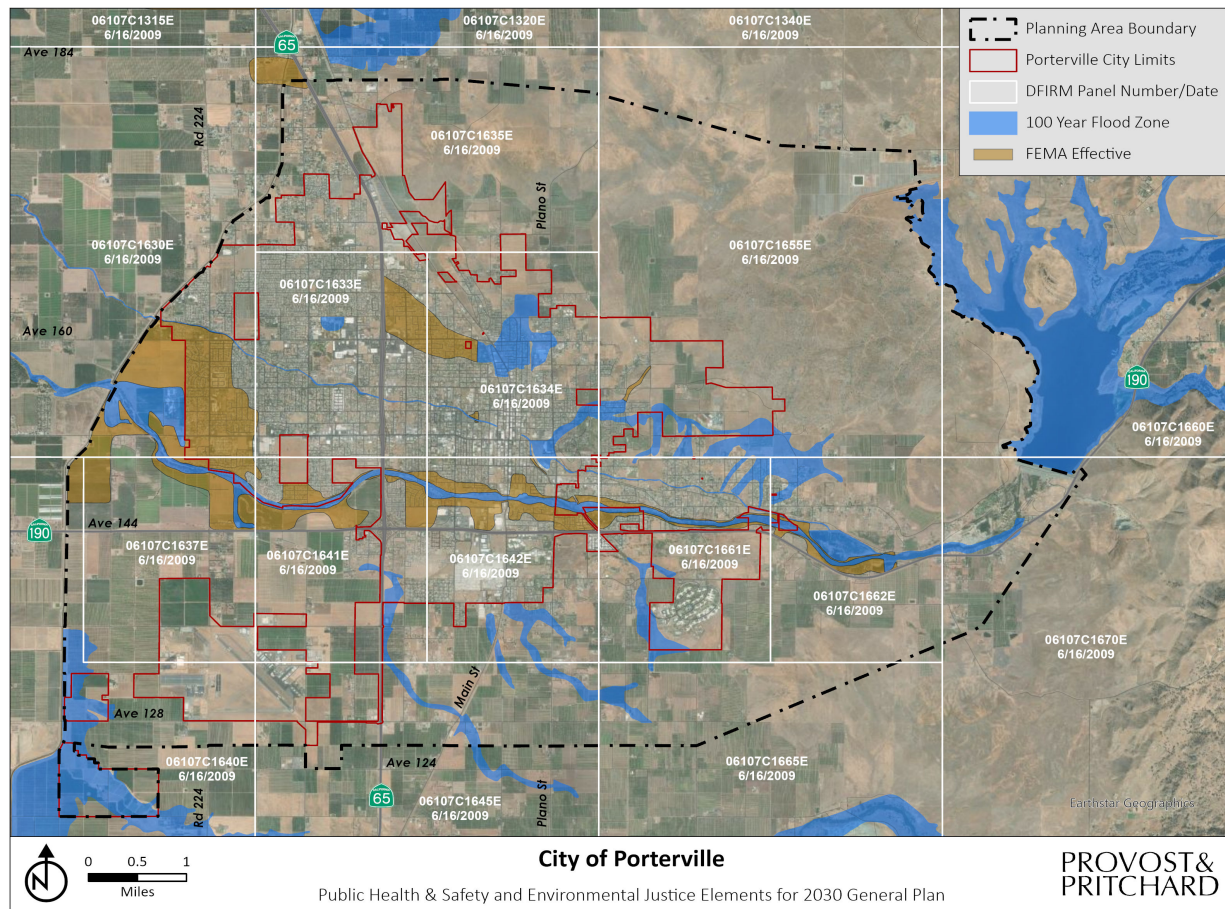
Flood concerns in Porterville related to a failure of Success Dam are discussed in the **Dam Failure** section above.

Impact

Floods can cause substantial damage to structures, landscapes, and utilities. They can also present life safety issues, having the potential to sweep people downstream, cause electrical hazards, and create areas of deep standing water, among other concerns. There can also be secondary concerns in the aftermath of a flood, including floodwater infiltration into sewer systems, stagnant pools of water creating breeding grounds for mosquitoes, and the potential for mold growth in water-damaged areas.

An existing system of dams, levees, and other flood protection infrastructure is already in place in the County. Additionally, there are planned infrastructure pieces to further protect development in Tulare County from damaging floods. Expected flood depths vary throughout the County and depend on the floodplain. Floods can cause substantial property damage and cause injury or death.

Figure 4: Porterville Flood Zones



Fog

Fog results from cooling air no longer being able to retain its water vapor. Various atmospheric situations can create fog, named either radiation or advection fog depending on how it formed. The Central Valley of California experiences a unique form of radiation fog called tule fog. It typically forms in the Valley on winter nights as the ground cools. Tule fog can last for days and cause disruptions to transportation as visibility can be extremely limited by the fog.

Location

Tulare County is predisposed to experiencing tule fog during the late fall to early spring. Typically, a large area of the valley floor is affected by these fogs, including a majority of the Porterville Planning Area.

Impact

Fog can contribute to transportation accidents, resulting in injury or death, due to limited vision while the fog is present. The occurrences of this dense fog have declined as temperatures rise due to climate change.

Landslide, Mudslide, and Debris

Landslides involve the downward and outward movement of rock, soil, and other debris and may be caused by both natural and human-induced environmental changes. Slope, material, structure, water content, and

vegetation, among others, may all impact the susceptibility of an area to landslides. Often, landslides are associated with other natural hazard events that impact soil stability such as floods, wildfires, or earthquakes. The likelihood of landslides in Tulare County is relatively low, with areas such as the foothills and mountains having a higher risk of landslides compared to the relatively flat valley.

Location

While landslides are considered an unlikely hazard due to the limited potential for landslides in populated areas, the area of impact would be within the eastern portion of the Porterville Planning Area within the foothills area.

Impact

Landslide impacts can vary greatly depending on the location in which they occur. In unpopulated areas, they may fill in waterways, causing flooding and/or conveyance issues. In populated areas, property damage, injury, and death may occur due to landslides.

Severe Storms and High Winds

Storms in Tulare County are generally defined by heavy rain, but may also include strong wind, lightning, and/or hail. Heavy storms may cause flooding and localized drainage issues. High winds, classified as sustained periods of wind over 40 miles per hour, may also down trees or power lines. Tornadoes are possible but rare within Tulare County.

Location

Heavy rains in the County vary by season and location but can occur anywhere in the Porterville Planning Area or Tulare County. Additionally, hail, lightning, and other aspects of storms can occur throughout Tulare County. High wind and tornadoes are also possible throughout the Porterville Planning Area or County.

Impact

Storms have occurred historically in Tulare County and will likely continue to occur annually, particularly during the winter months. Damage associated with storm events has been limited and depends on the severity of the storm. Flooding and property damage are the most likely impacts of storms and are anticipated to be minimal. While tornadoes and high winds are possible throughout the Porterville Planning Area and County, they have not occurred historically and are not likely. High straight-line winds⁹ do occur more regularly in Tulare County, though they rarely reach unsafe speeds.

Asset Inventory

The Porterville Annex of the LHMP outlines the various assets that are vulnerable to the hazards discussed in the **Hazard Profiles** section above. Generally, these assets include the infrastructure, property, and population of Porterville. The LHMP lists assets of medium or high significance and the hazards they may be vulnerable to. This assessment can be found in full in section E.3 of the LHMP but is summarized below.

⁹ Referring to high-speed winds that do not begin rotating, such as during a tornado.

The risk assessment first identifies various assets to the community (found in table E-2 of the LHMP), including public facilities, service provision infrastructure, parks, health facilities, wells, bridges, the Heritage Center, and other property that has community-wide benefit. It is noted in the LHMP that while values are provided for these assets, the value lost in the event of a hazard is difficult to estimate, primarily because damage is dependent on the severity of the hazard.

Certain facilities identified on the list of assets are also considered critical facilities for the community. These facilities can be found in table E-3 of the LHMP. Facilities such as fire stations, police stations, government offices, service provision infrastructure, health facilities, bridges, wells, and transportation infrastructure. Asset types and values are summarized in **Table 2** below and are categorized according to community assets and critical facilities during hazard events.

Table 2: Porterville Assets

Asset	Community Asset	Critical Facility
Fire Stations	X	X
Police Department	X	X
Public Safety Facility	X	X
Parks and Open Space	X	X ¹
City Hall	X	X
Contractor Equipment	X	
Vehicles	X	
Vacant Commercial Building	X	X
Wastewater Treatment Facilities	X	X
Hospitals and Medical Centers	X	X
Water Conservation Plant	X	X
Residences	X	
Sewer Lift Stations	X	X
Bridges	X	X
Porterville Municipal Airport	X	X
Transit Center	X	X
Heritage Center	X	
Electrical Substation	X	X
Animal Shelter	X	
The Gas Company Substation	X	X
Water Tanks	X	X ¹
Water Pump Stations	X	
Wells	X	X
Temporary Porterville Library		X

¹ Only some instances of these facilities in Porterville are considered critical facilities.

The asset inventory also estimates a population of 62,345 in Porterville as of 2022, based on data from the State of California Department of Finance. This translates to approximately 18,354 residential units with a median value of \$208,400 as of 2020. Employment sectors in Porterville are primarily related to retail trade, agriculture, forestry, fishing and hunting, and health care and social assistance. The population and employment opportunities are discussed in more detail in the risk assessment of the Porterville Annex of the LHMP.

Vulnerability and Potential Losses

The LHMP includes a summary of vulnerabilities and potential losses for each hazard type in table E-4. This summary was used to develop the hazard profiles in this report and are not repeated in this section of the policy paper. Generally, the summary provides an assessment of the potential impact and cost of a hazard event for the hazard types relevant to Porterville. Based on the risk assessment, the hazards most likely to affect Porterville are climate change, dam inundation, drought, extreme heat, and flooding. These hazards may impact the economy of the City, especially given their potential to impact the agricultural industry that drives much of the City's economy. The updated General Plan will include policies to address the hazards most likely to affect Porterville to help guide future decision-making relative to growth and development in a way that minimizes the risk from hazards.

Capability Assessment

The capability assessment identifies the City's potential to successfully implement adaptation and mitigation activities. The assessment considered City planning and regulatory capabilities, administrative and technical resources, fiscal resources, education and outreach capabilities, and previous and ongoing mitigation activities. The City of Porterville's existing implementation resources are discussed in more detail in tables E-5 through E-8 in the LHMP but are also summarized below. These tables are also included as **Appendix A**.

Regulatory Capabilities

The City's planning and regulatory capabilities include existing ordinances, policies, and laws that relate to growth and development in Porterville. These regulations include:

- **Porterville 2030 General Plan.** The City's General Plan forms its policy base for future growth and development. The General Plan includes policies related to hazard mitigation in the Public Health & Safety Element, and the updated element will include the LHMP by reference. General Plan policies are used to evaluate proposed development and apply to plans, policies, code provisions, and other regulations proposed in Porterville.
- **California Building Code Enforcement.** The Building Code is the basis of design and construction for buildings in California.
- **Capital Improvement Program.** The Capital Improvement Program is a planning tool for the acquisition of municipal facilities and ensures that capabilities keep up with future demand.
- **Tulare County Municipal Service Review.** The Municipal Service Review is a comprehensive analysis of service provision in the County and makes recommendations for expansion of services based on existing and planned development, service capabilities, and other factors.
- **Porterville Development Ordinance.** The Code establishes minimum development requirements for the safeguarding of health, safety, and general welfare.

- **Emergency Operations Plan.** This plan describes Porterville’s actions in response to various emergencies, as well as the role of the Emergency Operation Center.
- **Stormwater Quality Management Program and Storm Water Management Plan.** This plan describes steps to minimize stormwater pollution.

Administrative and Technical Capabilities

Administrative and technical capabilities refer to the community’s available staff and their skills and tools for mitigation and adaptation planning and implementation. This includes both City of Porterville staff and private sector staff that could be utilized for planning and implementation activities. This includes engineers, planners, emergency managers, GIS analysts, building inspectors, grant writers, and floodplain managers. This staff takes on the following responsibilities for the City:

- **Public Works Department.** Responsible for maintaining and operating local equipment and facilities to provide clean water, reliable sewer service, street maintenance, storm drainage, street cleaning, streetlights, and traffic signals.
- **Procurement Department.** Provides municipal financial services and administers licensing measures.
- **Code Enforcement, Building Inspection, and Planning Division.** Provides building inspection and code certifications.
- **Floodplain Administrator.** Reviews development proposals to ensure they do not increase flood risk and manages flood risk reduction projects.
- **Emergency Manager.** Maintains the Emergency Operations Plan and coordinates local response and relief activities from the Emergency Operation Center in the event of an emergency.

Fiscal Capabilities

Fiscal capabilities include general funds, property sales, bonds, development impact fees, and other fees imposed by the City. Porterville may also receive grant funding to further augment fiscal capabilities. The City primarily relies on the following funding sources for hazard mitigation efforts:

- **General Fund.** General funds are used for ongoing program operations for the City and may also be used to fund specific mitigation activity projects.
- **General Obligation Bonds.** GO Bonds are used for construction and acquisition of improvements to properties that are generally accessible, such as libraries, hospitals, parks, and educational facilities.
- **Lease Revenue Bonds Funding.** These bonds are used to finance capital projects that have income streams for repayment or that will be used for general governmental purposes.
- **Public-Private Partnerships for Economic and Redevelopment.** These partnerships typically involve working with local professionals, business owners, residents, civic groups, and trade associations to help study issues and develop recommendations.

Education and Outreach Capabilities

The City of Porterville has outreach and education opportunities related to fire safety, hazard awareness, and public communication. Information is primarily shared through the Tulare County Association of Governments (TCAG) and through the City of Porterville website and social media accounts. The Fire

Department also hosts a fire prevention week at elementary schools and provides station tours for students and other station visitors.

Mitigation Strategy

The LHMP includes mitigation strategies to address the hazards discussed in the **Hazard Profiles** section above. These strategies, which include both mitigation and adaptation strategies, are derived from the Porterville 2030 General Plan, City Ordinances, Capital Improvement Plan, and input from the public and stakeholders. Mitigation strategies from the 2011 LHMP were also retained. Mitigation strategies and actions are included in tables E-10 and E-11 of the LHMP and are prioritized according to the potential benefits, hazard(s) addressed, timeline of implementation, and whether or not a department is currently able to organize implementation of the strategy. Many mitigation strategies are applicable to all or multiple hazards, and all identified hazards are addressed through the mitigation strategies and actions included in the LHMP.

Table 3: LHMP Mitigation Strategies

Table	Strategy Number	Mitigation Strategy	Applicable Hazards
E-10	1	Create a GIS-based pre-application review for new construction and major remodels of residential and/or non-residential structures in hazard areas, such high and/or very high wildfire areas.	All
E-10	2	Integrate the City HMP, in particular the hazard analysis and mitigation strategy sections, into local planning documents, including general plans, emergency operations plan, and capital improvement plans.	All
E-10	3	Permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level.	All
E-10	4	Designate areas with a potential for significant hazardous conditions for open space, agriculture, and other appropriate low intensity uses.	All
E-10	5	Except as otherwise allowed by State law, ensure that all new buildings intended for human habitation are designed in compliance with the latest edition of the California Building Code, California Fire Code, and other adopted standards based on risk (e.g., seismic hazards, flooding), type of occupancy, and location (e.g., floodplain, fault).	All
E-10	6	Ensure that development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards.	Fire
E-10	7	Identify and map existing housing structures that do not conform to contemporary fire standards in terms of building materials, perimeter access, and vegetative hazards in very high fire hazard severity zones or State responsibility area by fire hazard zone designation. Identify plans and actions to improve substandard housing structures and neighborhoods.	Fire

Table	Strategy Number	Mitigation Strategy	Applicable Hazards
E-10	8	Acquire, relocate, or elevate residential structures, in particular those that have been identified as Repetitive Loss (RL) properties that are located within the 100-year floodplain.	Flooding
E-10	9	Acquire, relocate, elevate, and/or floodproof critical facilities that are located within the 100-year floodplain.	Flooding
E-10	10	Reinforce City ramps, bridges, and roads from flooding through protection activities, including elevating the road and installing culverts beneath the road or building a higher bridge across the area that experiences regular flooding.	Flooding
E-10	11	Regulate development in the 100-year floodplain zones, as designated on maps prepared by FEMA in accordance with the following: <ul style="list-style-type: none"> • Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted. • Passive recreation activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible. • New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions. 	Flooding
E-10	12	Increase participation in the NFIP by entering the Community Rating System program through which enhanced floodplain management activities would allow property owners to receive a discount on their flood insurance.	Flooding
E-10	13	Within the City limits, where storm and flood prevention improvements have not been installed, initiate a program to upgrade in accordance with the Master Drainage Control Plan for the area. Priorities should be conditioned upon locations where flood and sheet flow hazards are greatest.	Flooding
E-10	14	Ensure that new City flood control projects will not adversely impact downstream properties or contribute to flooding hazards.	Flooding
E-10	15	Maintain emergency evacuation plans for areas identified as subject to potential flooding.	Flooding
E-10	16	Continue aggressive clearing of storm drain problem areas for mitigation/prevention of localized flooding.	Flooding
E-10	17	Continue to create, revise, and maintain emergency plans for the broad range of natural and human-made disasters and response activities that could foreseeably impact the County. This shall include, but not be limited to, flooding, dam failure, extreme weather, evacuation/transportation, mass care and shelter, and animal evacuation and sheltering.	All
E-10	18	Continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures.	Earthquake, Flooding, Fire
E-10	19	Develop a public outreach program that informs property owners located in the dam or levee inundation areas about voluntary flood insurance.	Flooding, Dam Failure, Levee Failure

Table	Strategy Number	Mitigation Strategy	Applicable Hazards
E-10	20	Promote public safety programs, including neighborhood watch programs, child identification and fingerprinting, public awareness and prevention of fire hazards, and other public education efforts.	Critical Threats
E-10	21	Coordinate emergency response with local, State, and Federal governmental agencies, community organizations, volunteer agencies, and other response partners during emergencies or disasters using the California Standard Emergency Management System and the National Incident Management System.	All
E-10	22	Participate in established local, State, and Federal mutual aid systems. Where necessary and appropriate, the County shall enter into agreements to ensure the effective provision of emergency services, such as mass care, heavy rescue, hazardous materials, or other specialized function.	All
E-10	23	Continue to work with weather forecasting and public safety agencies to provide warning and protective information to residents, travelers, and visitors about dam inundation, severe valley fog and extreme heat conditions.	Fog, Extreme Heat
E-10	24	Use Geographic Information Systems (GIS) technology to track fire and law enforcement response times and provide technical assistance to fire and law enforcement agencies.	Fire, Time of Response
E-10	25	Require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.	All
E-11	1	Ensure that development in very high or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards.	Fire
E-11	2	Identify and map existing housing structures that do not conform to contemporary fire standards in terms of building materials, perimeter access, and vegetative hazards in very high fire hazard severity zones or State responsibility area by fire hazard zone designation. Identify plans and actions to improve substandard housing structures and neighborhoods.	Fire
E-11	3	Regulate development in the 100-year floodplain zones, as designated on maps prepared by FEMA in accordance with the following: <ul style="list-style-type: none"> • Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted. • Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.	Flooding
E-11	4	Within the City limits, where storm and flood prevention improvements have not been installed, initiate a program to upgrade in accordance with the Master Drainage Control Plan	Flooding

Table	Strategy Number	Mitigation Strategy	Applicable Hazards
		for the area. Priorities should be conditioned upon locations where flood and sheet flow hazards are greatest.	
E-11	5	Ensure that new City flood control projects will not adversely impact downstream properties or contribute to flooding hazards.	Flooding
E-11	6	Maintain emergency evacuation plans for areas identified as subject to potential flooding.	Flooding
E-11	7	Continue aggressive clearing of storm drain problem areas for mitigation/prevention of localized flooding.	Flooding
E-11	8	Continue to work with weather forecasting and public safety agencies to provide warning and protective information to residents, travelers, and visitors about dam inundation, severe valley fog and extreme heat conditions.	Fog, Extreme Heat
E-11	9	Work with FEMA Region IX to address any floodplain management issues that may have arisen/arise from the countywide DFIRM, Community Assessment Visits, and/or DWR.	Flooding
E-11	10	Increase participation in the NFIP by entering the Community Rating System program which through enhanced floodplain management activities would allow property owners to receive a discount on their flood insurance.	Flooding

Additionally, the General Plan contains policies related to the various hazards discussed in the LHMP. Policies related to fire and flooding are discussed in the **Wildfire Risk (SB 1241)** and **Flood Risk (SB 5)** sections, respectively. Most relevant policies are included in the Public Health & Safety Element. That element includes sections related to seismic and geologic hazards, flood hazards (discussed in the **Flood Risk (SB 5)** section below), fire hazards (discussed in the **Wildfire Risk (SB 1241)** section below), hazardous materials, safety services, and emergency response. The Public Health & Safety Element is included as **Appendix B**. Additionally, the following goals and policies related to health and safety are contained elsewhere in the General Plan:

Land Use Element

LU-I-18. Protect existing residential neighborhoods from the encroachment of incompatible activities and land uses, and environmental hazards.

LU-I-25. Establish buffering requirements and performance standards intended to minimize harmful effects of excessive noise, light, glare, and other adverse environmental impacts.

LU-G-17. Provide sufficient land for civic and institutional uses such as police and fire services, water and sanitary facilities, infrastructure and other City services to meet future demand.

Circulation Element

C-I-35. Ensure that the land uses in the Airport environs are consistent with the *Tulare County Comprehensive Airport Land Use Plan* in order to protect the safety of persons and property.

- Ensure no new schools and other noise sensitive uses are built within 4,000 feet of the Airport Clear Zone.
- Ensure that any non-residential uses are not subject to aircraft hazards based on specific criteria developed to evaluate safety risks.
- Limit residential parcels within the Airport Outer Approach/Departure Zone to at least five acres in size.

Open Space and Conservation Element

OSC-I-15. Preserve open space designated for public safety to minimize damage to people and property resulting from potential hazards. Such hazards include, but are not limited to, quaking, slope collapse, liquefaction, fire, earth sliding, flooding, erosion and siltation, soil compression, lateral spreading, and subsidence.

OSC-G-5. Preserve soil resources to minimize damage to people, property, and the environment resulting from potential hazards.

OSC-I-22. Continue to require soils and geologic surveys for all proposed development in hillside areas.

OSC-I-23. Require adequate grading and replanting to minimize erosion and prevent slippage of manmade slopes.

OSC-I-24. Require all mining and sand extraction operations to mitigate completely environmental impacts, including operations affecting water quality, habitat preservation, aesthetics and bridge undermining, and to submit reclamation and ultimate use plans for City approval prior to initiating operations.

OSC-I-57. Update the emergency water conservation plan to include appropriate conservation policies that can be implemented during times of water shortages caused by drought, loss of one or more major sources of supply, contamination of one or more sources of supply, or other natural or manmade events.

OSC-I-65. When asbestos has been identified in the preliminary soils report, require all new development and public works projects to comply with all provisions of State and regional ATCM regulations for control of airborne asbestos emissions relating to construction, road maintenance, and grading activities.

Public Utilities Element

PU-G-4. Provide a comprehensive storm drainage system to protect life and property.

Summary and Recommendation

The 2023 Tulare County Multi-Jurisdictional LHMP will be incorporated into the General Plan by reference during the focused update process. As such, the vulnerability assessment, mitigation strategy, and implementation plan in the LHMP will also be included in the General Plan. Based on a review of the LHMP,

no additional policies are warranted in the General Plan, although the project team may identify additional climate adaptation policies during the element drafting phase for inclusion.

Wildfire Risk (SB 1241)

Legislative Context

Jurisdictions are required to address fire risk in the safety element of their general plan. SB 1241 further requires that jurisdictions with very high fire hazard severity zones and state responsibility areas include additional information and consideration for fire risk in these areas. This includes historical data on wildfires; existing facilities in these areas; and goals, policies, and implementation measures to protect the community from unreasonable wildfire risk. Additional information related to wildfire can be found in the **Climate Adaptation and Resiliency (SB 379)** section above, but it should be noted that legislative requirements for SB 379 and SB 1241 vary slightly.

Historical Fire Data

As discussed under Fire Hazard Severity Zones below, there are very high fire hazard severity zones within the Porterville Planning Area, which requires discussion of historical fire data in the Porterville General Plan. The LHMP includes a summary of historical fire data, as well as a list of wildfires in Tulare County dating back to 1987 in Table 4-65 of the LHMP. The LHMP also provides additional discussion of the risk for wildfire in the County and the potential effects of wildfire on County residents. The LHMP will be incorporated into the updated General Plan by reference.

Fire Hazard Severity Zones

Fire hazard potential depends largely on the available fuel for the fire. In most cases, this is the extent and type of vegetation in the area. In Porterville, the wooded areas of the Sierra Nevada foothills are the areas most susceptible to fire risk and are generally considered high and very high fire hazard severity zones as shown in **Figure 5** below. Additionally, **Figure 6** isolates the very high fire hazard severity zones that require additional consideration in the General Plan per SB 1241, as well as the planned land use for each area. There are only four small areas considered at very high risk for wildfire. These areas are primarily planned for agricultural conservation and will not see extensive urban development. A very small portion of one very high fire hazard severity zone is planned for very low-density residential development. A review of the very high fire hazard severity zones showed that these areas are part of agricultural development and have rural farmland residences and farm outbuildings.

The General Plan Public Health & Safety Element contains the following goal and policies related to wildfire risk:

PHS-G-3. Protect Porterville’s residents and businesses from potential fire hazards.

PHS-I-13. Maintain automatic and/or mutual aid agreements with surrounding jurisdictions for fire protection.

PHS-I-14. Enforce weed abatement programs and building and fire code requirements to assure adequate fire protection.

PHS-I-15. Develop and expand existing public fire safety and emergency life support education programs in order to promote public awareness of fire hazards and emergency procedures.

PHS-I-16. Establish fire hazard standards and review procedures at least equivalent to State requirements to protect new development on or adjacent to the hillsides.

These policies or similar language will be retained in the updated General Plan. Additionally, the LHMP outlines mitigation strategies for fire hazards that further protect the area from fire risk. These strategies can be found in tables E-10 and E-11 of the LHMP, as well as summarized in **Table 3** above. Residents and development in very high fire hazard severity zones will be adequately protected from unreasonable risk due to these policies and implementation measures.

Figure 5: Fire Hazard Severity Zones

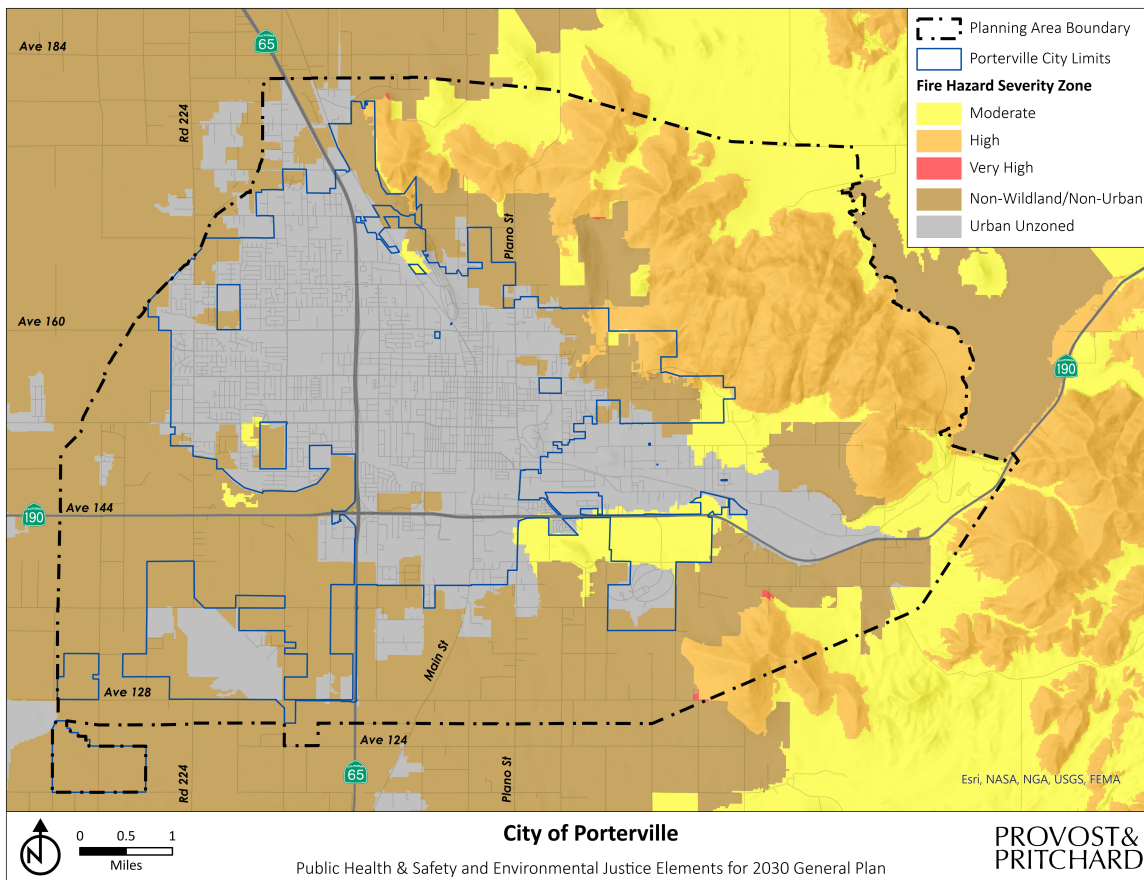
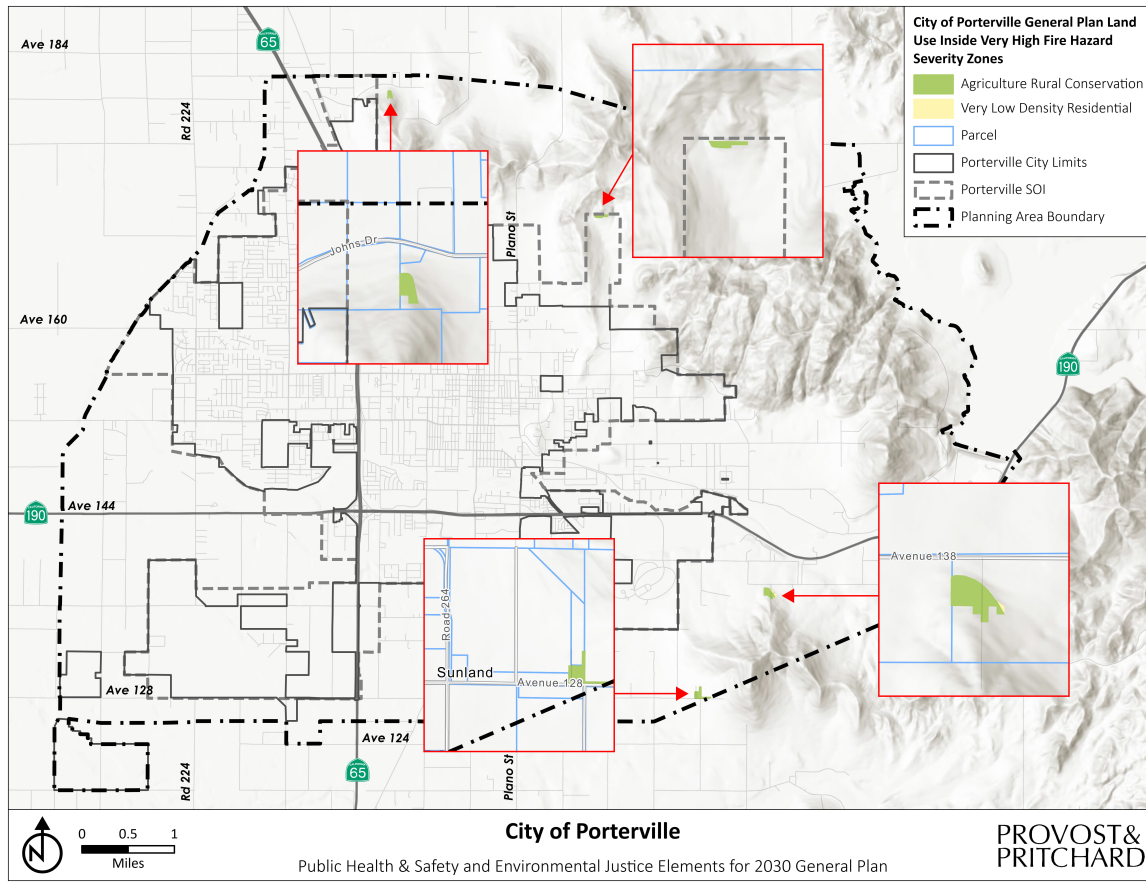


Figure 6: Very High Fire Hazard Severity Zone General Plan Land Use



Summary and Recommendation

The City of Porterville has very minimal Very High Fire Hazard Severity Zone areas within its planning area. Existing General Plan policies already address fire risk for these areas, as well as the City as a whole. Additional policies for the General Plan are not required to adequately comply with SB 1241. Background information required under SB 1241 is included in the LHMP and will be incorporated into the General Plan by reference. The project team may also identify additional policies related to fire risk for the updated Health & Safety Element during the drafting process, though none are required to satisfy SB 1241.

Flood Risk (SB 5)

Legislative Context

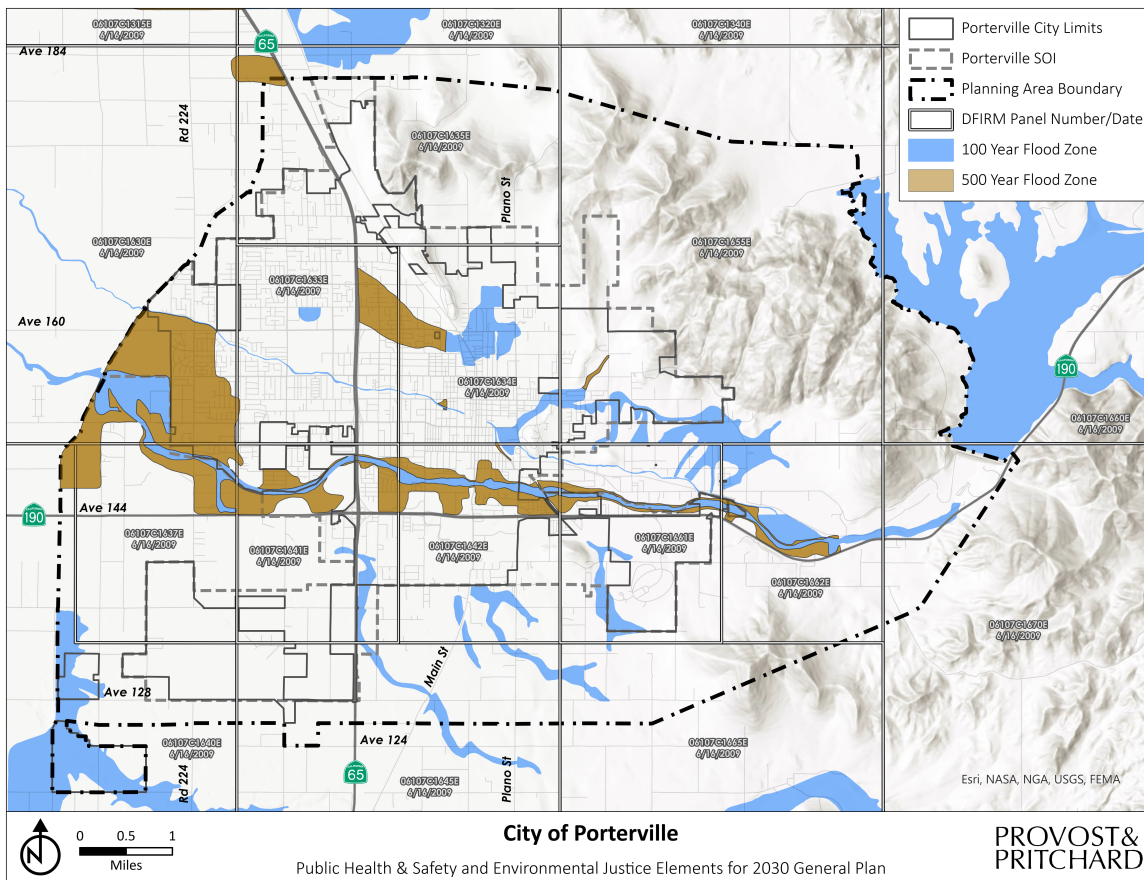
Jurisdictions in the Sacramento-San Joaquin Valley are required by SB 5 to address 200-year flooding in their general plans. This requires jurisdictions to provide historical flooding data as well as goals, policies, and implementation measures to protect lives and property at risk of flood damage in 200-year flood zone areas. The Central Valley Flood Protection Board is responsible for mapping 200-year flood zones.

Additional information related to flood risk can be found in Climate Adaptation and Resiliency (SB 379), above, but it should be noted that legislative requirements for SB 379 and SB 5 vary slightly.

200-Year Flood Zones

Mapping was completed by the Central Valley Flood Protection Board based on 2002 survey data and demonstrated that there are no 200-year flood zones present in the City of Porterville Planning Area. Flood zone mapping, which includes 100- and 500-year flood zones, can be found in **Figure 7**, below.

Figure 7: Porterville Flood Zones



Flood Risk in Porterville

The LHMP discusses historical flooding in Tulare County in section 4.3.12 Flood: 1%/0.5%/0.2%¹⁰ Annual Chance. This section also discusses the potential risk of flooding in the County. The adopted Porterville

¹⁰ 1% floods refer to the same likelihood as a 100-year flood, while 0.5% relates to 200-year floods and 0.2% floods relate to 500-year floods.

2030 General Plan, Public Health & Safety Element includes the following goal and policies to protect the community from flooding:

PHS-G-2. Protect the community from risks to life and property posed by flooding and stormwater runoff.

PHS-I-7. Coordinate with the U.S. Army Corps of Engineers, the County and local irrigation districts on potential flooding risks, including risks associated with dam failure.

PHS-I-8. Implement appropriate flood control measures to assure the safety of residents, while emphasizing maintenance of natural wildlife habitats and vegetation.

PHS-I-9. Require new development to provide for the perpetual funding and ongoing maintenance of detention reservoirs.

PHS-I-10. Continue to require any new development in the floodway to obtain a permit from the California Reclamation Board and enforce the Flood Damage Prevention Ordinance.

PHS-I-11. Coordinate with appropriate agencies to ensure that new bridges are constructed according to acceptable standards and maintained to avoid flood damage.

PHS-I-12. Continue to participate in the National Flood Insurance Program and encourage all property owners within flood hazard areas to carry flood insurance.

Mitigation strategies for flooding are also included in tables E-10 and E-11 of the Porterville Annex of the LHMP, which will be included in the General Plan by reference. These tables are also summarized above in **Table 3**. These policies adequately address flood risk in Porterville.

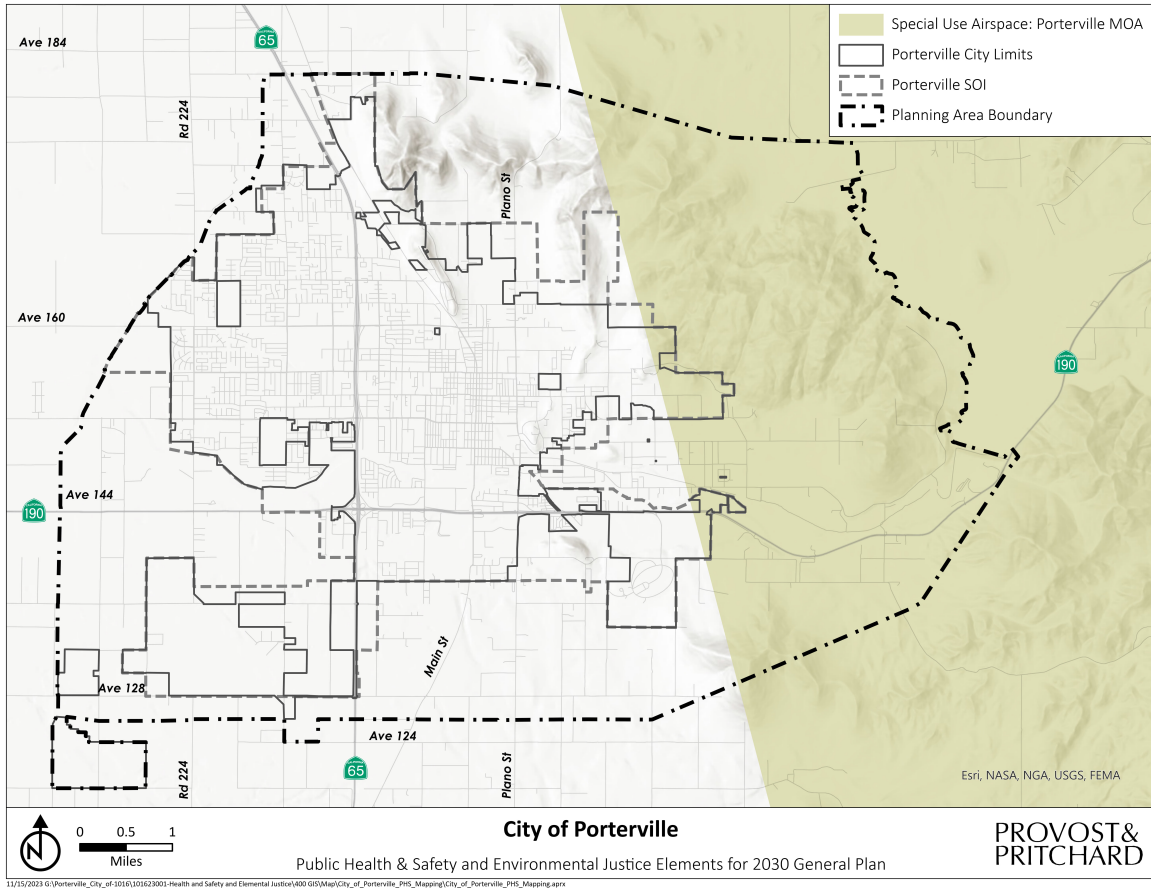
Summary and Recommendations

There are no 200-year flood zones within the Porterville Planning Area, according to mapping from the Central Valley Flood Protection Board. 100 and 500-year flood zones have been mapped and addressed through policies in the existing General Plan and the Tulare County Multi-Jurisdictional LHMP that will be included in the updated Health & Safety Element by reference. Additional policies are not required to comply with SB 5, although the project team may identify policies related to flood risk during the drafting phase of the update.

Military Readiness (SB 1458 and SB 1462)

According to the California Military Land Use Compatibility Analyst, made available through the Office of Planning and Research in 2014, a portion of the City's planning area, including areas within the existing City limits, is located within a special use airspace, as seen in **Figure 8** below. Although the Public Health & Safety and Environmental Justice element updates are not anticipated to result in land use changes, the City will share the public review drafts with the appropriate military contacts during the public review period.

Figure 8: Military Facility Mapping



Summary and Recommendations

Mapping shows that portions of the Porterville Planning Area are within Special Use Airspace. As such, the proposed General Plan updates will be shared with the relevant military parties for input during the public review period.

Appendix A: Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan Porterville Tables

Annex E City of Porterville

Planning and Regulatory Capabilities: These include local ordinances, policies and laws to manage growth and development. Examples include land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes and zoning ordinances.

Table E-5: Porterville Planning and Regulatory Capabilities

Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
General Plan 2035	<p>The City’s General Plan provides a policy base to guide future growth within the City. It was created by planners, engineers and technical staff with knowledge of land development, land management practices, as well as human-caused and natural hazards. The General Plan:</p> <ul style="list-style-type: none"> • Develops and maintains the General Plan, including the Safety Element. • Develops area plans based on the General Plan, to provide more specific guidance for the development of more specific areas. • Reviews private development projects and proposed capital improvements projects and other physical projects involving property for consistency and conformity with the General Plan. • Anticipates and acts on the need for new plans, policies, and Code changes. <p>Applies the approved plans, policies, code provisions, and other regulations to proposed land uses.</p> <p>The MJLHMP may be adopted as part of the Safety Element by the City Counsel. As the Safety Element is updated, revised hazard analysis from the MHLHMP will be incorporated. Safety Element actions will be aligned with MJLHMP mitigation measures.</p>	All	Updated 2014	Planning
California Building Code Enforcement	The California Building Standards Code, Title 24 serves as the basis for the design and construction of buildings in California including housing, public buildings and maintenance facilities. Improved safety, sustainability, maintaining consistency, new technology and construction methods, and	Earthquake, Fire, Floods, Severe winter storm/high winds		Regulatory

Annex E City of Porterville

Table E-5: Porterville Planning and Regulatory Capabilities				
Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
	<p>reliability are paramount to the development of building codes during each Triennial and Intervening Code Adoption Cycle.</p> <p>California’s building codes are published in their entirety every three (3) years. Amendments to California’s building standards are subject to a lengthy and transparent public participation process throughout each code adoption cycle. The California Seismic Safety Commission provides access to an array of regulatory and advisory information at: http://www.seismic.ca.gov/cog.html</p>			
Capital Improvement Program (CIP)	<p>The City’s CIP provides a foundation and planning tool to assist in the orderly acquisition of municipal facilities and to assure that service needs for the future are met. The CIP provides direct or contract civil, structural, and mechanical engineering services, including contract, project, and construction management.</p> <p>The MJLHMP will be used to select potential projects for the CIP. As the CIP is updated, additional mitigation measures will be analyzed and included in the Porterville section of the MJLHMP. Funding for CIP projects identified in the MJLHMP will be reviewed for mitigation grant program eligibility.</p>	Dam Failure, Earthquake, Fire, Floods, Landslides, Levee failure, Severe winter storm/high winds		Planning
Tulare County Municipal Service Review (MSR)	<p>MSRs are intended to provide a comprehensive analysis of service provision by each of the special districts and other service providers within the legislative authority of the (LAFCo) of a city. This analysis focuses on service providers within the City of Lindsay and makes determinations in each area of evaluation. The MSR considers and makes recommendations based on the following information:</p> <ul style="list-style-type: none"> • Present and planned land uses in the area. • Present and probable need for services in the area. 	All		Planning

Annex E City of Porterville

Table E-5: Porterville Planning and Regulatory Capabilities				
Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
	<ul style="list-style-type: none"> • Present ability of each service provider to provide necessary services. • The fiscal, management, and structural health of each service provider. • The existence of any social or economic communities of interest in the area. 			
City Code of Ordinances	<p>The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation, and safety to life and property from fire and other hazards attributed to the built environment; to regulate and control the demolition of all buildings and structures, and for related purposes.</p> <p>The MJLHMP will provide both hazard descriptions and mitigation actions that may address energy conservation, fire protection and development in hazard prone areas. The maps of Porterville related hazards will be used to augment other mapping products to protect public health and safety when updating City Code.</p>	Earthquake, Fire, Flooding,		Regulatory
Emergency Operations Plan (2015)	Describes what the local jurisdiction’s actions will be during a response to an emergency. Includes annexes that describe in more detail the actions required of the local jurisdiction’s departments/agencies. Further, this plan describes the role of the Emergency Operation Center (EOC) and the coordination that occurs between the EOC and the local jurisdiction’s departments and other response agencies. Finally, this plan describes how the EOC serves as the focal point among local, state, and federal governments in times of disaster.	All	Yes: Mitigation and preparedness sections. Hazard descriptions.	Planning

Annex E City of Porterville

Table E-5: Porterville Planning and Regulatory Capabilities				
Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
	The MJLHMP will be used as an essential tool to update the City EOP. Cal OES requires that EOPs describe applicable hazards as part of the Plan. The latest MJLHMP hazards descriptions will be included. Mitigation actions that are preparedness and response in nature will be analyzed for applicability to include in the description of EOP processes and procedures.			
Stormwater Quality Management Program (SWQMP) - Storm Water Management Plan (2009)	Describes measures that the local jurisdiction will take to minimize stormwater pollution. The SWQMP is required by the National Pollutant Discharge Elimination System Phase II regulations, which became effective in March 2003.	Flooding		Planning

Annex E City of Porterville

Administrative and Technical: These capabilities include community (including public and private) staff and their skills and tools used for mitigation planning and implementation. They include engineers, planners, emergency managers, GIS analysts, building inspectors, grant writers, and floodplain managers.

Table E-6: Porterville Administrative and Technical Capabilities

Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
Engineer, project managers, technical staff, equipment operators, and construction staff within the Public Works Department.	Maintains and operates a wide range of local equipment and facilities as well as providing assistance to members of the public. These include providing sufficient clean fresh water, reliable sewer services, street maintenance, storm drainage systems, street cleaning, street lights and traffic signals.	All		Technical
Procurement Department	Provides a full range of municipal financial services, administers several licensing measures, and functions as the plan participant’s Procurement Services Manager.	All		Technical
Engineers, Inspectors, Code enforcement officers, and other technical staff within the Tulare City Fire Department Building Inspections	Provides for building inspection and code certifications.	Fire, Earthquake		Technical

Annex E City of Porterville

and Planning Division				
Floodplain Administrator	Reviews and ensures that new development proposals do not increase flood risk, and that new developments are not located below the 100-year flood level. In addition, the Floodplain Administrator is responsible for planning and managing flood risk reduction projects throughout the local jurisdiction or tribal area.	Flood		Technical
Emergency Manager	Maintains and updates the Emergency Operations Plan for the local jurisdiction. In addition, coordinates local response and relief activities within the Emergency Operation Center, and works closely with County, state, and federal partners to support planning and training and to provide information and coordinate assistance.	All		Technical

Fiscal: These capabilities include general funds, property sales, bonds, development impact fees, or other fees.

Table E-7: Porterville Fiscal Capabilities				
Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
General Fund	Program operations and specific projects.	All		Financial, Financial Services Department
General Obligation Bonds	GO Bonds are appropriately used for the construction and/or acquisition of improvements to real property broadly available to residents and visitors. Such facilities include, but are not limited to, libraries, hospitals, parks, public safety facilities, and cultural and educational facilities.	All		Financial
Lease Revenue Bonds Funding	Lease revenue bonds are used to finance capital projects that (1) have an identified budgetary stream for repayment (e.g., specified fees, tax receipts, etc.); (2) generate project revenue but rely on a broader pledge of general fund revenues to reduce borrowing costs; or (3) finance the acquisition and installation of equipment for the local jurisdiction's general governmental purposes.	All		Financial

Annex E City of Porterville

Public-Private Partnerships for Economic and Redevelopment	Includes the use of local professionals, business owners, residents, and civic groups and trade associations, generally for the study of issues and the development of guidance and recommendations.	All		Financial
--	--	-----	--	-----------

Education and Outreach: Programs in place such as fire safety programs, hazard awareness campaigns, public information or communications offices.

Table E-8: Porterville Education and Outreach Capabilities				
Name	Description (Effect on Hazard Mitigation)	Hazards Addressed	Updated since 2010 (if yes, identify parts applicable to mitigation)	Capability Type (Regulatory, Administrative, Technical, or Financial) If known
Tulare County Association of Governments (TCAG)	TCAG is committed to improving the quality of life for residents and visitors throughout the County. They address traffic congestion, coordinate regional transit programs to make getting around easy and convenient, work to improve air quality and strive to continue to meet national standards. TCAG addresses current and future rail needs and possibilities and gathers data which is used by the census and the public to properly forecast housing and transit needs.	All		Education and Outreach
Porterville Website http://www.ci.porterville.ca.us/ and other social media	Provides easily accessible conduit to information about planning and zoning, permits and applications and programs that address hazard mitigation such as clean energy efforts. The updated MJLHMP will be posted to City media sites. As the planned is reviewed annually and new updates made, information on the planning process will be included on web sites and announced on social media.	All		Education and Outreach

Appendix B: Adopted Health and Safety Element

7

Public Health & Safety

The purpose of the Public Health & Safety Element is to identify the natural and man-made public health and safety hazards that exist within the City, and to establish preventative and responsive policies and programs to mitigate their potential impacts. This Element addresses geologic hazards, wildfire hazards, hazardous materials, flood hazards, and safety services. It also includes policies on natural hazards mitigation planning, which respond to the Federal Disaster Mitigation Act of 2000 and the Federal Emergency Management Agency's implementing regulations. Airport safety is addressed in the Land Use, Circulation, and Noise Elements.

7.1 SEISMIC & GEOLOGIC HAZARDS

Geologic and soils hazards include steep slopes and landslides, subsidence, expansive soils, and soils with naturally-occurring asbestos. These hazards are shown on figures 7-1 and 7-2. Additional information on soils and erosion within the Planning Area is in Open Space & Conservation Element. Seismic hazards related to earthquakes include ground shaking and ground failures, such as liquefaction, lateral spreading, ground lurching, seiches, mudslides, landslides, and soil slumping.

GEOLOGY & SOILS

The valley floor is mostly composed of consolidated alluvial deposits which can be soft near the river and other waterways and firm in the downtown, north and northeast areas as a transition to the granitic bedrock deposits in the foothills. The Porterville Planning Area contains a wide variety of soil types which have a significant bearing on land planning and development. Porterville Clay is the most prominent soil type located within the Planning

Area, comprising approximately 18 percent of the Planning Area. The City Code Building Regulations (Chapter 7, Article XIII) require a preliminary soil report for every new subdivision.

Steep Slopes and Landslides

The majority of the urban area is at elevations between 400 and 800 feet. However, the eastern portion of the Planning Area is in the Sierra Nevada foothills where elevations reach almost 1,800 feet above sea level. Slopes can be greater than 30 percent grade. Development which occurs on slopes greater than 25 percent exacerbates soil erosion, risk of landslides and wildland fires, as well as impacting the visual aesthetics of the area. Figure 7-1 shows the steep slopes in the Planning Area.

Areas with fractured and steep slopes, where less consolidated or weathered soils overlie bedrock, have a higher risk of landslides. The California Geological Survey determined that no areas in Tulare County are at risk for catastrophic failure due to landslides.

The City is adopting a Hillside Development Ordinance which includes development, design and landscape standards for the Hillside Development Zone. The Ordinance will limit the number of housing units allowed per acre in sloped areas in order to protect the public health, safety and welfare; protect and preserve natural and biological resources for the long-term benefit of Porterville and the broader community.

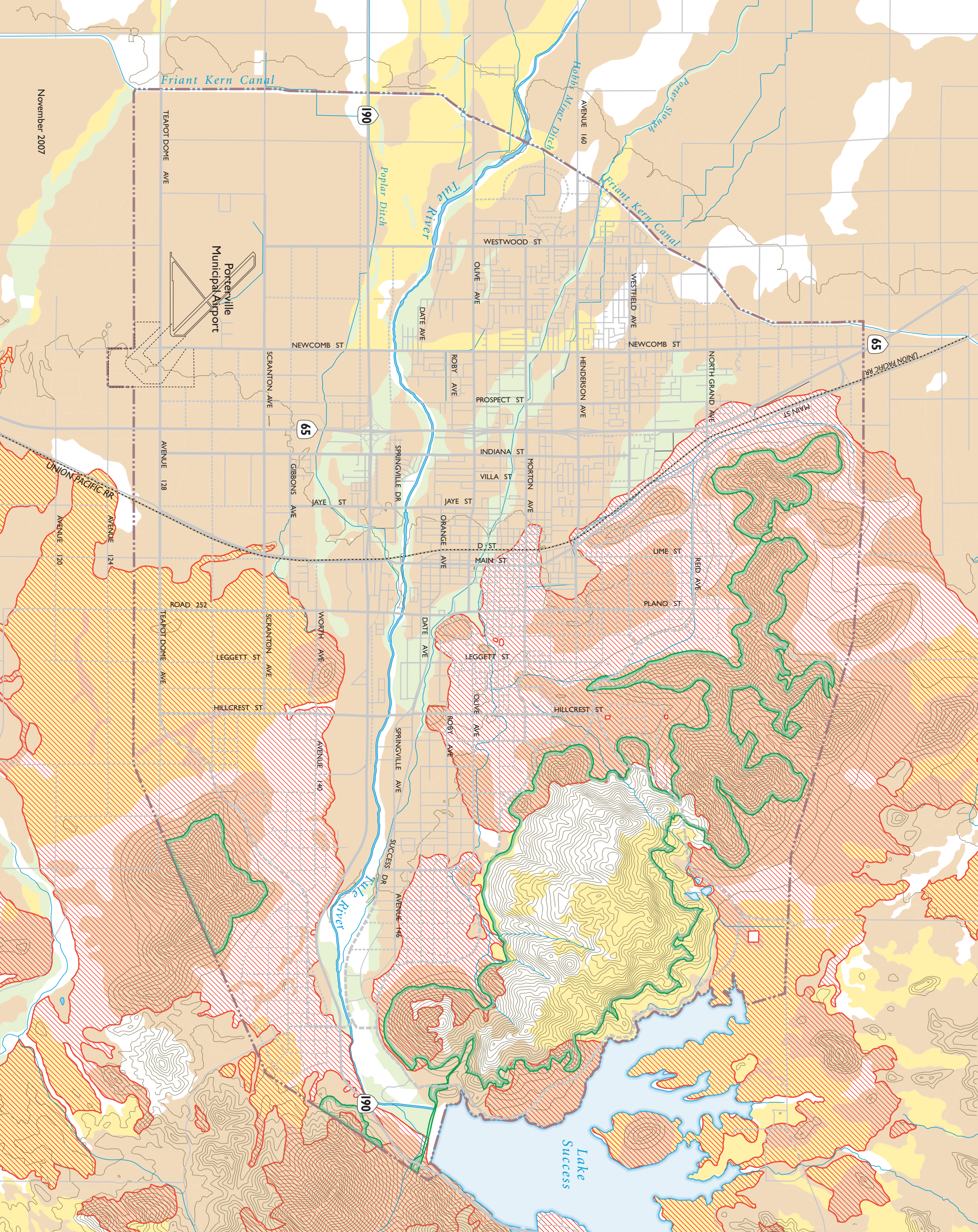
Expansive Soils

Expansive soils have the potential to shrink or swell significantly with changes in moisture content, which can limit the development capacity of an area. The type and amount of the silt and clay content in the soil will determine the amount of shrink or swell associated with the various levels of water content. Soils comprised of sand and gravel are not expansive soils.

Expansive soils are most likely to be found in basins and basin rims. Any structure located on expansive soils can be significantly damaged should the soil suddenly shrink or swell. Structural damage may result over a long period of time, usually from inadequate soils and foundation engineering or the placement of structures directly on expansive soils. Construction in areas of expansive soils may require major sub-excavation and replacement of existing materials with more stable soils.

As shown in Figure 7-1 the eastern portion of the Planning Area contains clay soils with high expansion potential. Table 7-1 summarizes the distribution of soil expansion potential for the Planning Area as a whole.

Figure 7-1
Geological and Soil Hazards



- Erosion Susceptibility Index (K Factor)**
- 0.17 - Low
 - 0.20 - 0.28 - Moderate
 - 0.32 - 0.43 - High
- High Soil Expansion Potential
 - Slope greater than 25%
 - Planning Area

Source: California Division of Mines and Geology.

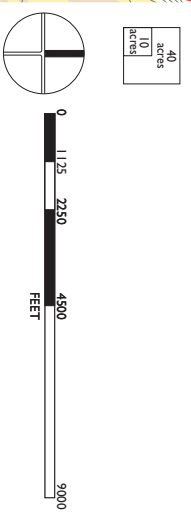


Table 7-1: Expansive Soils

<i>Soil Expansion Potential</i>	<i>Total Acres</i>	<i>Percent of Total</i>
High	13,722	38%
Moderate	349	1%
Low	17,563	48%
Data Unavailable ¹	4,707	13%
Total	36,283	100.0%

¹ Includes water, riverwash, rock outcrops, pits and dumps

Source: Environmental Science Associates, 2005.

Subsidence

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. Some areas in the Central Valley have subsided more than 20 feet during the past 50 years.¹ Subsidence may occur in the Planning Area, particularly in areas with high clay content soils or due to groundwater withdrawal.

Naturally-Occurring Asbestos

Asbestos is a term used for several types of naturally-occurring fibrous minerals found in serpentine rock, and its parent material, ultramafic rock. These rock types are abundant in the Sierra foothills. Naturally-occurring asbestos (NOA) has been identified in Tulare County and ultramafic rocks have been generally mapped in the Porterville area.^{2,3} Figure 7-2 illustrates areas more likely to contain natural occurrences of asbestos.

Asbestos may be released from ultramafic and serpentine rock when it is broken or crushed. This can happen when land is graded for building or agriculture purposes, at quarrying operations, or when the soil is disturbed by other activities such as the digging of fire suppression trenches. It is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. Airborne asbestos is classified as a human carcinogen. Exposure to asbestos can result in health ailments, such as lung cancer, mesothelioma (cancer of the linings of the lungs and abdomen), and asbestosis (scarring of lung tissues that results in constricted breathing).⁴

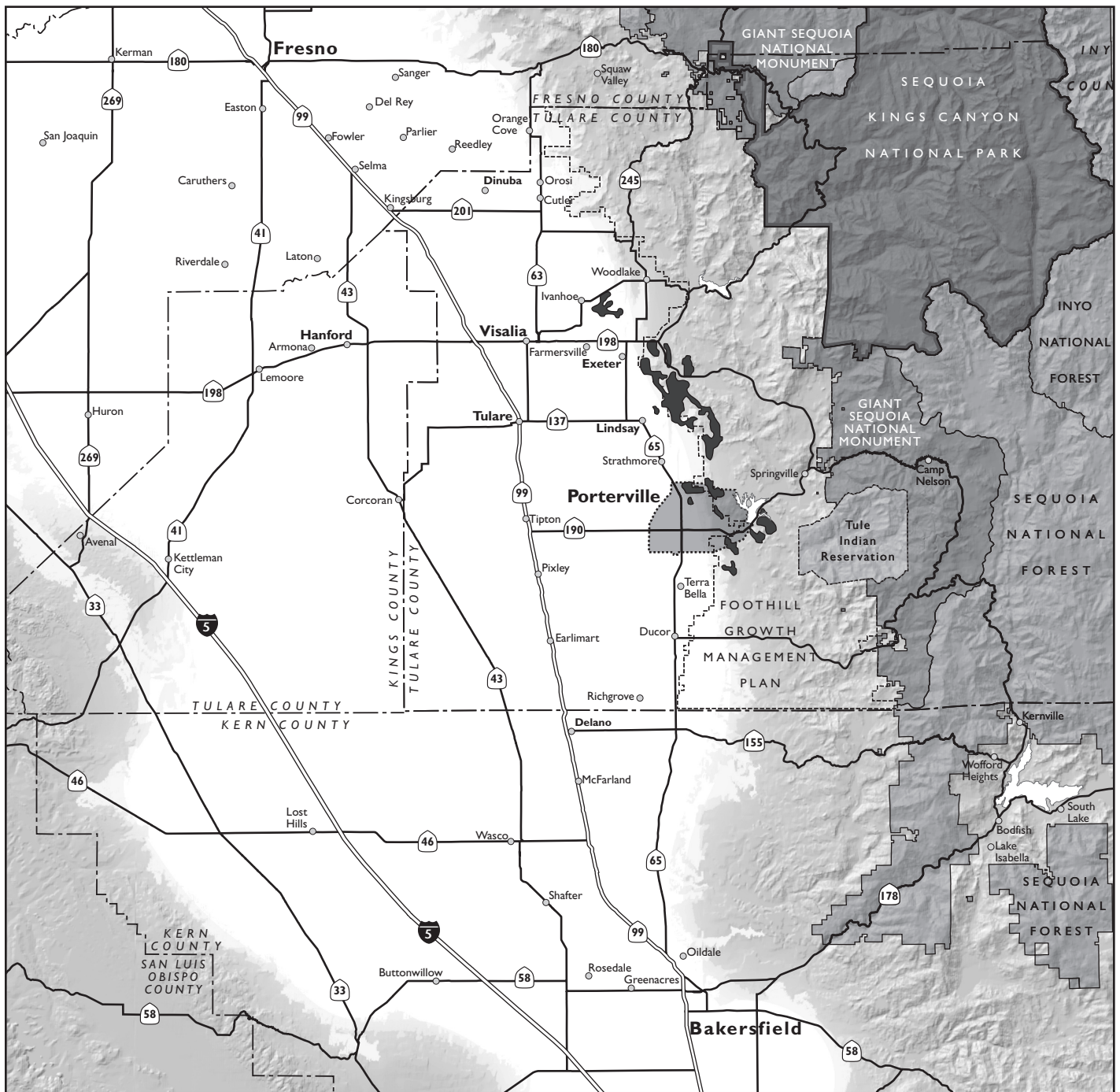
This hazard is also addressed in the Open Space & Conservation Element.


¹ Tulare County, General Plan Background Report, October 2004. pg. 8-11.

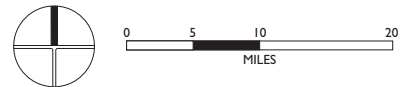
² Geologic maps are generalized depictions of the presence and distribution of rock types. Without extensive surveys, detailed maps of NOA are not feasible.

³ California Air Resources Board. <http://www.arb.ca.gov/toxics/asbestos/geninfo.htm>

⁴ SJVAPCD, Draft Staff Report Asbestos for Surfacing Applications, March, 2002.



 Ultramafic Rock Areas



The ultramafic rock areas shown on this map are adapted from Jennings, C.W., 1977, Geologic Map of California, California Department of Conservation, Division of Mines and Geology, Geologic Data Map No. 2, scale 1:750,000.

This map should not be used to determine whether bedrock or soil on a particular parcel of land in or adjacent to areas identified as ultramafic rocks contains asbestos. A site-specific investigation would be required to make such a determination.

Figure 7-2
**Location of Ultramafic Rocks,
 Areas More Likely to Contain
 Naturally Occurring Asbestos**

SEISMIC HAZARDS

There are no known active earthquake faults in the Planning Area. The closest active faults are Owens Valley fault group and Sierra Nevada Fault Zone (50 miles to the east of the Planning Area, the San Andreas Fault Zone (70 miles to the west), and an unnamed fault group north of Bakersfield (40 miles to the south).¹ Major earthquakes such as the 1906 San Francisco, 1952 Kern County, and 1983 Coalinga quakes were felt and caused some minor to moderate property damage in Porterville. Other potentially active faults exist near Tulare Buttes, about 30 miles north of Porterville. These faults are small and have exhibited activity in the last 1.6 million years, but not in the last 200 years. It is possible, but unlikely, that previously unknown faults could become active in the area. The State Geologist has not delineated any Alquist-Priolo Earthquake Fault Zones within or near the Planning Area.

Ground Shaking

The most significant hazard associated with earthquakes for the Porterville area is ground shaking rather than surface rupture or ground failure. However, the hazards due to ground shaking are considered to be minimal. Ground shaking intensities are measured using the modified Mercalli Intensity Scale. This is a 12-point scale of earthquake intensity based on local effects experienced by people, structures, and earth materials. Effects range from those that are detectable only by seismicity recording instruments at M1 (I) to total destruction at M12 (XII). The Modified Mercalli Rating for the Porterville area, as determined by the California Division of Mines and Geology, is estimated to be between Intensity M7 (VII) and M8 (VIII). Intensity M7 will cause considerable damage in poorly designed or constructed buildings (including some broken chimneys), slight to moderate damage in well-built ordinary structures, and negligible damage in buildings of good design and construction. Intensity M8 will cause great damage in poorly designed or constructed buildings (including fall of chimneys, factory stacks, columns, walls, etc.), considerable damage in ordinarily substantial structures (including some partial collapse), but slight damage in specially designed structures.

Ground Failure

Earthquake-induced ground failures, such as ruptures, lateral spreading, ground lurching, seiches, or mudslides, are unlikely to occur in the Planning Area because of its relatively stable geologic formation and lack of active faults. However, there is moderate risks of landslides due to the hillside topography, and soil slumping and liquefaction near the Tule River. There is also the risk of earthquake-induced dam failure at Success Dam. Potential inundation effects are discussed below in the Flood Hazards section.

Seismic Safety

Existing structures in the Planning Area could be affected by the types of earthquake-induced effects listed above, but to varying degrees based on length, intensity, and distance of the earthquake from a given building. New structures are required to adhere to current California Uniform Building Code (CUBC) standards for Seismic Zone 3, providing adequate design, construction and maintenance of structures to prevent exposure of people and structures to major geologic hazards. In particular, any critical facilities such as hospitals, fire and police

¹ USGS Fault Maps, <http://quake.wr.usgs.gov/info/faultmaps>

stations, and emergency communications and operations centers must be adequately designed, constructed and maintained with the goal of remaining functional after a large seismic event. The use of flexible utility connections, building anchors, and adequately reinforced concrete can reduce the loss of life and damage to buildings for human occupancy.

GUIDING POLICY

PHS-G-1 Minimize risks of property damage and personal injury posed by geologic and seismic hazards.

IMPLEMENTING POLICIES

PHS-I-1 Amend the Zoning Ordinance to include provisions for a geologic hazards abatement district for hillside areas to ensure that geologic hazards are properly mitigated by developers or avoided prior to, or during, development.

Geologic Hazard Abatement Districts are potentially useful financing mechanisms for reducing hillslope hazards. They enable the formation of local assessment districts for the purpose of prevention, mitigation, abatement, or control of geologic hazards, allowing property owners to cooperate in solving a common problem and share costs in an equitable way. These districts are established on individual sites on a case-by-case basis through Zoning Map amendments.

PHS-I-2 Maintain and enforce appropriate building standards and codes to avoid and/or reduce risks associated with geologic constraints and to ensure that all new construction is designed to meet current safety regulations.

PHS-I-3 Provide information and incentives for property owners to rehabilitate existing buildings using construction techniques to protect against seismic hazards.

PHS-I-4 Support continued investigation by State agencies of geologic conditions within the City's Planning Area to promote public awareness of potential geologic and seismic hazards.

PHS-I-5 Require, as part of the preliminary soil report, a construction dust management plan when it has been determined that soils contain naturally-occurring asbestos.

PHS-I-6 If asbestos is present require construction work be done when soil moisture is sufficient to adequately compact the tread and prevent visible dust, which may contain airborne asbestos emissions.

If work is to be done under dry season conditions, then water will be added in sufficient quantities to maintain adequate soil moisture. Upon mechanical disturbance by the treads of track driven equipment, the soil will be re-compacted in six-inch or less lifts.

7.2 FLOOD HAZARDS

Porterville is in the Tulare County Flood Control District. Since the climate is relatively arid and development continues to increase the amount of impervious surfaces, surface run-off and storm drainage must be managed. The average annual precipitation in the Porterville area is approximately 10 inches. However, portions of the Tule River watershed which contribute to flooding in Porterville have a mean annual precipitation of 40 inches. Eighty-five percent of the annual precipitation occurs between November and April.

In the Planning Area, there are two natural channels for storm water discharge, the Tule River and Porter Slough. Flows in the natural waterways are largely controlled by the Success Dam, but still pose some flooding hazards, particularly in the lower-lying western portions of the City. Flash flooding has occurred in low-lying drainage areas at the base of the foothills. The main channel of the Tule River can pass flows of about 10,000 cubic feet per second (cfs) before extensive damage occurs. Damage to urban property would occur at flows of approximately 16,000 cfs. Porter Slough has a designated capacity of 450 cfs and is an officially designated floodway of Tule River.

There are also seven irrigation ditch companies and storage reservoirs which divert and manage surface water within the Planning Area. In addition to delivering water for irrigation, the ditches provide extra capacity to carry peak flood flows and urban storm water runoff. Minor flooding or ponding may occur on the valley floor if irrigation canals or reservoirs overflow. See the Public Facilities Element for more information about storm drainage facilities.

FLOOD ZONES

In Porterville, the storm flood hazard is considered to be low because the City does not permit development in the flood plain without adequate mitigation measures. Flood zone mapping by the Federal Emergency Management Authority (FEMA) indicates that approximately six percent of the total Planning Area is located within the 100-year floodplain and another five percent is located within the 500-year floodplain. These two floodplains closely correspond to the watercourses that flow through the city. These flood zones are illustrated in Figure 7-3 and summarized in Table 7-2.

Table 7-2: Floodplains in Planning Area

Type	Acres	Percent of Planning Area
100 Year Floodplain	2,136	6%
500 Year Floodplain	1,958	5%
Success Dam Inundation Area	13,390	40%

Source: FEMA, 2005; U.S. Army Corps of Engineers, 2004.

Dam Safety & Inundation Hazard

A breach or overflow event at Success Lake Dam could cause significant flooding in Porterville. This dam is overseen and maintained by the United States Army Corps of Engineers (USACE) and administered by the Sacramento District of the USACE's regional office located in Porterville. Through their work, Porterville is provided with flood safety, water resources, electricity, recreation, and camping. It includes a recreation area, located eight miles east of the City of Porterville in the western portion of the Sierra Nevada foothills.

Construction of the earth-filled dam was completed in 1961. It spans 3,490 feet across the Tule River and is 142 feet high. When full, the lake holds 82,000 acre-feet of water with a surface area of 2,450 acres.

Success Dam was originally designed to withstand an earthquake with a magnitude of 8.3. However, it was built before the process of seismic liquefaction of earth-fill dams was completely understood. The USACE is planning to re-construct and widen the existing earthen embankment dam to bring it up to federal safety standards. Construction should begin in 2009. Once the seismic retrofit is complete, USACE intends to raise the spillway by 10 feet and lengthen it by 165 feet. This addition will increase Lake Success' capacity by 28,000 acre feet.

According to a 2004 report prepared for USACE, approximately 40 percent of the Planning Area is located within the Success Dam inundation area.¹ This inundation area runs through Porterville, to a location downstream of Corcoran, a distance of approximately 44 miles. Although subsequent infrastructure and drainage improvements have reduced the threat of flooding in many areas prone to inundation, the City requires a flood certificate and appropriately raised floor plates for any development proposed in an identified hazardous flood zone.

Figure 7-3: Flood Hazards? Figures 7-3 BACKGUIDING POLICY

PHS-G-2 *Protect the community from risks to life and property posed by flooding and stormwater runoff.*

IMPLEMENTATION POLICIES

PHS-I-7 Coordinate with the U.S. Army Corps of Engineers, the County and local irrigation districts on potential flooding risks, including risks associated with dam failure.

This will include coordination on training to respond to catastrophic dam failure, and maintaining adequate storm drainage capacity in the Tule River and Porter Slough.

PHS-I-8 Implement appropriate flood control measures to assure the safety of residents, while emphasizing maintenance of natural wildlife habitats and vegetation.





PHS-I-9 Require new development to provide for the perpetual funding and ongoing maintenance of detention reservoirs.

Maintenance may be by the City under contract, by a private entity, or by another public agency.

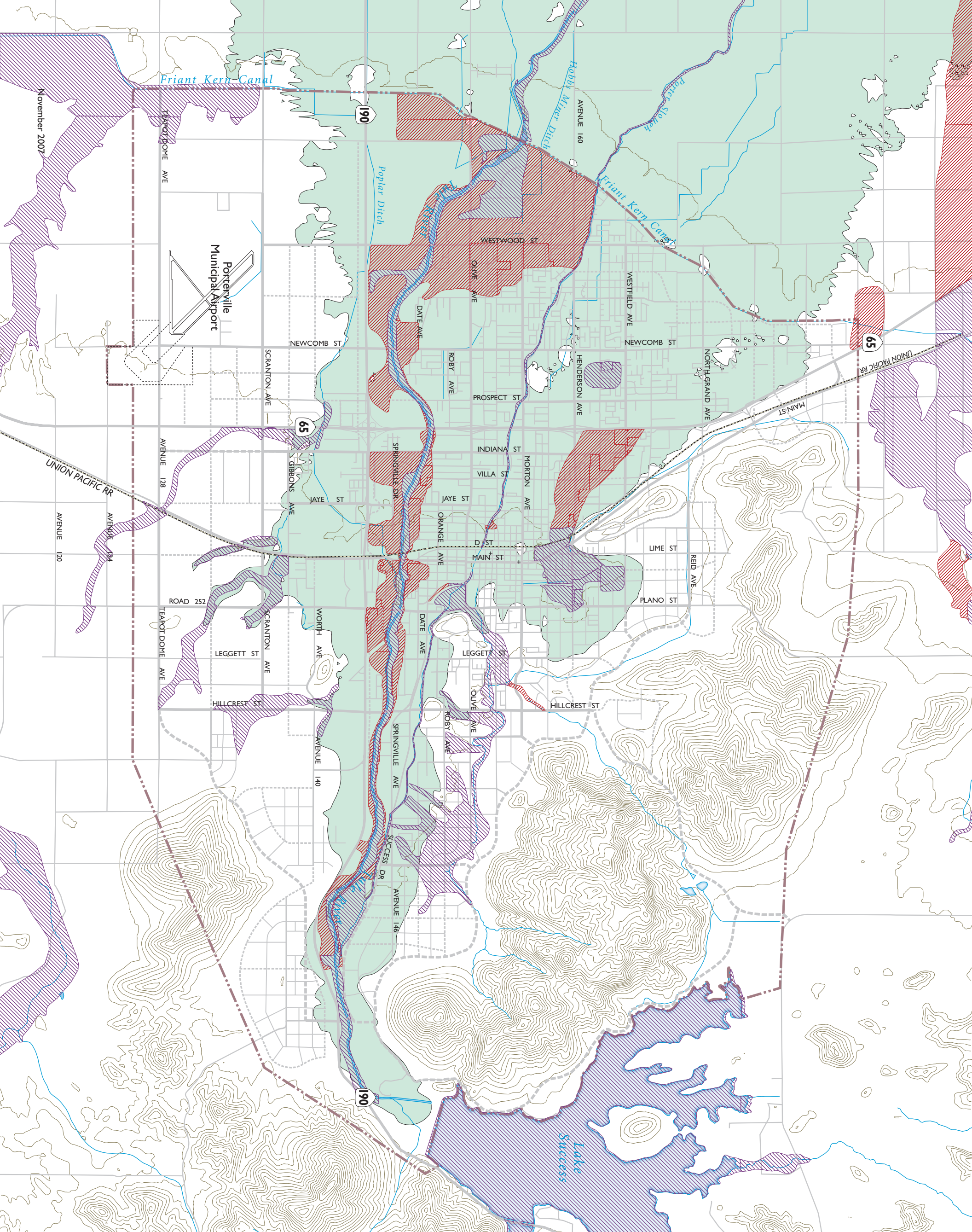
PHS-I-10 Continue to require any new development in the floodway to obtain a permit from the California Reclamation Board and enforce the Flood Damage Prevention Ordinance.

¹ RAC Engineers & Economists. *Lake Success: Flood Inundation for an Earthquake-Induced Dam Failure with the Reservoir Poll at El. 630 ft msl.* October 2004.

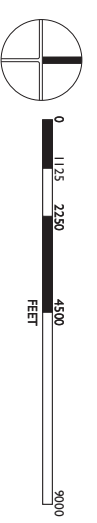
Figure 7-3
Flood Hazards

-  100-year Flood Zone
-  500-year Flood Zone
-  Dam Failure Inundation Area
-  Planning Area

Source: FEMA, 1995.



40
10
Acres
Feet



November 2007

- PHS-I-11 Coordinate with appropriate agencies to ensure that new bridges are constructed according to acceptable standards and maintained to avoid flood damage.
- PHS-I-12 Continue to participate in the National Flood Insurance Program and encourage all property owners within flood hazard areas to carry flood insurance.

7.3 FIRE HAZARDS

WILDLAND FIRES

Fire hazard potential is largely dependent on the extent and type of vegetation, known as surface fuels, that exists within a region. Fire hazards are typically highest in heavily wooded, undeveloped areas as trees are a greater source of fuel than low-lying brush or grassland. Suburban, urban areas, or rocky barren areas have minimal surface fuels and therefore typically have the lowest fire hazard. Figure 7-4 depicts the risk of fire within the Planning Area.

Due to the wooded nature of the Sierra Nevada foothills and hot summers, land located in the northeast portion of the Planning Area near Lake Success is considered to have a high to very high risk of fire. The fire season has over 100 days of temperatures in excess of 90 degrees Fahrenheit, usually between May and October. Forty-three percent of the Planning Area is considered to have a moderate fire hazard (see Table 7-3). Pockets of land with high fire hazards are found throughout the Planning Area, although the fire hazard currently present in these areas should decrease as vacant parcels become developed. The wooded areas along the Tule River have the potential of allowing a wildland fire to traverse the Planning Area.

Table 7-3: Existing Wildland Fire Hazards

<i>Fire Hazards</i>	<i>Acres</i>	<i>Percent of Planning Area</i>
Little or No Threat	8,490	23%
Moderate	15,777	43%
High	7,183	20%
Very High	2,373	7%
Unclassified	2,518	7%
Total	36,341	100%

Level of fire hazard severity based on surface fuels analysis, California Department of Forestry and Fire Protection.

Source: California Department of Forestry and Fire Protection, Dyett & Bhatia, 2005.

URBAN FIRES

Even though Porterville is not considered to be a fire-prone city, structural fires pose a greater risk to life and property than wildland fires. The City of Porterville requires all new development and subdivisions to meet or exceed the Uniform Fire Code provisions (Porterville City Code: Chapter 12) which address topography, geology, climate, and development conditions. The Public Works Department and Fire Department review all development applications during the review process.

GUIDING POLICY

PHS-G-3 Protect Porterville's residents and businesses from potential fire hazards.

IMPLEMENTATION POLICIES

PHS-I-13 Maintain automatic and/or mutual aid agreements with surrounding jurisdictions for fire protection.

PHS-I-14 Enforce weed abatement programs and building and fire code requirements to assure adequate fire protection.

PHS-I-15 Develop and expand existing public fire safety and emergency life support education programs in order to promote public awareness of fire hazards and emergency procedures.

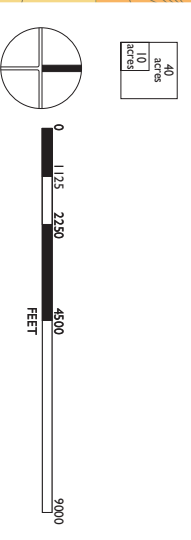
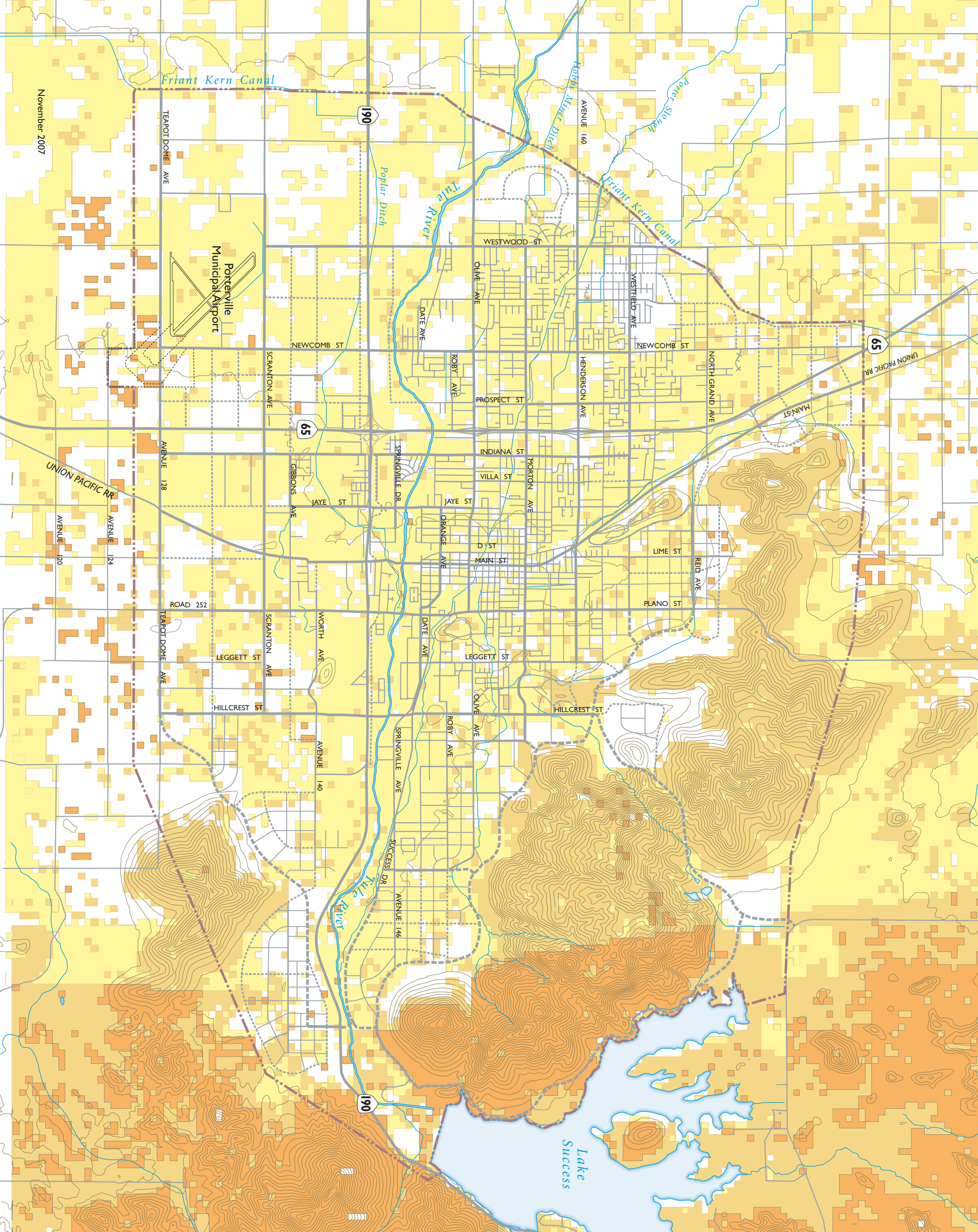
PHS-I-16 Establish fire hazard standards and review procedures at least equivalent to State requirements to protect new development on or adjacent to the hillsides.

The Subdivision Ordinance and the Zoning Ordinance standards will require new development on the urban fringe to incorporate fuel breaks, fuel reduction and buffer zones to minimize potential fire losses.

Figure 7-4
Wildland Fire Hazards

- Moderate
- High
- Very High
- Planning Area

Source: California Department of Forestry and Fire Protection, 2004



7.4 HAZARDOUS MATERIALS

The California Code of Regulations defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed.¹ Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. A hazardous materials incident involves the uncontrolled release of a hazardous substance during storage, use, or transport.

LAWS & REGULATIONS

Federal and State laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, transported and disposed of, and in the event that such materials are accidentally released, to prevent or mitigate injury to health or the environment. Laws and regulations require hazardous materials users to train employees to manage them safely. The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (EPA), U.S. Department of Labor Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT). In many cases, California State law mirrors or is more restrictive than federal law, and enforcement of these laws has been delegated to the State or a local agency.

The State Water Resources Control Board (SWRCB) administers the aboveground storage tank (AST) program and the underground storage tank (UST) program. The AST program covers facilities that store petroleum in a single tank, or multiple tanks with an aggregate capacity in excess of 1,320 gallons, and requires that tank owners or operators file a storage statement, pay a facility fee, and prepare and implement a Federal Soil Prevention, Control and Countermeasure (SPCC) Plan. The SPCC Plan must identify procedures, methods, and equipment in place at the facility to prevent discharges of petroleum from reaching navigable waters. State laws governing USTs specify requirements for permitting, construction, installation, leak detection monitoring, repairs, release reporting requirements, corrective actions, cleanup, and closure.

¹ California Code of Regulations, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10

In Porterville, the Tulare County Environmental Health Division (TCEHD) is the local agency responsible for the implementation of the state-mandated Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Tulare County has prepared a Hazardous Waste Management Plan and a Multi-Hazard Functional Plan, that serves as the County's emergency response plan for hazardous materials emergency incidents. In addition, the TCEHD acts as lead agency to ensure proper remediation of leaking underground petroleum storage tank sites and certain other contaminated sites. TCEHD provides a permanent Household Hazardous Waste (HHW) drop-off facility located in Visalia (approximately 30 miles from Porterville) that is available free of charge to any Tulare County resident and operates mobile collection events throughout the year. Typically, two events per year are hosted in Porterville, normally in April and September.

The City of Porterville Fire Department, Fire Prevention Division provides limited oversight of hazardous materials. The Fire Department is responsible for conducting inspections for code compliance and fire-safe practices, permitting of certain hazardous materials, and for investigation of fire and hazardous materials incidents. The Fire Department regulates explosive and hazardous materials under the Uniform Fire Code, and permits the handling, storage and use of any explosive or other hazardous material.

HAZARDOUS MATERIALS SITES

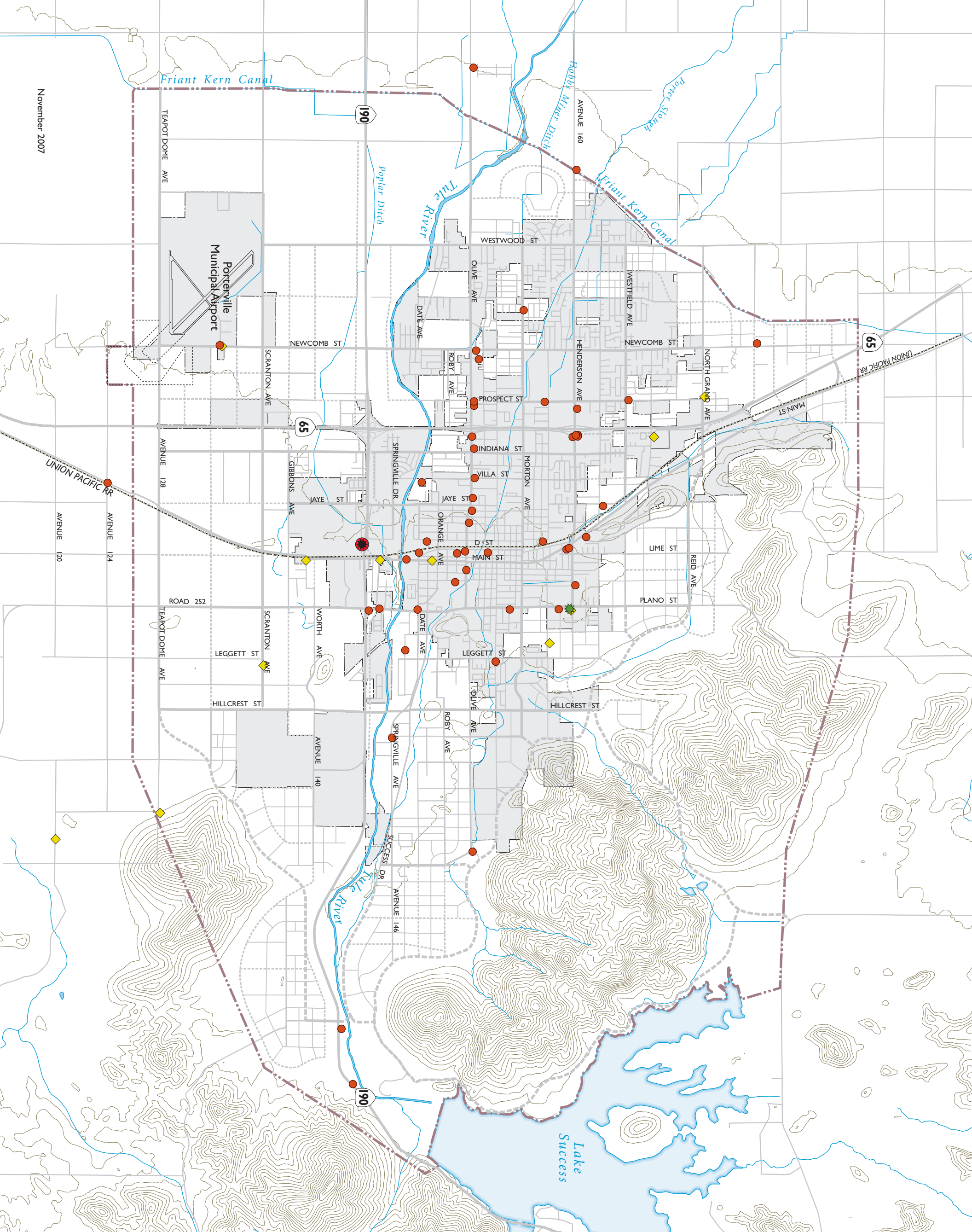
Areas where historic or on-going activities have resulted in the known or suspected release of hazardous materials into the soil and groundwater are identified by Environmental Data Resources, Inc. In Porterville, contaminated sites are largely associated with leaking underground storage tanks and are predominately clustered around primary transportation corridors including State Route 65 (SR 65), Main Street, Henderson Avenue, and Olive Avenue (see Figure 7-5). Most sites are associated with retail and commercial uses (e.g., gas stations, convenience stores, car washes, etc.), but a few are associated with local industrial and agricultural uses. Sites identified on the State's existing Brownfield database are also shown in Figure 7-5.

The City's Emergency Operations Plan also mentions the possibility of illegal drug manufacturing sites as sources of hazardous materials and incidents. Residue and hazardous waste are often dumped illegally and pose a threat to public health.

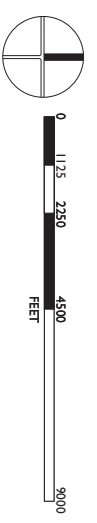
Figure 7-5
Hazardous Materials

- Leaking Underground Storage Tanks (LUST)
- ◆ Spills, Leaks, Investigations, & Cleanups (SLIC)
- ★ Toxic Releases
- Superfund Site
- Planning Area
- ▭ City Limits, 2006

Source: SWRCB Geotracker, and EPA RCRA, 2007



November 2007



GUIDING POLICY

PHS-G-4 *Protect soils, surface water, and groundwater from contamination from hazardous materials.*

IMPLEMENTATION POLICIES

PHS-I-17 Require remediation and cleanup of sites contaminated with hazardous substances.

The level of remediation and cleanup will be determined based on the intended use and health risk to the public. At the minimum, remediation will be in compliance with federal and State standards. Clean up shall be required in conjunction with new development, reconstruction, property transfer of ownership, and/or continued operation after the discovery of contamination.

PHS-I-18 Adopt a Household Hazardous Waste Program and support the proper disposal of hazardous household waste and waste oil; encourage citizens and crime watch organizations to report unlawful dumping of hazardous materials.

The City will promote the reduction, recycling, and safe disposal of household hazardous wastes through public education and awareness. Collection programs should be reviewed annually and expanded where appropriate. The City will also coordinate with hazardous waste recyclers to increase the frequency of hazardous waste collection events under this program.

PHS-I-19 Ensure that all specified hazardous facilities conform to the Tulare County Hazardous Waste Management Plan.

PHS-I-20 Prohibit specified hazardous waste residual repositories and onsite facilities utilizing incineration methods unless the facility demonstrates that it will produce insignificant levels of emissions.

PHS-I-21 Coordinate enforcement of the Hazardous Material Disclosure Law and the implementation of the Hazardous Material Emergency Response Plan with the Tulare County Health and Human Service Agency.

State and federal legislation requires every business that handles hazardous materials report their inventories to the local fire department. The program's primary function is to identify, monitor, and assist businesses using or storing hazardous materials and allow the City to handle emergency incidents more effectively. The City will maintain and share this information with police, fire, and emergency services.

PHS-I-22 Coordinate with the Tulare County Department of Environmental Health, and other appropriate regulatory agencies during the review process of all proposals for the use of hazardous materials or those involving properties that may have toxic contamination, such as petroleum hydrocarbons, CAM 17 metals, asbestos, and lead.

- PHS-I-23 Require applicants of projects in areas of known or suspected hazardous materials occurrences such as petroleum hydrocarbon contamination, CAM 17 metals, USTs, location of asbestos rocks and other such contamination to perform comprehensive soil and groundwater contamination assessments in accordance with regulatory agency testing standards, and if contamination exceeds regulatory action levels, require the project applicant to undertake remediation procedures prior to grading and development under the supervision of appropriate agencies, such as Tulare County Department of Environmental Health, Department of Toxic Substances Control, or Regional Water Quality Control Board.

7.5 SAFETY SERVICES

POLICE SERVICES

Law enforcement services in Porterville are provided by the City of Porterville Police Department. The Department currently has 57 sworn peace officers and 22 civilian staff members. Every sworn officer is provided with the safety gear essential to their specific assignment including firearms, protective vests, and uniforms. Each officer is assigned a vehicle, either a marked police car, a marked police motorcycle, or an unmarked police car. Additionally, the Police Department has a SWAT specific vehicle, a DUI/Mobile Substation Trailer, and a Radar Display trailer. The Porterville Police Department's headquarters is located at 350 N. D Street.

Currently, the Police Department is operating at a ratio of almost 1.3 officers per 1,000 residents. Response times and the ability of the Police Department to provide acceptable levels of service are contingent on growing staffing levels, sworn and civilian, consistent with resident population and the population of visitors, merchants, schools, and shoppers with the service area of Porterville. According to the Porterville Police Department, a ratio of 1.2 police officers to 1,000 residents would support adequate law enforcement efforts at buildout. This would require a total of 129 (72 additional) sworn officers by 2030.

Even though the current police facility is nearing its capacity to support staffing levels, the Police Department will continue to maintain a central station. Due to the resources involved in providing police services to the community, a centralized station is more effective, efficient, and fiscally responsible. As the community grows and levels of service increase, satellite Community-based Policing Offices will be located with other public facilities, such as fire stations in shopping centers, community centers or high-crime areas in order to provide the required services.

The Tulare County Sheriff's Office has a Porterville substation at 379 N. Third Street. This substation has ten patrols for the currently unincorporated areas of the County. As Porterville grows, the Police Department will need to work closely with the Sheriff's Office.

FIRE & LIFE SAFETY SERVICES

The City's Fire Department provides fire and life safety services for residents located within the city limits while the Tulare County Fire Department provides additional services for unincorporated areas within the Planning Area. City fire dispatch is handled by the Police Department.

In order to meet the service demand of greater population, four new fire stations are proposed by this General Plan. The Fire Department has planned stations near the intersection of Jaye Street and Worth Avenue,












The Plan will support expansion of existing public fire safety and emergency life support services.

near the intersection of Morton Avenue and Crestview Street,¹ near the Porterville Airport, and near the intersection of Reid Avenue and Main Street. The locations of County, City-owned, and CDF stations are illustrated in Figure 7-6, along with 1.5 mile radii from fire stations demonstrating fire coverage for Porterville residents. Table 7-4 summarizes fire station locations and facilities.

¹ City of Porterville Fire Department, March 29, 2007.

Figure 7-6
Emergency Services

-  City Fire Station
 -  County Fire Station
 -  CDF Fire Station*
 -  Proposed City Fire Station
 -  Police Station
 -  Fire Service, 1.5 Mile Radius
 -  Evacuation Routes
 -  2030 Developed Land
 -  Planning Area
- * CDF station services provided through agreement with City.

Source: City of Porterville, 2007.

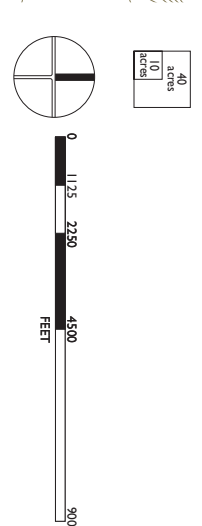
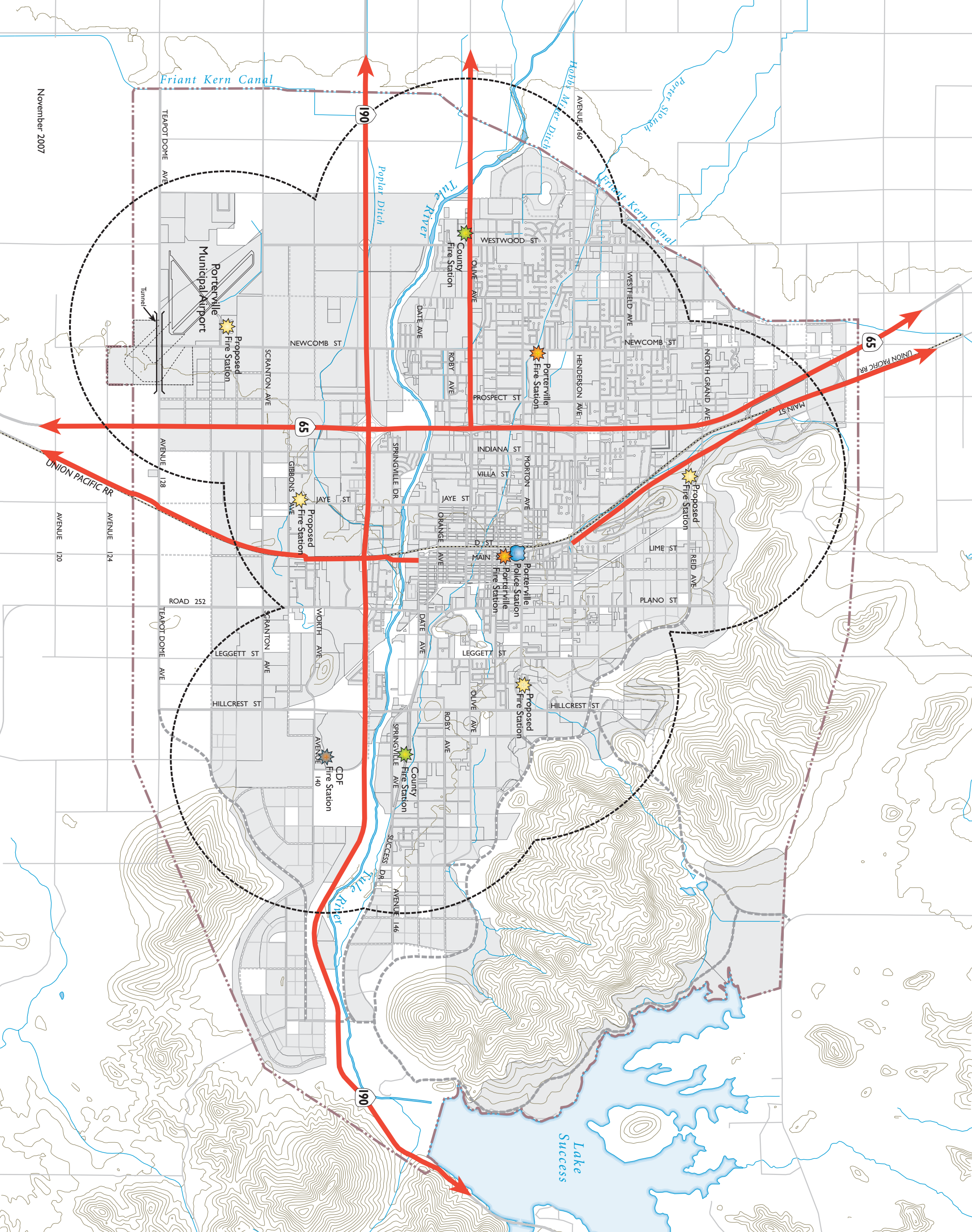


Table 7-4: Fire Station Locations and Facilities

No.	Location	Staffing	Facilities
1	40 W. Cleveland Ave.	Min of 4, Max of 6 per shift.	3 heavy fire engines (type I), 1 75 ft. Quint Aerial Ladder Truck, 1 Rescue Unit, and 1 Light Unit (Patrol)
2	500 N. Newcomb	Min of 3, Max of 4 per shift.	2 heavy fire engines (type I), 1 Light Unit (Patrol)
19 ¹	22315 Ave. 152	1 full time per shift and 17 paid on-call firefighters	1 heavy fire engine (type II), 1 light engine (type IV), 1 water tender (tractor, trailer)
20 ¹	1551 E. Success Dr.	1 full time per shift and 17 paid on-call firefighters	1 heavy fire engine (type I), 1 light engine (type IV), 1 water tender (bobtail)
CDF Worth Ave at Road 265			
*	Jaye St. at Worth Ave.		
*	Morton Ave. at Crestview St.		
*	Porterville Airport		
*	Reid Ave. at Main St.		

1. County-operated.

* Proposed, conceptual locations for new City of Porterville Fire Stations.

Sources: Porterville Fire Department, 2007; Tulare County Fire Department, 2007.

FIRE RESPONSE STANDARD & ISO RATING

The Insurance Service Office (ISO)—a private organization that surveys fire departments in cities and towns across the United States—awarded the Porterville Fire Department a Class 3 rating (1 being highest and 10 being lowest). This rating considers a community’s fire defense capacity versus fire potential, and then uses the score to set property insurance premiums for homeowners and commercial property owners.

Currently, the Department responds to 60 percent of its calls within five minutes. The internal response time goal set by the Department is to provide service within five minutes of the 911 call being received, 80 percent of the time. The proposed two new stations will help the Department reach its goal.

Water Flow Rates & Pressure

In order to adequately protect life and property in Porterville, water flow rates and pressure standards defined by the Uniform Fire Code are maintained.

Policies in the Land Use Element will ensure that new development will finance public safety facilities needed to serve new development. Additional policies addressing airport hazards are also located in the Circulation Element.

GUIDING POLICY

PHS-G-5 *Provide a comprehensive program of safety services including police, fire and medical response in all parts of Porterville.*

IMPLEMENTATION POLICIES

PHS-I-24 Provide cost effective fire, police, and emergency medical service within the City to minimize potential injury, loss and/or destruction to persons or property.

To meet existing and future demand, the City will continue to plan for adequate law enforcement and fire-fighting services, and strive for staffing ratios and response time that meet or exceed national standards. The requirements for additional Police and Fire Stations will be assessed when the City prepares its Capital Improvement Programs and development fees.

PHS-I-25 Maintain the City's Class 3 ISO rating, or better, for fire protection.

PHS-I-26 Promote a community-oriented approach to law enforcement.

The City will support public education programs involving crime prevention and safety issues. Currently, the Porterville Police Department has a number of outreach and training programs in place. These include a neighborhood crime-watch program, Police Explorers, Youth Services Foundation, and police volunteer program. Continue to cooperate with the California Highway Patrol and the nearby law enforcement agencies to provide back-up police assistance in emergency situations.

PHS-I-27 Continually assess the adequacy of current funding programs for police, fire and paramedic services and investigate new funding sources.

These could include a public safety impact fee.

PHS-I-28 Ensure that new development incorporates safety concerns into the site, circulation, building design and landscaping plans.

This will be done during the development review process.

7.6 EMERGENCY RESPONSE

EMERGENCY PLANNING

The California Emergency Services Act (Government Code Section 8550-8668) requires each city to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The Porterville Emergency Operations Plan was adopted in 2004. The Plan includes planning and response scenarios for seismic hazards, extreme weather conditions, landslides, dam failure and other flooding, wildland fires, hazardous materials incidents, transportation emergencies, civil disturbance, and terrorist attacks. It is meant to work in conjunction with the Tulare County Emergency Operations Plan and the State Emergency Plan. The Emergency Council of the Tulare County Operational Area meets for regional coordination purposes at least four times per year. In addition, the City Fire Department has specific procedures for hazardous materials emergency response.

EVACUATION ROUTES & POTENTIAL SHELTER SITES

The City has designated several evacuation routes through Porterville to be used in case of catastrophic emergencies. The extent and the severity of a disaster will determine which routes and which direction people must take in order to escape or avoid the afflicted areas. Sierra View District Hospital in Porterville provides emergency health care services.

In the event of a natural or man-made disaster, the City will coordinate with the Red Cross, Salvation Army, and State and federal agencies responsible for providing emergency shelter for displaced residents. The sites most commonly used are schools, senior centers, community centers, public buildings, and churches.

GUIDING POLICY

PHS-G-6 Provide comprehensive emergency response and evacuation routes for Porterville residents.

IMPLEMENTATION POLICIES

- PHS-I-29 Maintain and periodically update the City's Emergency Management Plan.
This plan will be updated as necessary in consultation with City departments, community leaders, the school districts, Sierra View District Hospital, PG&E, and relevant regional and State agencies.
- PHS-I-30 Initiate periodic public information programs that explain the City's emergency preparedness programs and evacuation routes and encourage each household to be self-sufficient for 72 hours after a manmade or natural disaster.
- PHS-I-31 Maintain multi-jurisdictional communication systems and cooperation for emergency training, planning and management.

PHS-I-32 Work with owners and operators of critical use facilities to ensure that they can provide alternate sources of electricity, water, and sewerage in the event that regular utilities are interrupted in a disaster.

Public utilities are lifeline services for Emergency Command Centers, police and fire departments, and hospitals. Keeping them open and operative is especially crucial in the 72 hours after a major disaster.