Public Safety Element

The Public Safety Element identifies and describes potential public safety challenges that can and may affect the City, as well as the requirements and resources available to respond when a public safety incident or emergency occurs. This Element sets forth objectives, policies and implementation measures to address foreseeable public safety challenges. The overall purpose of this Element is to identify and outline proactive measures to minimize public safety challenges as well as enable the City to expediently and efficiently respond in the event of a public safety challenge.

Public safety challenges can be divided into two broad categories – environmental hazards (e.g., earthquake, flood) and human - error caused accidents (e.g., chemical spill). Most people are familiar with the police and fire services that response to an accident or emergency incident. In addition to providing police and fire emergency services, the City of Chowchilla is responsible for administering and implementing building codes, emergency response plans, airport management plan and hazardous materials management plans, all of which are crucial public safety programs aimed at protecting the community from potential environmental hazards and human – error caused accidents.

SEISMIC ACTIVITY

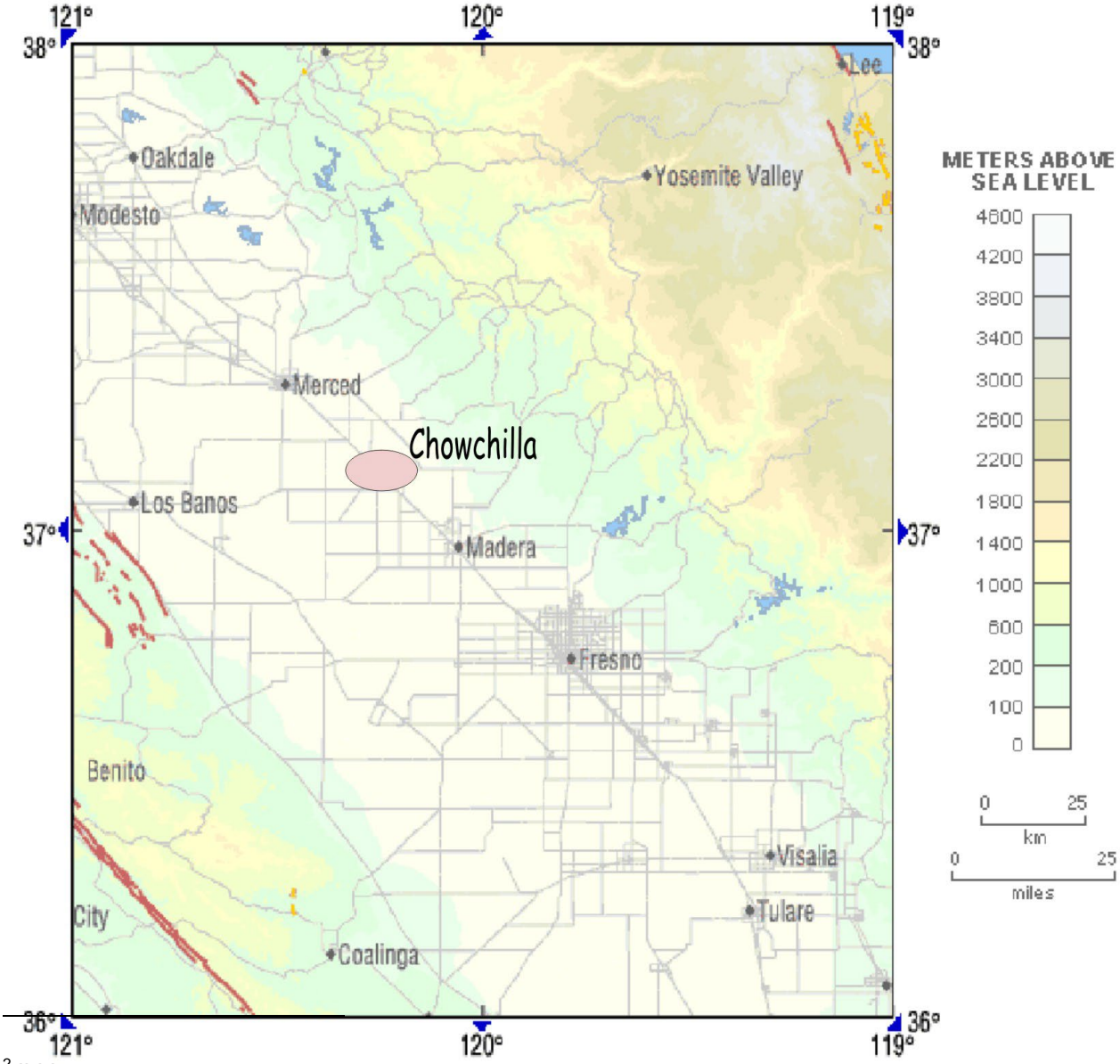
The California Seismic Hazards Mapping Act requires the California State Geologist to identify and map seismic hazard zones. Development in seismic hazard areas is subject to policies and criteria standards established by the California State Mining and Geology Board. The California State Geologist, pursuant to the Alquist – Priolo Earthquake Fault Zone Act, is also responsible for identifying and mapping earthquake fault zones along active and potentially active major faults. An active fault is defined as having had movement at least once during the past 11,000 years and a potentially active fault is defined as have had movement during the past 1.6 million years and continued activity is suspected.[1]

[1] California Geological Survey, Special Publication 42 Interim Revision 2007, Fault – Rupture Hazard Zones in California, Alquist – Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps.

No known geologic active or potentially active faults or instability are found in the 2040 General Plan Planning Area.[2] Nonetheless, the 2040 General Plan Planning Area could be subject to ground movement and shaking resulting from a distant earthquake or slippage along an active or potentially active fault. There are four fault zones in the surrounding region delineated under the Alquist – Priolo Earthquake Fault Zoning Act 1974 – 2007 that could potentially pose seismic activity within the 2040 General Plan Planning Area. The four principal fault zones are the San Andreas, Origalita, and Owens Valley Faults, and possibly the White Wolf Fault.[3] Figure PS - 1 shows active earthquake faults near Chowchilla.

Figure PS - 1

Active Earthquake Faults Near Chowchilla



[2] Ibid.

[3] Ibid.

- San Andreas Fault is approximately 75 miles west of the City of Chowchilla. The San Andreas Fault extends approximately 800 miles from Cape Mendocino in the northern California to the California / Mexico border. The San Andreas Fault is estimated to have the capability of producing up to an 8.3 magnitude earthquake. The last major surface rupture, a 7.8 magnitude earthquake, occurred in 1906.

- Ortigalita Fault is approximately 42 miles northwest of the City of Chowchilla. The Ortigalita Fault extends approximately 43 miles from 12 miles northwest of the San Luis Reservoir southeast to the vicinity of Panoche Valley (through western Stanislaus, eastern San Benito, western Merced and western Fresno counties). The Ortigalita Fault is estimated to have the capacity of producing up to a 6.9 magnitude earthquake. The last major surface rupture is unknown. All information is according to a USGS database search.

- Owens Valley Fault Group located in the eastern Sierra Nevada Range is approximately 109 miles east-southeast of the City of Chowchilla, The Owens Valley fault extends 78 miles from near Bishop, CA south east to Lone Pine, CA (near Owens Lake). The Owens Valley fault is estimated to have the capacity of producing up to an 8.2 magnitude earthquake. The most recent major surface rupture, an 8.0 magnitude earthquake, occurred in 1872. All information is according to a USGS database search.

- White Wolf fault is approximately 141 southeast of the City of Chowchilla. The White Wolf fault extends 38 miles from approximately 3 miles south of Arvin, CA to near Walker Basin. The White Wolf fault is estimated to have the capacity of producing up to a 7.5 magnitude earthquake. The most recent major surface rupture, a 7.5 magnitude earthquake, occurred in 1952.

Within the Planning Area, earthquakes can give rise to seismic hazards including ground shaking and liquefaction. During an earthquake, most damage, injuries and loss of life results from structural failures due to shaking. The resulting damage is a function of both building structural integrity and soil type. There are homes and buildings in the City pre-dating modern earthquake construction standards. These older homes and buildings may not withstand the lateral stress imposed by the ground shaking of a major earthquake. Typically, older buildings fare less well in earthquakes, especially un-reinforced masonry walls, and multiple story structures without steel reinforcement. A large earthquake could cause considerable damage to ordinary structures.

There are two common measurements of earthquakes – magnitude and intensity. Magnitude and intensity measure different characteristics of earthquakes.

Magnitude is the strength of an earthquake measured using the Richter Scale, a numerical scale for quantifying earthquake magnitude. The Richter Scale is a logarithmic scale that measures the amount of energy released at the source or epicenter of the earthquake based on the amplitude of the highest peak recorded on a seismograph.

Intensity is the force of an earthquake at a particular place measured on the Modified Mercalli Scale, which is a subjective ranking of earthquake's effects on persons and structures.

Table PS - 1 below correlates and summarizes the magnitude ranges of the Richter Scale to the intensities levels of the Mercalli Scale. As a rule, the greater the earthquake magnitude and the closer the fault rupture to the site, the greater the intensity of ground shaking. Based on the location of the City and the proximity to nearby active or potentially active faults, the entire City could experience ground shaking during an earthquake one of several faults. The National Geophsical Data Center (NGDC) lists the results of groundshake events on their web data base. For Chowchilla, the maximum ground shaking intensities, with Modified Mercalli (MM) intensity range from minor (MM III) to moderate (MM VI) since 1926. MM VI is associated with damage to some heavy furniture moved, and a few instances of fallen plaster with only slight damage.

Other geologic hazards associated with seismic activity are ground failure and liquefaction. Liquefaction occurs when ground shaking causes water-saturated soils to become fluid and lose strength. This can result in loss of foundation support, failures due to lateral spreading, and settlements of affected soils after an earthquake when excess pore water pressures are dissipated. Conditions necessary for liquefaction are saturated, loose, cohesion less, granular fine-grained soils. The potential for liquefaction within the 2040 General Plan Planning Area is limited to the areas paralleling the two watercourses traverse the Planning Area – Ash and Berenda Sloughs.

Ground failure is generally associated with hilly and steep slopes. Given the relatively level topography of the Central Valley, the risk for ground failure within the 2040 General Plan Planning Area is extremely remote and, at best, would likely be limited to the banks of the watercourses traversing the Planning Area – Ash and Berenda Sloughs. Land adjacent to Ash Slough and Berenda Slough are designated Open Space to minimize public exposure and property damage to potential liquefaction or ground failure.

FLOODS

The City of Chowchilla lies within the San Joaquin River Hydrologic Region. The San Joaquin River Hydrologic Region is comprised of a myriad of flood control projects. Numerous Central Valley communities, including the City of Chowchilla, and surrounding farmland are protected by flood control projects that make up the Lower San Joaquin River Flood Control Project. The Lower San Joaquin River Control Project is comprised of a system of levees, bypasses, diversion channels, reservoirs and control structures. Principal flood control improvements in the immediate 2040 Chowchilla General Plan Planning Area include bypasses, levees and reservoirs and flood control structures on Berenda and Ash Sloughs and on the Chowchilla River.

The levees and bypasses are generally projects of the United States Corps of Engineers (USACE), sponsored by the Central Valley Flood Control Board. Reservoirs and dams are projects of the USACE and the United States Bureau of Reclamation (USBR), with flood reservations for and controlled by the USACE. The USACE maintains Buchanan Dam and Eastman Lake. Berenda Slough Dam and Berenda Reservoir are maintained by the Chowchilla Irrigation District.

Table PS - 1

Earthquake Magnitude and Intensity Scales

Magnitude	Intensity	Descriptor	Description
1.0 – 2.9	Very Minor	I	I. Not felt except by a few under especially favorable conditions.
3.0 – 3.9	Minor	II – III	II. Felt only by a few persons at rest, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it is an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
4.0 – 4.9	Light	IV – V	IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors, disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably. V. Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
5.0 – 5.9	Moderate	VI – VII	VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight. VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
6.0 – 6.9	Strong	VIII – IX	VIII. Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns; monuments, walls. Heavy furniture overturned. IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
7.0 – 7.9 8.0 and Higher	Major Great	X – XII	X. Some well-built wooden structures destroyed; mostly masonry and frame structures destroyed with foundations. Rail bent. XI. Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly. XII. Damage total. Lines of sight and levee are distorted. Objects

			thrown into the air.

Source: United States Geological Survey, National Earthquake Information Center.

Flood Prone Areas

The Federal Emergency Management Agency (FEMA) is responsible for providing flood insurance and administering national floodplain management regulations. FEMA is also responsible for identifying and mapping flood hazards throughout the country. These flood hazard maps, know as Flood Insurance Rate Maps, or FIRMs, are used to identify flood prone areas, with the most susceptible areas designated as special flood hazard zones.

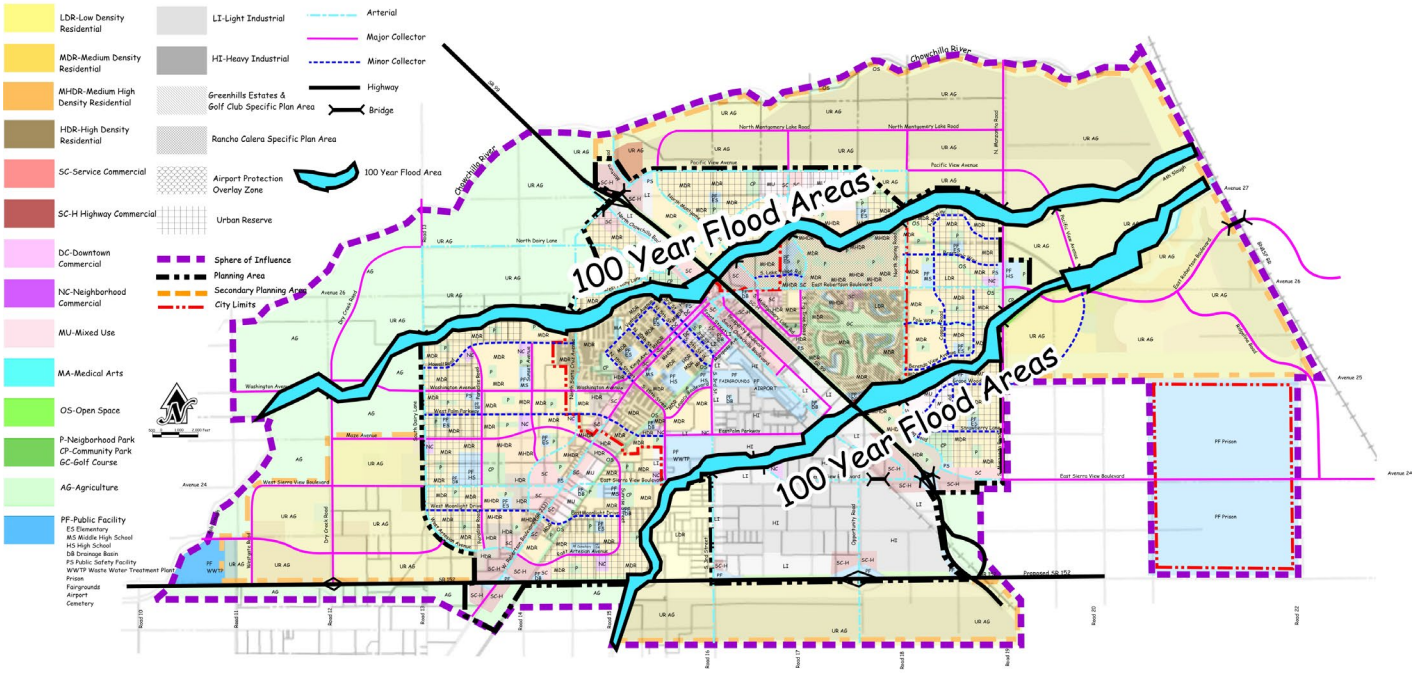
A number of specialized terms are used to describe flood hazards. The “base-flood elevation” is the water surface level of a water course or water body that corresponds to a flood event that has a one percent change of being equaled or exceeded in any given year (e.g., 100-year flood event). The “floodway” is the channel of a watercourse that must be reserved in order to discharge the base flood without increasing the water surface elevation more than one foot. The “flood zone” is the designated area where flooding could occur during the “base flood” or 100-year flood.

According to FIRMs applicable to the 2040 General Plan Planning Area, the 2040 General Plan Planning Area is subject to minimal flooding.

Figure PS - 2, illustrates the FEMA designated flood hazards within 2040 General Plan Planning Area.

Figure PS - 2

Flood Prone Areas



FEMA has identified Ash Slough, Berenda Slough and the Chowchilla River as floodways. Federally designated flood zones are limited to the defined bank and channels of Ash Slough, Berenda Slough and Chowchilla River. No base flood elevation has been determined for the 100-year floodplains. The remainder of the 2040 General Plan Planning Area is designated as Zone X – an area determined to be outside the 0.2 percent annual chance floodplain.[4] The 2040 General Plan minimizes public exposure and property damage from potential floods by designating land adjacent to Ash Slough and Berenda Slough as Open Space.

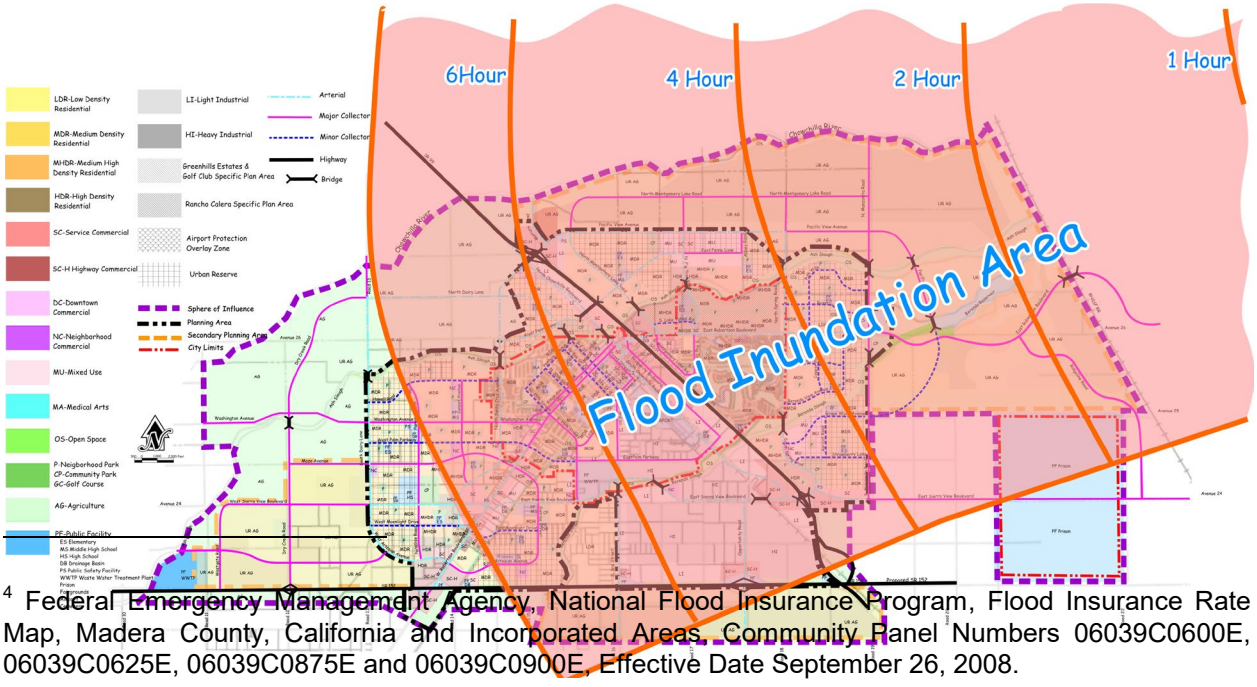
Dam Failure Inundation

The City of Chowchilla is at risk of flooding in the event of the collapse of either the Buchanan Dam or Berenda Slough Dam. The USACE has mapped the potential extent of floodwaters that could result should either Berenda Slough Dam or Buchanan Dam fail. These dams are subject to multi-jurisdictional responsibilities that include the California Department of Water Resources, USACE and the Chowchilla Irrigation District. The State of California, Office of Emergency Services maintains inundation maps for each of these dams. A dam failure plan is integrated into the City's Emergency Operations Plan.

Berenda Slough Dam at Berenda Reservoir is a rock fill structure. Berenda Reservoir, an irrigation reservoir, can hold up to 960 acre feet of water and has surface area of 215 acres. Berenda Slough Dam and Reservoir are owned and operated by the Chowchilla Water District. In the event of the collapse of the Berenda Dam, flood inundation of the 2040 General Plan Planning Area would be limited. Figure PS - 3 illustrates the potential extent of flooding in the event of a Berenda Slough Dam failure.

Figure PS - 3

Dam Failure Inundation Areas



[4] Federal Emergency Management Agency, National Flood Insurance Program, Flood Insurance Rate Map, Madera County, California and Incorporated Areas, Community Panel Numbers 06039C0600E, 06039C0625E, 06039C0875E and 06039C0900E, Effective Date September 26, 2008.

Buchanan Dam, constructed by the USACE to form Eastman Lake up stream from the City of Chowchilla, is an earth and rock fill structure designed to restrain flood flows in the Chowchilla River and control flows in Ash and Berenda Slough. Eastman Lake can hold up to 150,000 acre feet of water. In the event of the collapse of the Buchanan Dam, the entire 2040 General Plan Planning Area would be inundated. Figure PS - 3 illustrates the potential extent of flooding in the event of a Buchanan Dam failure.

WILDLAND FIRE

The risk of a wildfire fire is related to a combination of factors. Factors which may influence the potential of a wildfire include the extent and type of vegetation, temperature, humidity, wind and fuel moisture content. The Central Valley experiences long, dry summers. The major urban / wildland interface areas of moderate fire risk include the Ash Slough and Berenda Slough corridors. The vegetative habitat associated with Ash or Berenda Sloughs can be highly flammable during the warm, dry summer months. Urban development (e.g., residential, commercial land uses) adjacent to these corridors will increase the potential risk of personal injury or property damage from a wildland fire.

The California Department of Forestry and Fire Protection (Cal Fire) Fire Hazard Sensitivity Scale utilizes three criteria in order to evaluate and designated potential wildland fire hazard zones in the State. The criteria are fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture content) and topography (degree of slope). Cal Fire, pursuant to California Public Resources Code Section 4201 – 4204, has mapped fire hazard severity zones in California for both state and local fire agency responsibility areas. According to the fire hazard map applicable to the 2040 General Plan Planning Area, the majority of the 2040 General Plan Planning Areas is unzoned by Cal Fire and is free from major wildland fire hazards. However, there are small confined areas within the2040 General Plan Planning Area mapped by Cal Fire as moderate fire hazard severity zones.[5] In general, areas designated as moderate fire hazard severity zones are limited to vegetative habitat associated with Ash or Berenda Slough. As of January 1, 2008 any development in designated fire hazard severity zones requiring a building permit must comply with the Wildland-Urban Interface Fire Area Building Standards.

[5] California Department of Forestry and Fire Protection Draft Fire Hazard Severity Zones in Local Responsibility Area, September 17, 2008.

ELECTROMAGNETIC FIELDS

Public concerns have been raised regarding electromagnetic fields (EMFs) emanating from high tension power lines and other public electrical facilities. Although there has been a great deal of research dedicated to the study of EMFs over the years, the research has yielded no definitive conclusions. EMFs are imperceptible energy emissions located at the low end of the electromagnetic spectrum, produced by alternating current as it passes through electrical wires. EMFs are comprised of two components, an electrical charge and a magnetic attraction. Low frequency EMFs are less damaging to living tissue cells than higher frequency forms of radiation such as x-rays, microwaves, or ultraviolet rays, which contain greater amounts of energy.

Two Pacific Gas and Electric Company high voltage power transmission line corridors in residential areas traverse the 2040 General Plan Planning Area. One 115 kilovolt (kv) high voltage power transmission line corridor, an east – west trending corridor, extends west from the Plan Area's easterly most boundary to an electrical substation west of Highway 99, between Highway 99 and South Chowchilla Boulevard. This high voltage power transmission line corridor is approximately one-half (½) mile south of East Robertson Boulevard.

A second Pacific Gas and Electric Company high voltage power transmission line corridor, a diagonal northwest – southeast trending corridor, extends from the southwesterly corner of South Manzanita Road and East Robertson Boulevard towards the Chowchilla River. This is high voltage power transmission line conveys 220 kv.

Pacific Gas and Electric Company has no official setback recommendations for development adjoining power transmission line easements. The California Department of Education, School Facilities Planning Division has established limits for locating school sites near high voltage power transmission line easements. The California Department of Education has established the following setbacks for locating any part of a school site property line near the edge of high voltage transmission line easement: 100 foot setback for 50 to 133 kv power lines; 150 foot setback for 220 to 230 kv power lines; and 350 foot setback for 500 – 550 kv power lines.[6]

HAZARDOUS MATERIALS

Hazardous materials are transported, stored and used in Chowchilla for a variety of purposes. The most common consumers and / or producers of hazardous materials include manufacturers, agriculture, automotive related services and medical. Hazardous waste is also produced and / or temporarily stored by business in City. Individual households utilize smaller amounts of hazardous materials, including, but not limited to, cleaners, herbicides, pesticides and paint. When used and disposed of properly, many

[6] California Department of Education, School Facilities Planning Division, School Site Selection and Approval Guide, 2000.

hazardous materials can provide needed or desired ends, but improper use, as well as accidents associated with the production, use and transport of hazardous materials can lead to health and safety risks.

Large consumers and transporters of hazardous materials are monitored and regulated by the United States Environmental Protection Agency (EPA) and other federal, state and local regulatory agencies, such as the California State Department of Toxic Substance Control. The primary federal legislation is the Resource Conservation and Recovery Act (RCRA) which administered by the EPA. RCRA places reporting, permitting and operational control requirements on those who generate, treat, store or dispose of hazardous waste. The Superfund Act is a federal designed to protect the environment from risks created from previous disposal practices. Adopted by Congress in 1980, the law also known as the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), created a long-term trust to provide funding to remediate and prevent damage from improper hazardous materials disposal.

The federal Hazardous Materials Transport Act, administered by the United States Department of Transportation, requires detailed manifesting and reporting, and packaging requirements of hazardous material shipped on United States highway system. The Clean Water Act, also administered by the EPA, controls the discharge of hazardous materials or hazardous waste to waters of the United States or to local wastewater treatment plants.

A number of state agencies through legislation accept delegation of federal responsibility for hazardous materials and hazardous waste management in California. The Porter – Cologne Water Quality Act allows the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) to accept responsibility for the implementation of the Clean Water Act. The Hazardous Waste Control Act of 1977, and recent amendments to its implementation regulations, has given the Department of Health Services (DHS) the lead role in administering the Resource Conservation and Recovery Act of 1976 (RCRA) program. The Hazardous Substances Highway Spill Containment Act gives the California Highway Patrol (CHP) the authority to respond to spills of hazardous materials on the state's highways.

The California Department of Education, School Facilities Planning Division has established guidelines for locating school sites within one-quarter mile of facilities that might reasonably be anticipated to emit hazardous air emissions. For a school site is to be developed within one-quarter mile of a facility emitting hazardous air emissions, the school district (i.e., Chowchilla Elementary School District, Chowchilla Union High School District) is required to make the findings that the health risks do not or will not constitute an actual or potential endangerment of public health at the school site or that corrective measures will be taken prior to occupancy of the school site..[7]

[7] California Department of Education, School Facilities Planning Division, School Site Selection and Approval Guide, 2000; and California Education Code Section 17213(a).

As January 2007, only one site in 2040 General Plan Planning Area is identified in the EPA's Toxic Release Inventory database – Certainteed Corporation.[8] This site, a fiberglass manufacture facility located in the Heavy Industrial designated area south of Berenda Slough, is known to release hazardous emissions into the air. The EPA's Toxic Release Inventory reporting program closely monitors the emissions from this facility to ensure that their annual limits allowed under federal regulations are not exceeded and that community's public health and safety are protected.

Hazardous Waste Treatment, Storage and Disposal Facilities

At the local level, the Madera County Hazardous Waste Management Plan (HWMP) in compliance with applicable federal, state and local government laws regulates the management of hazardous waste treatment, storage, and disposal (TSD) facilities in the County of Madera. The Madera County HWMP lists CertainTeed Corporation as a hazardous waste producer. CertainTeed is the only licensed TSD facility in Madera County. CertainTeed does not accept hazardous waste from any other source, and contains its waste temporary for transport and disposal outside the County of Madera. The nearest major hazardous waste disposal facility is located in western Kings County, the Kettleman Hills facility, about 80 miles southwest of the City.

The Madera County HWMP has identified general areas within the County where a TSD facility may be sited. The Madera County HWMP lists as a feasible site for future TSD facilities the Chowchilla Industrial Park. Although contained in the Madera County HWMP as a potential site, the City of Chowchilla has significant reservations as to the permitting, management and monitoring of such a site in or near the City. Madera County's current intent is to site TSD facilities only in heavy industrial or general agriculture zones as a conditional use if certain criteria can be met. The broad siting criteria include review for:

- High Hazard Areas - Seismic; floodplains; wetlands; habitat of endangered species; soils stability; major recharge areas for aquifers.

- Public Safety - Distance from residences; distance from immobile populations; proximity to major transportation routes; public health and safety benefit to the County.

- Physical Limitations of the Site Area - Permeable strata and soil; non-attainment air quality areas; prime agricultural lands; depth of groundwater.

- Location-Specific Criteria - Proximity to public facilities; proximity to waste generation streams; industrial, commercial and specially zones lands; recreation cultural and aesthetic areas; mineral resources areas, military lands; other State, Federal and Indian lands.

[8] United States, Environmental Protection Agency, Toxic Release Inventory – Release Year 2006 PDR data set frozen on October 12, 2007 and released to the public February 21, 2008.

The Kettleman Hills facility provides adequate capacity and sufficient projected capacity for management of Madera County's hazardous waste stream, and so no additional hazardous waste facilities are proposed in Madera County or near the City of Chowchilla at this time.

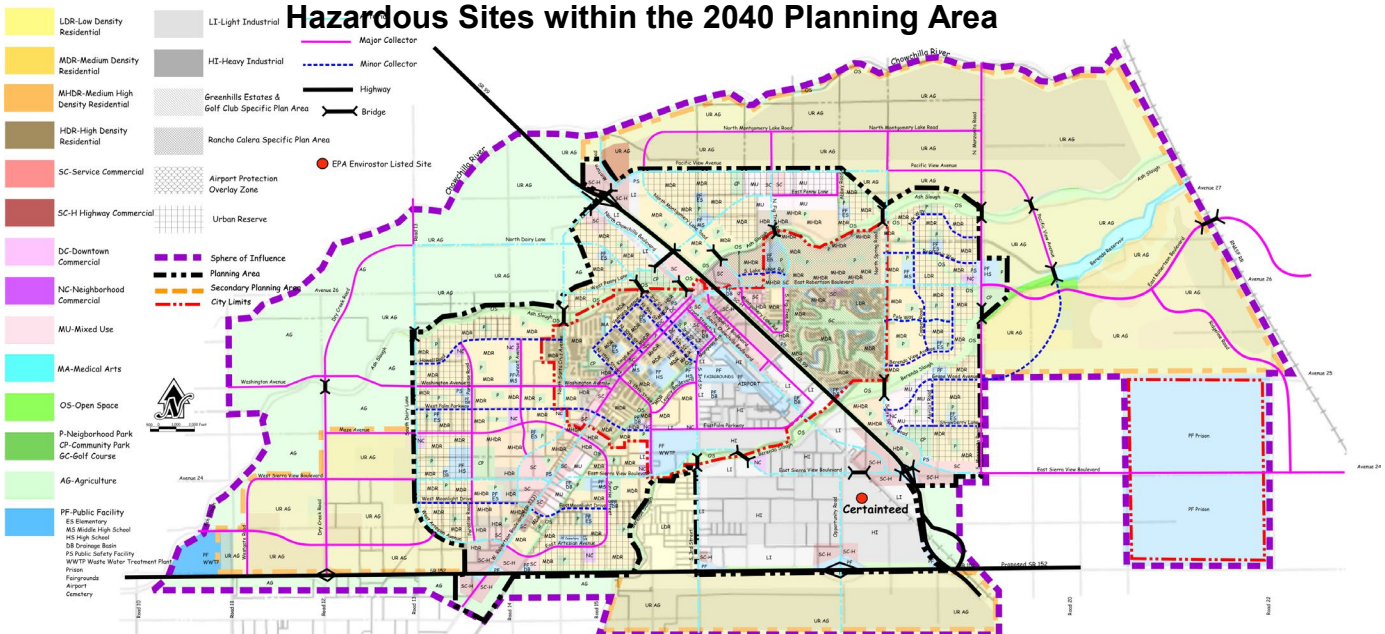
Hazardous / Contaminated Sites

With Ash and Berenda Sloughs traversing the City, the City's proximity to the Chowchilla River, and more importantly, given the local groundwater basin supplies potable water, improper use and disposal of hazardous materials poses real threats to the City's well-being. Sources of possible contaminants include septic tanks, present and past agricultural and urban business practices. As detailed in this General Plan's Public Facilities, and Open Space and Conservation Elements, the City is located within San Joaquin River Hydrologic Region and Groundwater Basin and extracts all of its water supply from the Chowchilla Sub-basin. The groundwater supplied to the City typically meets or exceeds state and federal water regulations and guidelines.

As noted earlier in this Element, the use, storage, handling, transport and disposal of hazardous materials is carefully regulated by federal, state and local agencies. List of known hazardous or contaminated sites are reported and available through EPA, RWQCB, California Department of Toxic Substance Control (DTSC) and Madera County Department of Environmental Health. There is only one reported present or past activity that has led to the contamination of properties within the 2040 General Plan Planning Area. It can be found on the Certainteed property, located within the City's heavy industrial zone; please see Figure PS - 4 on the following page. According to the EPA's Envirostor Database, a voluntary action cleanup was undertaken in June of 1995 for an unspecified contaminate. The facility investigation report was approved. Nevertheless, site specific hazardous material contaminated conditions may exist within the 2040 General Plan Planning Area which has not yet been identified. In addition, laws and regulations pertaining to the handling, storage and disposal of hazardous materials, as well as broadening definition of hazardous materials continue to evolve. Past and possibly present business practices of handling, storage, use and disposal of materials may in the future be defined a site specific area contaminated.

Figure PS - 4

Hazardous Sites within the 2040 Planning Area



An area of special concern regarding potential contaminated sites hazardous materials is residual affects of aerial and ground-based spraying of agricultural crops. These methods of herbicide and pesticide applications require regular washing and rinsing of tanks after applications. Over the years, residues have may have accumulated and toxic problems have developed. The City of Chowchilla does not allow aerial operators based at the Chowchilla Municipal Airport to wash or rinse tanks on the airport premise.

As part of the development approval process the importance of site assessments, especially where the presence of potentially hazardous materials is suspected, can not be overlooked. Many lending institutions now require a "Preliminary Site Assessment" (PSA) as part of their due diligence in making development loans. The City of Chowchilla, as part of its development approval process, may require a PSA as part of the initial environmental assessment to ensure potentially hazardous conditions do not exist, or to trigger additional study to abate conditions where they do exist.

Agricultural Spraying

A number of herbicides and insecticides, which are classified by the California Department of Food and Agriculture (DFA) as potentially injurious to humans, are used in the agricultural fields surrounding the City. Although risks from agricultural chemicals are predominately occupational, some hazards to neighboring land uses may occur during application. Some chemicals utilized in agricultural practices require a buffer zone from residential and other sensitive land uses (i.e., schools, parks). Use of any of a list of hundreds of insecticides and herbicides which are classified as "injurious" by the DFA is prohibited without issuance of a permit.

Transport of Hazardous Materials

Transportation is among one of the greatest risks associated with hazardous management programs. The potential for a truck or rail accident involving hazardous materials on state highways or rail lines passing through the City or even on the City's surface streets is always present. Even though hazardous materials pass through Chowchilla on state highways, rail lines and surface streets, the City has no direct authority to regulate the transport of hazardous materials on state highways, or rail lines.

The transport of hazardous materials on state highways and rail lines are governed by regulations of the United States Department of Transportation and the California Highway Patrol. Federal law requires railroads accept all hazardous materials shipments that are offered them. When transporting explosives, inhalation hazards or other potentially dangerous materials, and highway route-controlled quantities of radioactive materials, safe routing and safe stopping places are required, and drivers are required to display warning placards or markings while hauling hazardous materials.

The Madera County HWMP minimizes the risk of transportation related incident by designating routes for hazardous material transport. The Madera County HWMP defines roads in the County based on a three-tier classification – minor roads; collectors and arterials; and state and interstate routes. The Madera County HWMP suggests that transport of hazardous materials should be maximized on the highest tier roads, or highways and freeways, and minimized on the lowest tier, or minor roads, to the extent feasible. The Madera County HWMP designates two routes within the 2040 General Plan Planning Areas for transporting hazardous materials - Highways 99 and152. Highway 233 (West Robertson Boulevard), which travels through the center of the City's commercial district and by an elementary school, is not designated as route for the transport of hazardous materials. The transport of hazardous materials on West Robertson Boulevard is not permitted by the City.

TRANSPORTATION NETWORK

Chowchilla's multi-faceted transportation network – regional and local streets, highways, rail lines and airport – provide much needed mobility to citizens, visitors, businesses, and the movement of goods. At the same time, all of these elements of the City's transportation network pose potential safety risks to users and those in the vicinity. The following focuses on the potential risks of the City's transportation network.

Chowchilla Municipal Airport

The risk of accidents involving aircraft is an important consideration in planning around airports. The Federal Aviation Administration (FAA) is responsible for enforcement of Title 14 Code of Federal Aviation Regulations. Part 77 of the Federal Aviation Regulations (FAR), Objects Affecting Navigable Airspace, establishes standards and notification requirements for the purpose of protecting airspace required for aircraft operations at an airport. These regulations require the FAA be notified of certain proposed construction or alteration of objects, whether permanent, temporary or natural growth, within a specified vicinity of an airport.

The State of California regulates airports under the authority of the State Aeronautics Act (California Public Utility Code Section 21670 et. seq.). The State of California regulates airports under the authority of the Airport Land Use Commission Law, Chapter 4 and Article 3.5, California Public Utilities Code. This law is implemented through the Airport Land Use Commissions (ALUC), which are required in every county with a public use airport or with an airport served by a scheduled airline. Under the provisions of the Law, the ALUC has certain responsibilities conferred upon it and specific duties to perform. In 2002 the California Division of Aeronautics amended the California Airport Land Use Planning Handbook, which relaxed density standards for the "Traffic Pattern Zone" or Zone "C" in the 1993 Madera County ALUCP. According to the new guidance there is "no limit" to residential density in this Zone and the population can not exceed 100-150 persons per acre which is well below the population expected in dwelling units at less than 6 per acre. The Madera ALUCP standards are outdated and should not be amended to reflect the current standards.

The ALUC is responsible for preparing a comprehensive airport land use plan for airports within its jurisdiction. The plan must reflect the anticipated growth of the airport over a 20-year horizon as a minimum. The airport land use plan includes airport safety zones which specify limitations on building heights, restrictions on the use of the land, and standards for building construction. Airport safety zones are established to minimize the number of people subject to potential aircraft accidents by limiting the type of development that is allowed around airports through zoning regulations. The zoning regulations are implemented by the ALUC. The City of Chowchilla generally accepts the Madera County ALUC policies and standards for development. However, as allowed by law, the City reserves the right to overrule the decision of the Madera County ALUC should certain types of development which may conflict with the Madera County ALUC's Airport Land Use Compatibility Plan be favored by the City. This is particularly true with the outdated standards in the current ALUC.

Figure PS - 5 illustrates the aircraft hazard areas for the Chowchilla Municipal Airport. These zones establish areas where the risks of an aircraft crash are determined in relation to airport approach and departure flight patterns. Flight patterns illustrated in Figure PS - 5 impact the City's residential neighborhoods and central commercial district south of West Robertson Boulevard, between South 5th street and Highway 99.

Figure PS - 5

Airport Safety Zones and Influence Areas

As illustrated in Figure PS - 5, the Airport Land Use Compatibility Plan adopted by the Madera County Airport Land Use Commission in December 1993 has identified three zones that influence airport safety and land use compatibilities at as well as in the vicinity of the Chowchilla Municipal Airport.

The Chowchilla 2040 General Plan Land Use Diagram (Figure LU-1) in the Land Use Element of this General Plan has been configured to avoid new intensive land uses within the airport influenced areas. Development controls including limiting development within areas subject to excessive noise levels and limiting the intensity and height of development within aircraft hazard zones are embraced by policies in this General Plan. Airport operations as well as land use development limitations and restrictions as it relates to noise and compliance to noise standards is addressed in this General Plan's Noise Element.

Union Pacific Railroad Corridor

Railroad corridors create potential public safety challenges at grade railroad crossings and along rail right-of-ways. The Union Pacific Railroad Company (UP) main rail corridor traverses the City in a northwest / southeast trending direction, roughly parallel with Highway 99. Several rail spurs and sidings from the UP main rail corridor serve the City's industrial area, west of Highway 99.

All UP railroad crossings in the 2040 General Plan Planning Area are at-grade crossings. The UP at grade railroad crossings in Chowchilla pose pubic safety challenges in addition to localized traffic congestion, and will continue to pose potential safety challenges in the future as rail traffic is expected to increase in the future. UP averaged 20 freight trains / day in 2008 along the main rail corridor and UP that by 2040 rail traffic along the main rail corridor to grow to an estimated 26 trains / day.

Given the expense to achieve grade separations (e.g., over-crossing, under-crossing), other measures may need to be pursued, including integrating roadway – rail traffic control systems and roadway traffic management systems, and provide improved information warning of trains to motorists and pedestrians.

To lessen vehicular, bicyclist and pedestrian interface with rail activity, as well as improve east – west circulation flow in the community, the 2040 Chowchilla General Plan Circulation Diagram (refer to Figure CI – 1) identifies three grade-separated UP rail corridor crossing in the 2040 General Plan Planning Area. Two UP railroad corridor over-crossings are planned north of Ash Slough one at the reconstructed Minturn Interchange and Highway 99 and the second at East Penny Lane. One UP railroad corridor over-crossing is planned south of Berenda Slough at East Sierra View Boulevard. No UP rail corridor grade separations are planned between Ash and Berenda Sloughs as there are distance limitations and airport height restrictions.

Another public safety hazard associated with railroad operations includes potential railroad car derailment. The 2040 General Plan also minimizes potential railroad

derailment concerns and public safety risks by not designating public gathering places (e.g., park, school) adjacent to the UP main rail corridor.

Pedestrian and Bicycle Facilities

As the City looks to encourage increased pedestrian and bicycling activity to achieve its transportation goals, pedestrian and bicyclist safety will require attention. While vehicular transportation needs tend to get the most attention – or at least the greatest amount of pavement – walking and bicycling represent important travel modes that are more environmentally benign and offer physical exercise. An environment safe for walking and bicycling is considered to be a key element of successful residential and commercial neighborhoods. Successful neighborhoods are those that offer safe pedestrian and bicycle routes to commercial centers, schools, parks and to employment centers.

FIRE PREVENTION AND PROTECTION

Structural and automobile fires represent the most common types of fire in urbanized areas and can be caused by a variety of human, mechanical and natural factors. Urban fires have the potential to spread to other structures or areas, particularly if not extinguished promptly. Proactive efforts, such as fire sprinkler systems, fire alarms, fire resistant construction materials and methods, can collectively lessen the likelihood and reduce the severity of urban fires. Areas of open space and vegetation pose the greatest threat for wildland fire hazards.

The City of Chowchilla Volunteer Fire Department (CVFD) serves the City of Chowchilla and its surrounding unincorporated area. The CVFD is solely a volunteer unit with a paid full time Fire Chief operating from a single fire station – Station 1. Station 1 is centrally located in the City on North First Street. Fire dispatch for CVFD is handled through the City of Chowchilla Police Department. It is the CVFD desire is to maintain a ratio of 2.8 firefighters per 1,000 population. The City's acceptable standard for responding to an emergency service call is five minutes. Most of the City's present development lies within a five minute emergency response time service area from Station 1.

Cal Fire provides services to the unincorporated area surrounding the City of Chowchilla through a contract with Madera County. Madera County contracts with Cal Fire for prevention and suppression services in the unincorporated areas of Madera County. Given the level of urban development and the uncertainty of boundaries near the City limits, a joint response including City of Chowchilla Volunteer Fire Department is part of the mutual aid agreement with Madera County. Madera County Fire Department Station 2 is located in the City of Chowchilla on North First Street. Other County Fire Department stations may also respond to a fire depending on the location and ability to commit equipment. Fire dispatch for Madera County Fire Department is handled by Cal Fire.

The CVFD and Madera County also have cooperative agreements with the California Department of Corrections for fire protection services. The CVFD will respond to a fire emergency at either the California Department of Corrections' Central Valley Women's Facility or Valley State Prison for Women.

For purpose of underwriting fire insurance, communities are classified with respect to their fire defense and physical characteristics. These classifications are referred to as Insurance Services Office (ISO) ratings. The ISO ratings range on a scale of 1 to 10. An ISO rating of 1 represents the highest level of fire protection and an ISO rating of 10 represents the lowest level of fire protection. A community's ISO rating takes into account water availability and pressure, fire department capabilities (e.g., available firefighters and equipment, number and location of public safety facilities), access, effectiveness of the community's land use regulations, fire codes and building standards, hazards and climate. The availability of an adequate water supply and delivery system is a major consideration. In January 2009, the City of Chowchilla had an ISO rating of 5.

Critical to the provision of fire protection resources include the establishment of response and staffing standards, as well as the provision of the necessary facilities and equipment to adequately serve the City. As the 2040 General Plan Planning Area develops, it is the City's desire to add full-time firefighters and to add new strategically placed public safety facilities (fire and police station) in the community. Additional fire fighting equipment will also be required as urban growth demands new public safety facilities stations to be constructed. The number and kind of vehicles available to CVFD will depend on the type and form of land uses within the City.

The City's next public safety facility, Station 2, is planned for the eastside of Highway 99 in the area of East Robertson Boulevard and Fig Tree Road. Station 2 will aid in reducing response times to the development areas east the Union Pacific Railroad corridor. Other public safety facilities are planned to serve the community as 2040 General Plan Planning Areas develops. Station 1 and the general location of future public safety facilities that are to serve the 2040 General Plan Planning Area are identified in Figure LU-1, City of Chowchilla 2040 General Plan Land Use Map. The existing fire station and the general location of future public safety facilities are identified as PS (Public Facility – Public Safety Facility). Future public safety facilities and service areas are designated to allow for emergency services equipment and personal to respond to an emergency call within five minutes.

LAW ENFORCEMENT

Law enforcement services for the City of Chowchilla are provided by the Chowchilla Police Department (CPD). Historically, the CPD has been centralized with its headquarters building located on Trinity Street. The CPD facilities are undersized for the number of police officers, dispatch employees, prisoner holding, and records retention requirements. Additional space is needed to accommodate existing law enforcement personnel and to meet the needs of law enforcement personnel and services as the City's population increases and Chowchilla's City Limits is extended.

The City is evaluating alternatives for the expansion or relocation of the police facility. Public safety facilities (fire and police stations) can provide additional space and improved response times. Cost of the expansion or relocation will have to be addressed by a combination of new development and existing City financial resources. Expanding personnel requires significant capital investment for equipment such as vehicles, law enforcement supplies, and office space. The CPD dispatches for both City police and fire services. In January 2009, the ratio of sworn officers per 1,000 population was 1.3. The City's desired ratio of sworn officers per 1,000 population is 1.5 and to maintain an emergency response time of five minutes or less for all priority calls.

The CPD headquarters and the general location of future public safety facilities that are to serve the 2040 General Plan Planning Area are identified in Figure LU-1, City of Chowchilla 2040 General Plan Land Use Map. The CPD headquarters and the general location of future public safety facilities are identified as PS (Public Facility – Public Safety Facility). Future public safety facilities and service areas are designated to allow for emergency services equipment and personal to respond to an emergency call within five minutes.

The Madera County Sheriff's Department is responsible for law enforcement in the unincorporated areas of Madera County. The County's Sheriff's headquarters building is located on Road 28 in the City of Madera. A portion of the CPD headquarters building serves as a substation for the Madera County Sheriff's Department Deputies patrolling the unincorporated areas around Chowchilla and northern Madera County. In the event that the Sheriff's Department requires assistance or is unable to respond, the CPD will dispatch officers as needed, at the request of the Sheriff's Department watch supervisor.

The California Highway Patrol (CHP) is the primary law enforcement agency providing traffic safety and management as well as law enforcement in the unincorporated areas of Madera County. The "Madera Area" CHP office is located on Airport Drive in the City of Madera

EMERGENCY AND DISASTER PREPAREDNESS

Major public safety challenges require the coordinated response of multiple local and regional agencies. As required by state law, Chowchilla has established emergency preparedness procedures and has adopted an "Emergency Plan" to guide City's activities in the case of a major emergency. The Emergency Plan, contained in Section 2.28 of the Chowchilla Municipal Code (Emergency Services Act), provides for Disaster Council powers and duties. Chowchilla Municipal Code allows the Mayor to designate a Director of Emergency Services, which is typically the City Administrator. The City's Emergency Plan is a collection of Municipal Code Sections that define the responsibilities of City staff in response to emergency situations. The Plan presents detailed responsibilities for the Director of Emergency Services. The Emergency Plan does not address specific emergency situations; rather, it provides the framework for coordinating efforts throughout the City staff to provide the greatest level of assistance, guidance, and support to the community in response to a catastrophic event.

To supplement the City of Chowchilla emergency response, Madera County and the City of Chowchilla cooperate in the Multi-Hazard Functional Plan which serves as the County's and City's emergency response plan in case of catastrophic disaster.

Establishing and maintaining disaster evacuation routes requires the cooperation of cities and the County. There are similar and mutually supporting relationships established for the various public safety activities. Fire suppression and police services are excellent examples of sharing resources in situations where life and property are endangered. Should Madera County experience a natural or manmade catastrophe, the Multi-Hazard Functional Plan will serve as the County's and City's emergency response plan. The City of Chowchilla has established its own internal emergency response plan which is headed by the City Administrator.

PUBLIC SAFETY GOALS, POLICIES AND IMPLEMENTATION MEASURES

GOALS

- **Minimize community exposure to harmful impacts caused by natural or man made hazards.**
- **Minimize community exposure to risks associated with the transport, distribution, use and storage of hazardous materials.**
- **Minimize community exposure to toxic air pollutant emissions and noxious odors from industrial, manufacturing and processing facilities.**
- **Provide adequate public safety facilities and services in a timely manner to meet existing and planned growth requirements.**

OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

The following objectives, policies and implementation measures are organized into the categories and sequence outlined above. The categories, in the order they are presented, are Seismic, Floods, Fire Prevention, Law Enforcement, Hazardous Material, Transportation and Electromagnetic Fields.

SEISMIC

Objective PS 1

Minimize risks of potential property damage and personal injury posed by geologic or seismic activity.

Policy PS 1.1

Areas within the 2040 General Plan Planning Area know to be subject to geologic or seismic instability (e.g., liquefaction, slumping) shall be designated as Open Space to prohibit development and avoid creating a potential public safety hazard.

Implementation Measure PS 1.1.A

The City of Chowchilla shall rely on the most current and comprehensive geologic hazard mapping available to assist in identifying and designating areas of known or questionable geologic and seismic hazard conditions Open Space on the 2040 General Plan Land Use Diagram, as well as for evaluating potential geologic or seismic hazards associated with new and redevelopment projects.

Policy PS 1.2

Geologic and engineering studies are required for all new and redevelopment projects where known or questionable geological or seismic hazard conditions exist.

Implementation Measure PS 1.2.A

Where questionable geological or seismic conditions exist, the City of Chowchilla shall require geologic and soils studies to identify potential hazards and, if applicable, measures to mitigate identified hazards as part of the approval process for all new or redevelopment projects prior to issuing grading permits.

Policy PS 1.3

Geologic and engineering studies are required for all public and critical facility projects (e.g., school, hospital, utility substation, water storage reservoir, wastewater treatment facility, public safety building, bridges and overpasses).

Implementation Measure PS 1.3.A

All new and redevelopment projects, utilities, public or critical facility projects that required geologic and engineering studies shall be designed, sited and constructed in a manner that mitigates the risks of potential property damage and personal injury associated with the specific geologic and / or seismic conditions identified in the project geologic and engineering studies to minim shall identify shall be constructed in a manner that mitigates site specific geotechnical challenges and minimizes the risk to the public from seismic hazards.

Policy PS 1.4

Ensure new and redevelopment projects comply with adopted seismic and geotechnical requirements of the Uniform Building Code.

Implementation Measure PS 1.4.A

The City of Chowchilla shall continue to incorporate appropriate earthquake prevention standards, as they become available, into the City uniform building codes and require all new structures be engineered to meet seismic safety code standards.

Policy PS 1.5

Support and encourage seismic upgrades to older homes and structures in the City of Chowchilla that may be structurally deficient.

Implementation Measure PS 1.5.A

The City of Chowchilla shall identify unreinforced masonry buildings and other buildings that would be at risk during seismic events and continue to promote strengthening of these buildings.

Implementation Measure PS 1.5.B

The City of Chowchilla shall identify and promote programs that encourage property owners to protect their homes and structures against seismic hazards.

Implementation Measure PS 1.5.C

The City of Chowchilla shall provide to the public an information guide for property owners on how to reinforce or rehabilitate existing homes and structures more seismic resilient.

Implementation Measure PS 1.6.D

The City of Chowchilla shall provide the public with information on how to be prepared for a seismic event, and minimize related damage or threat to health and public safety.

FLOODING

Objective PS 2

Minimize risks of potential property damage and personal injury from flooding.

Policy PS 2.1

The City of Chowchilla shall cooperate with appropriate local, state and federal agencies to address local and regional flood issues.

Policy PS 2.2

Development of urban uses, with the exception of passive recreation use areas and pedestrian / bicycle trails within a floodway or floodplain subject to a 100-year flood event shall be prohibited.

Implementation Measure PS 2.2.A

New and redevelopment projects shall provide site plans that identify applicable floodways, floodplains or other potential flood hazards.

Implementation Measure PS 2.2.B

The City of Chowchilla shall only approve new residential, commercial or industrial, or redevelopment projects when the project is shown to be protected from a 100-year flood.

Policy PS 2.3

Preserve floodways and floodplains for non-urban uses with the exception of passive or active recreational development may be allowed in a floodplain with appropriate measures that avoid or minimize damage to recreation or structural improvements.

Implementation Measure PS 2.3.A

The floodways of Ash and Berenda Sloughs, to the extent feasible, shall be preserved in their natural state, and shall not be channelized or otherwise altered. Floodways should remain undeveloped and allowed to function as natural flood protection features in the City where flood waters are temporary conveyed during storm events.

Implementation Measure PS 2.3.B

The floodways of Ash Slough or Berenda Slough are not to be modified to accommodate new or redevelopment projects in the City beyond the installation of storm drain outfalls, utilities or bridges, or to restore floodway capacity, stabilize slough banks or to restore plant or wildlife habitat.

Policy PS 2.4

Ensure that potential flooding impacts, including on-site flood damage, and potential inundation, are adequately addressed through the environmental review process and appropriate mitigation is imposed.

Implementation Measure PS 2.4.A

The City of Chowchilla's development review process shall ensure no residential, commercial or industrial land use project is constructed within floodway or a 100-year floodplain.

Implementation Measure PS 2.4.B

The City of Chowchilla's development review process shall ensure no public or private infrastructure (e.g., bridge), or utility project constructed within a floodway or a 100-year floodplain will compromise the health, safety, and welfare of the City.

Policy PS 2.5

Establish and maintain evacuation routes for areas that could be affected by flooding or dam failure, with special emphasis on critical and emergency facilities.

Implementation Measure PS 2.5.A

Roads that provide access to urban uses, in particular to critical facilities (e.g., school, hospital, utility substation, water storage reservoir, wastewater treatment facility, public safety building, bridges and overpasses) should also be prohibited within a floodway or floodplain which is subject to 100-year flood.

Objective PS 3

Minimize risks of potential property damage and personal injury in the event of a dam failure.

Policy PS 3.1

The City of Chowchilla, in cooperation with the County of Madera, shall continue to maintain a disaster relief plan that addresses potential flood inundation in the areas of Eastman Lake or Berenda Reservoir in the event of a dam failure.

Implementation Measure PS 3.1.A

The City of Chowchilla shall review evacuation plans in the City's emergency management plan, as periodically amended, for the inundation areas regularly to ensure they are accurate and up to date.

Implementation Measure PS 3.1.B

The City of Chowchilla shall work the California Department of Water Resources to ensure adequate funding is allocated for inspections of Buchanan and Berenda Dams, and that inspections and required maintenance are being carried out.

Implementation Measure PS 3.1.C

The City of Chowchilla shall maintain an emergency evacuation plans in the City's emergency management plan for the safe evacuation of people from areas subject to inundation from failure of Buchanan and /or Berenda Dam. Plans shall be reviewed annual and, if necessary, updated to ensure the evacuation plans are accurate and up to date.

Implementation Measure PS 3.1.D

The City of Chowchilla shall investigate and implement, when feasible, measures for urban development in a dam inundation area that offers protection from flooding and provide the public with information on how to be prepared for a flood in the event of a dam failure.

FIRE PREVENTION AND RESPONSE

Objective PS 4

Minimize risks of potential property damage and personal injury from wildland fires.

Policy PS 4.1

New and redevelopment projects in a designated moderate fire hazard severity zone shall comply with the Wildland-Urban Interface Fire Area Building Standards.

Implementation Measure PS 4.1.A

The City of Chowchilla shall evaluate all new and redevelopment projects located adjacent to Ash or Berenda Sloughs to assess it vulnerability to fire and it potential as source of fire.

Policy PS 4.2

New and redevelopment projects in which the elimination of a wildland fire hazard would require the significant removal of, or damage to, established trees and other riparian vegetation associated with Ash Slough or Berenda Slough shall not be permitted.

Implementation Measure PS 4.2.A

The City of Chowchilla shall review all new and redevelopment projects proposed within 500 feet of top of bank of Ash or Berenda Slough for conformity with the Wildland-Urban Interface Code. Development within designated Fire Hazard Severity Zone shall be in compliance with California Public Resources Code Section 4291.

Objective PS 5

Protect property in urbanized areas from fire hazards.

Policy PS 5.1

Ensure that new fire stations, personnel and equipment are provided to sufficiently meet the needs of the City as it grows in size and population.

Implementation Measure PS 5.1.A

The City of Chowchilla shall endeavor to meet / maintain a response time of five (5) minutes for all areas within the City Limits.

Implementation Measure PS 5.1.B

The City of Chowchilla shall endeavor to meet and maintain a ratio of 2.8 fire personnel per 1,000 population.

Implementation Measure PS 5.1.C

The City of Chowchilla shall integrate fire safety considerations in the planning review and approval process.

Implementation Measure PS 5.1.D

The City of Chowchilla shall acquire land and construct additional fire stations to maintain acceptable response times throughout the 2040 General Plan Planning Area.

Implementation Measure PS 5.1.D

Fire stations and facilities shall be considered consistent with all land use designations in the General Plan and all zoning districts. The station's

architectural design and landscape of new fire stations shall be complementary with surrounding land uses.

Policy PS 5.2

New and redevelopment projects shall mitigate fire hazards related to urban development or patterns of urban development as they are identified.

Implementation Measure PS 5.2.A

The City of Chowchilla shall analyze the additional service demands for fire services and, as necessary, require new development to provide funding to meet the cost of expanding the service.

Implementation Measure PS 5.2.B

The City of Chowchilla shall require property owners to remove fire hazards, structures, materials and debris as directed by the Fire Department.

Policy PS 5.3

Ensure that potential fire impacts are adequately addressed through the environmental review process and appropriate mitigation is imposed.

Implementation Measure PS 5.3.A

The City of Chowchilla development review and approval process shall continue to involve the Chowchilla Volunteer Fire Department.

Implementation Measure PS 5.3.B

The City of Chowchilla's development review process shall ensure no residential, commercial or industrial land use project is constructed without adequate fire services, personnel, equipment available.

Policy PS 5.4

Pursue strategies to improve the City of Chowchilla's Insurance Service Office (ISO) rating.

Implementation Measure PS 5.4.A

The City of Chowchilla shall provide fire station facilities, equipment and staffing necessary to improve the City's ISO rating of 5.

Implementation Measure PS 5.4.B

The City of Chowchilla shall identify non-contiguous streets and other barriers to rapid response and pursue measures to eliminate the barriers.

Implementation Measure PS 5.4.C

The City of Chowchilla shall develop and provide public outreach and education to the community regarding fire safety and prevention.

Policy PS 5.5

The City of Chowchilla shall continue to cooperate with the Madera County Fire Department in the provision of fire protection services through a mutual aid agreement.

Policy PS 5.6

The City of Chowchilla shall require that new development provide adequate access for emergency vehicles, particularly firefighting equipment, as well as provide evacuation routes, where applicable.

Policy PS 5.7

The City of Chowchilla shall ensure adequate fire flow requirements are maintained throughout the City.

Policy PS 5.8

The City of Chowchilla shall consider protection from fire hazards in all planning, regulatory and capital improvement programs.

Policy PS 5.9

The City shall continue to promote public awareness and prevention of fire hazards through fire prevention programs.

Policy PS 5.10

The City of Chowchilla shall maintain a weed abatement program to ensure clearing of dry vegetation. Weed abatement activities shall be conducted in a manner consistent with all applicable environmental regulations.

Implementation Measure PS 5.10.A

Continue with an intensive weed abatement program to minimize fire hazards near urban uses.

Objective PS 6

Provide high quality emergency services to protect life and property in the City of Chowchilla.

Policy PS 6.1

Provide for efficient and cost effective fire and emergency medical service to minimize potential injury, loss or destruction to persons or property.

Implementation Measure PS 6.1.B

Potential fire hazards shall be identified in project review and shall be mitigated to an acceptable level.

Implementation Measure PS 6.1.C

To the extent feasible, the City of Chowchilla shall maintain Fire Marshall inspection services to ensure that new and remodel construction complies with

Uniform Fire Code requirements, and that commercial and industrial buildings are meeting minimum fire prevention and safety requirements.

Implementation Measure PS 6.1.D

Maintain mutual aid with Madera County.

Implementation Measure PS 6.1.E

Maintain emergency fire dispatch services at an acceptable level and to the extent feasible maintain mutual aid communications channels with Madera County Central Dispatch.

Policy PS 6.2

Minimize urban fire hazards within the Chowchilla Planning Area.

Implementation Measure PS 6.2.A

The City of Chowchilla shall minimize the dependency of new commercial, industrial, and mixed-use development on fire fighting personnel and equipment by requiring on-site fire suppression systems (e.g., sprinklers, alarm), utilization fire resistant construction material and other measures, as appropriate.

Implementation Measure PS 6.2.B

All new development shall be constructed according to the fire safety and structural standards contained in the latest adopted Uniform Building Code (UBC) and related regulations.

LAW ENFORCEMENT

Objective PS 7

Provide high-quality police services to all residents and businesses in the City of Chowchilla.

Policy PS 7.1

Provide staff and financial resources to ensure adequate and equitable distribution of police services

Policy PS 7.2

Promote community order by preventing criminal activity, enforcing laws, and meeting community police service demands.

Implementation Measure PS 7.2.A

Maintain the 911 emergency system and promote Neighborhood Watch systems and similar crime prevention activities and programs through schools and community organizations.

Implementation Measure PS 7.2.B

Design defensible public and private spaces to minimize opportunities for criminal activity.

Implementation Measure PS 7.2.C

Maintain mutual aid agreements with Madera County and neighboring County law enforcement agencies and the California Highway Patrol.

Implementation Measure PS 7.2.D

Law enforcement hazards shall be identified in project review and shall be prevented or mitigated to an acceptable level.

Policy PS 7.3

Coordinate with the Madera County Sheriff's Department in its effort to provide law enforcement services within the unincorporated areas of the 2040 General Plan Planning Area.

Policy PS 7.4

Endeavor to provide minimum response time of five minutes on all priority calls.

Objective PS 8

To provide protection to the public through adequate police staffing and related resources, effective law enforcement and the incorporation of crime prevention features in new development.

Policy PS 8.1

The City of Chowchilla shall maintain an average response time of five minutes or less for priority calls.

Policy PS 8.2

The City of Chowchilla shall maintain a minimum ratio of 1.5 sworn officers per 1,000 population.

Policy PS 8.3

The City of Chowchilla shall promote public safety programs, including neighborhood watch, child identification and fingerprinting and other public education efforts.

Policy PS 8.4

The City of Chowchilla shall promote the use of building and site design features as a means for crime prevention and reduction.

Implementation Measure PS 8.4.A

The City of Chowchilla development review and approval process shall continue to involve the Chowchilla Police Department.

NEW DEVLEOPMENT RESPONSIBILITY

Objective PS 9

New development shall pay fees as necessary to meet all identified costs associated with new development.

Policy PS 9.1

Ensure that potential law enforcement needs are adequately addressed through the environmental review process and appropriate mitigation is imposed.

Implementation Measure PS 9.2.B

The City of Chowchilla's development review process shall ensure no residential, commercial or industrial land use project is constructed without adequate law enforcement services, personnel, equipment available.

Policy PS 9.2

New development shall be responsible for paying a financial contribution to mitigate the effect of the development on the provision of such public services as police and fire protection, solid waste disposal, public education, water, drainage, and sewer facilities.

Implementation Measure PS 9.2.A

During deliberation on proposed projects, the Planning Department shall include a finding in their staff report which addresses the adequacy of public services and the method by which the proposed development is to provide for these public services as part of the development.

Policy PS 9.3

The City shall acquire land and construct additional structures for fire and police services to maintain acceptable response times throughout the General Plan Area.

Implementation Measure PS 9.3.A

The City shall analyze the additional service demands for fire and police services and, as necessary, require new development to provide funding to meet the cost of expanding the service.

Implementation Measure PS 9.3.B

Public buildings and facilities shall be considered consistent with all land use designations in the General Plan and all zoning districts. The architectural design and landscaping of new public buildings and facilities shall be complementary with surrounding land uses.

Policy PS 9.4

Construction permits shall not be granted until the developer provides for the installation and/or financing of needed public facilities.

HAZARDOUS MATERIAL

Objective PS 10

Protect the City of Chowchilla and its environment from harmful effects of hazardous materials.

Policy PS 10.1

Residual hazardous waste repositories shall be prohibited in the City of Chowchilla.

Policy PS 10.2

The City of Chowchilla shall require, as appropriate and as a component of the environmental review process, a hazardous materials inventory for project sites, including an assessment of materials and operations for any development applications. Particular attention shall be paid to land that previously contained agricultural uses.

Policy PS 10.3

The City of Chowchilla shall ensure the proponents of new development project address hazardous materials concerns through the preparation of a Phase I or Phase II hazardous materials studies for each identified site as part of the design and environmental review process. Recommendations required to satisfy local, state or federal cleanup standards outlined in the studies shall be implemented as part of the construction phase for each project.

Policy PS 10.4

The City of Chowchilla shall coordinate with Madera County to provide household hazardous waste disposal and recycling services.

Policy PS 10.5

The City of Chowchilla shall use the development review process to ensure compatibility between hazardous material users and surrounding land use.

Policy PS 10.6

The City of Chowchilla shall educate the public as to the types of household hazardous waste and the proper methods of disposal.

Policy PS 10.7

The City of Chowchilla shall require that all new habitable structures be setback at least 85 feet from the nearest railroad track. These setback areas shall be measured from the edge of the outermost railroad track.

Policy PS 10.8

The City shall require that hazardous materials are used, stored, transported and disposed of within the City in a safe manner and incompliance with local, state and federal regulations.

Policy PS 10.9

Hazardous waste management facilities may be permitted in areas designated as Heavy Industrial if other siting criteria can be met and potential environmental affects are mitigated as part of conditional approval.

Policy PS 10.10

Business practices using; storing or producing hazardous materials shall be located at a safe distance from other uses that may be adversely affected by such activities. Sensitive receptors such as schools, hospitals, day care centers, convalescent homes, and other immobile populations shall be considered during the review process.

Implementation Measure PS 10.10.A

The City of Chowchilla shall restrict the storage of hazardous material in industrial areas which are located near sensitive receptors.

Policy PS 10.11

Any risks involving the disposal, transport, manufacture, storage and handling of hazardous material in the City of Chowchilla shall be evaluated in the project review and approval process.

Implementation Measure PS 10.11.A

City of Chowchilla shall coordinate with Madera County to provide educational opportunities for generation of small quantity, household and agricultural waste products regarding their responsibilities for source reduction and proper and safe hazardous waste management.

Implementation Measure PS 10.11.B

The City of Chowchilla shall prohibit the transport of hazardous materials through the City on Highway 233.

Implementation Measure PS 10.11.C

The City of Chowchilla shall adopt current versions of the Uniform Fire Code to regulate the storage of hazardous substances.

Implementation Measure PS 10.11.D

The City of Chowchilla shall require full environmental review, including early public notification, of any proposal to establish a licensed hazardous substance treatment, storage, or disposal facility within the 2040 General Plan Planning Area or Sphere of Influence.

Implementation Measure PS 10.11.E

The City of Chowchilla shall consider the potential harmful effects from toxic air contaminants or emissions on sensitive receptors when approving the siting of new industrial facilities or when a change is proposed in existing industrial uses.

Implementation Measure PS 10.11.F

The City of Chowchilla shall coordinate with Madera County and the California Highway Patrol to establish designated travel routes through the 2040 General Plan Planning Area for vehicles transporting hazardous materials.

Implementation Measure PS 10.11.G

The City of Chowchilla shall coordinate with the Madera County Department of Environmental Health for the implementation of the Hazardous Material Disclosure Law.

Implementation Measure PS 10.11.H

The City of Chowchilla shall identify potential users and producers of hazardous materials at the time of permit application and mitigate dangers associated with these materials.

Policy PS 10.12

Separate, buffer and protect sensitive receptors from significant sources of air pollutants to the greatest extent possible.

Implementation Measure PS 10.12.A

New and redevelopment projects with sensitive receptors within 500 feet of an existing or planned highway, arterial or major collector shall be designed with consideration of site and building orientation, and incorporate best available technology for improved air quality and flow, ventilation and filtration to lessen potential health risks due to the project's proximity to the roadway.

Implementation Measure PS 10.12.B

To the extent allowable by State Law, the City of Chowchilla shall prohibit new school facilities, with the exception of "bus barns" or maintenance facilities to be developed within one-quarter mile of a known industrial facility permitted to emit hazardous air pollutant or within one quarter mile of any land designated as Light Industrial or Heavy Industrial.

Objective PS 11

Minimize public exposure risks associated with the storage, transport and disposal of hazardous materials.

Policy PS 11.1

Ensure hazardous materials used in business and industry is used, stored, handled and disposed of properly.

Implementation Measure PS 11.1.A

City of Chowchilla shall provide the resources to ensure that hazardous materials used, stored and generated by businesses are handled properly.

Implementation Measure PS 11.1.B

The City of Chowchilla shall coordinate with responsible federal, state and local agencies to identify and regulate the use, storage, transportation and disposal of hazardous materials.

Objective PS 12

Minimize risks of personal injury associated with potential hazards in the urban environment.

Policy PS 12.1

Potential public safety hazards associated with irrigation canals and drainage areas shall be minimized by design, fencing or by restricting public access.

Implementation Measure PS 12.1.A

The City of Chowchilla shall develop and establish design guidelines and standards for publicly accessible irrigation facilities, sloughs, detention basins and drainage facilities to minimize potential for accidents and injury. Design guidelines and standards shall promote a visually attractive environment consistent with the form and character of the surroundings.

Implementation Measure PS 12.1.B

The City of Chowchilla shall coordinate with canal owners and operators with facilities in the City Limits to minimize potential public safety risks and to ensure, if applicable, the facilities have properly placed hazard warning signs.

Implementation Measure PS 12.1.C

The City of Chowchilla shall place applicable hazard warning signs at City owned, maintained, and / or operated storm drainage facilities where a potential f public safety hazard is present.

TRANSPORTATION NETWORKS

Objective PS 13

Protect the community from potential airport and air transportation hazards.

Policy PS 13.1

Minimize the risk of potential hazards associated with aircraft operations at Chowchilla Municipal Airport.

Policy PS 13.2

When planning for development near the Chowchilla Airport anticipate possible increases in airport activity and expansion of airport facilities and services and the effects these changes may have on public safety.

Policy PS 13.3

Encourage development in the vicinity of the Chowchilla Municipal Airport would not cause land use conflicts, hazards to aviation or hazards to the public and that is in compliance with the Madera County Land Use Compatibility Plan for the Airport.

Policy PS 13.4

Maintain the Protection Overlay Zone for the Chowchilla Municipal Airport, as required for safety for both the present runway configuration.

Policy PS 13.5

Review the Chowchilla Municipal Airport Master Plan periodically to update operational and safety procedures, reflect state and federal mandates, better utilize airport property and recommend land use capacity standards for land surrounding the airport.

Policy PS 13.6

The City of Chowchilla shall maintain an Airport Master Plan for the Chowchilla Municipal Airport.

Implementation Measure PS 13.6.A

The City of Chowchilla should consider relocating the airport to a new location which will allow expansion and operation without interference from urban encroachment.

Implementation Measure PS 13.6.B

As necessary, the City shall acquire land to implement the Airport Master Plan by the appropriate governmental agency.

Policy PS 13.7

Chowchilla shall maintain the Airport Land Use Compatibility Plan for the environs of the Chowchilla Municipal Airport.

Implementation Measure PS 13.7.A

The City of Chowchilla shall seek amendment to the ALUC Plan to modernize the requirements and standards for development consistent with recommended guidance from Caltrans.

Implementation Measure PS 13.7.B

The Land Use Element of the Chowchilla General Plan and the Chowchilla Zoning Ordinance shall be used to restrict potentially hazardous land uses from being established within Airport Safety Zones A and B1 of the Chowchilla Municipal Airport.

Policy PS 13.8

Minimize the risk of potential hazards associated with aircraft operations at the Chowchilla Municipal Airport through the adoption and implementation of the Airport

Protection Overlay Zone and by implementing the Madera County Airport Land Use Compatibility Plan.

Policy PS 13.9

Ensure development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Madera County Airport Land Use Compatibility Plan.

Policy PS 13.10

To the extent feasible, locate new buildings of high public occupancy – particularly schools, medical, civic and institutional uses – at an adequate distance from main railroad alignments and the highway to minimize risks to life and property in the event of a hazardous cargo accident.

Objective PS 14

Provide City-wide safe pedestrian and bicyclist environments.

Policy PS 14.1

Enhance and maintain pedestrian safety through the inclusion of well-designed streets, sidewalks, crosswalks, traffic control devices and school routes throughout the City.

Implementation Measure PS 14.1.A

The City of Chowchilla shall develop guidelines and standards for the treatment of public streetscape to improve pedestrian safety and walkability. The guidelines and standards should address street trees, street lighting, street furniture, traffic calming and other pertinent pedestrian safety and walkability topics.

Implementation Measure PS 14.1.B

The City of Chowchilla shall identify and inventory existing pedestrian safety and walkability areas within the City area developed areas within the City. The City shall establish funding sources and priorities, and set forth a phased improvement program to improve present pedestrian safety and walkability deficiencies within the City.

Policy PS 14.2

All new and redevelopment projects shall provide reasonable means of pedestrian and bicycle accessibility and safety provisions.

Implementation Measure PS 14.2.A

The City of Chowchilla shall verify that all new and redevelopment projects provide appropriate pedestrian and bicycle accessibility and safety provisions prior to project approval.

Implementation Measure PS 14.2.B

All grade separation projects shall implement pedestrian and bicycle accessibility and safety measures.

EMERGENCY SERVICES (FIRE, POLICE, AND PUBLIC WORKS)

Policy PS 14.1

Maintain an Emergency Preparedness Plan.

Implementation Measure PS 14.3.A

Update the Emergency Preparedness Plan periodically to respond to changes in land use, population and incorporated city boundaries, including: evacuation routes; location of critical facilities; peak load water supply requirements; minimum road widths and turning radii; and identification of the population at risk.

Implementation Measure PS 14.3.B

Coordinate with Madera County, Federal Emergency Management Agency, and Office of Emergency Services in reducing community risk in the event of a disaster through Emergency Preparedness Plan preparation and disaster drills.

Implementation Measure PS 14.3.C

Coordinate City evacuation routes with Madera County's emergency evacuation routes.

Implementation Measure PS 14.3.D

Ensure that public and private water facilities have adequate capacity to supply emergency needs.

Objective PS 15

Protect Chowchilla from hazards associated with the natural environment.

Policy PS 15.1

Minimize risks of personal injury and property damage associated with natural hazards.

Implementation Measure PS 15.1.A

Participate in state and County programs to educate residents regarding preparedness and response to natural disasters, including information describing procedures and evacuation routes to be followed in the event of a disaster.

Implementation Measure PS 14.3.B

Design consideration shall be given for future evacuation routes as a component of the street construction and improvement programs of the City. The City shall coordinate its planning and design efforts with other agencies including Madera County and Caltrans.

Implementation Measure PS 14.3.C

Prepare a Local Hazard Mitigation Plan pursuant to the Disaster Mitigation Act of 2000 to ensure that the City remains eligible for emergency funding in the event of natural hazards.

Objective PS 16

To maintain emergency preparedness programs to protect the public.

Policy PS 16.1

The City of Chowchilla shall coordinate with local, state and federal agencies to maintain and test a coordinated emergency response system that addresses a variety of public safety challenges.

Policy PS 16.2

The City of Chowchilla shall support and periodically update its emergency preparedness programs to meet current local, state and federal requirements.

Policy PS 16.3

The City shall ensure that major access and evacuation corridors area available and unobstructed in case of a major emergency or disaster.

Policy PS 16.4

The City of Chowchilla shall ensure that the siting of critical emergency response facilities (i.e., public safety facilities, medical, emergency operations center, substations) have minimal exposure to flooding, seismic, fire and explosions.

Policy PS 16.5

The City shall seek to minimize vulnerability of its infrastructure.

Policy PS 16.6

The City shall complete regularly scheduled reviews and updates of its emergency management plans.

Implementation Measure PS 14.6.A

The City of Chowchilla shall conduct periodic mock exercises using emergency response systems to test the effectiveness of City procedures included in the emergency response plans.

FLOOD CONSIDERATIONS

Objective PS 17

Ensure and improve safety and protection in areas that are likely to experience flooding.

Policy PS 17.1

Any areas that have experienced burn shall be cleared and replanted with native vegetation to limit and/or prevent flooding in these areas.

Policy PS 17.2

Continue the ongoing eradication of Arundo donax (giant cane) from sloughs to reduce the risk of flooded waterways and hard-to-control fires.

Policy PS 17.3

All wildfire burned areas shall be treated to control storm water runoff prior to winter rains.

EXISTING DEVELOPMENT

Objective PS 18

Public and private landowners shall minimize the risk of fire.

Policy PS 18.1

Public and private landowners for all existing land uses shall comply with all applicable state and local requirements and implement site-specific safety measures that mitigate to a low-risk condition around or near public facilities, infrastructure, and natural resources such as the city's sloughs.

Policy PS 18.2

Public and private landowners shall minimize the risk of fire moving from property to property, by increasing structural hardening measures (e.g., fire-rated roofing and fire-resistant construction materials and techniques), maintaining and improving defensible space on site, and supporting vegetation management in adjacent undeveloped areas.

FIRE SAFETY AND EMERGENCY PREPAREDNESS

Objective PS 19

Employ the many safety opportunities available to reduce the risks of fire and to plan for emergencies.

Policy PS 19.1

All residential, commercial, and industrial construction and development shall comply with the statewide Fire Safe Regulations (see CCR, Title 14, Sections 1270 et seq.) relating to roads, water, signing, and fuel modification.

Policy PS 19.2

Public open spaces should be used as demonstration areas and examples to neighborhood residents for fire-adapted and drought tolerant landscapes.

Policy PS 19.3

Update site landscaping standards to be fire-adapted using native vegetation or fire-resistant planting palettes and prohibit flammable landscape plantings or materials storage within the structure ignition zone (e.g., within 0-5 feet of the structure).

Policy PS 19.4

Work cooperatively with other agencies and private interests to educate private landowners on fire-safe and defensible measures to increase compliance with existing regulations to achieve a low-risk condition.

Policy PS 19.5

Review and update emergency response and evacuation plans and procedures at least every five (5) years to reflect current conditions and community needs.

Policy PS 19.6

Incorporate forecasted impacts from climate change into trends and projections of future fire risk and consideration of policies to address identified risk.

Policy PS 19.7

As the City continues to grow and its boundaries expand, if the need arises, plan for the future for a new fire station and equipment.

Policy PS 19.8

Mitigate the impacts of train-related emergency response vehicle delays by planning for a city roadway grade separation.

ENVIRONMENTAL JUSTICE POLICIES FOR EMERGENCY PREPAREDNESS ELEMENT

Objective PS 20

Ensure completeness and availability of identified emergency supplies, resources, and programs to all segments of the population.

Policy PS 20.1

Ensure completeness and availability of identified emergency supplies and resources to all segments of the population, focusing especially on vulnerable and disadvantaged communities, including but not limited to temporary shelter or housing, and items such as medical supplies and services, water main repair parts, generators, pumps, sandbags, road clearing, and communication facilities..

Policy PS 20.2

Identify or develop programs to provide financial incentives or assistance to low-income households for defensible space maintenance, home hardening, and other measures to reduce risk.