

5.1 Introduction

The Safety Element, a legally required Element of the General Plan, identifies and appraises potential safety hazards within the City, and is used as a guide for establishing land use patterns that minimize the exposure of City residents to excessive natural and man-made hazards. It also establishes policies and implementing actions that will minimize risks associated with seismic, geologic, flood, fire, and environmental hazards. By identifying these hazards and the appropriate abatement measures, the Safety Element will effectively reduce the potential for events to occur that would threaten lives, damage property, and disrupt the local economy.

While seismic and geologic hazards in Colusa are minimal, seismic and geologic goals and policies are provided to protect the City's residents from danger associated with active faults, liquefaction, and ground failure. Drainage channels within the City and the Sacramento River trigger the need for development standards to provide flood protection.

Goals and policies in the Chapter also address issues related to fire hazards, hazardous materials, and airport hazards. Existing and planned residential, commercial, and industrial development, as well as undeveloped properties and grasslands surrounding the City pose potential safety hazards the City must address.

The airport policies contained in the Colusa County Airport Comprehensive Land Use Plan (CLUP) are addressed both in this element and the Circulation Element. Specifically, the Safety Element will address proposed land uses within the airport overflight and safety zones.

Other emergency services and programs addressed in this Element include police, fire, emergency response, and health services – all critical aspects of planning for the health, safety, and welfare of Colusa residents. The police and fire discussions in this Element relate specifically to the City's ability to provide for the public's health, safety, and welfare. The facilities planning associated with police and fire services is addressed the Municipal Facilities and Services Element. The Community Character and Design Element discusses aspects of design that promote safety, and the Circulation Element includes policies and actions that encourage safe travel.

5.2.1 SETTING - SEISMIC AND GEOLOGICAL HAZARDS

TOPOGRAPHY AND GEOLOGY

The City of Colusa is located adjacent to the Sacramento River in the center of the Sacramento Valley. The topography of Colusa is relatively flat, with little change in elevation. The highest elevations are found along the levees of the Sacramento River.

The geological history of the Colusa area includes a mixture of ancient marine and alluvial deposits. About 300 million years ago, a vast sea occupied the valley and upland areas of Colusa County. Up to 155 million years ago, periods of volcanic activity and uplifting were followed by periods of uplifting and folding, which formed the Coast Range to the west. These periods ended about three to four million years ago, when the sediments of the Tehama Formation were deposited from coastal range streams onto the valley floor.

The floor of the Sacramento Valley, which was formed by the uplift of the mountains surrounding it, is a structural trough that has been filled with a sequence of thick marine and alluvial sediments ranging in age from 135 million years to recent. It is suggested that these sediments

may overlie a deep bed of volcanic or metamorphic rocks, which were formed up to 350 million years ago.

SEISMIC HAZARDS

There are no known active faults within Colusa County. However, the possibility of an earthquake affecting the City of Colusa cannot be ruled out. Colusa County is vulnerable to moderate ground shaking from earthquakes centered outside of the County. Four minor quakes on an unknown fault in the coastal foothills to the west occurred in 1985. Earthquakes of a maximum magnitude of 5.7 on the Richter scale could occur at the nearest known fault at the Sutter Buttes. This could cause ground shaking in Colusa County up to an intensity of VI to VII, as measured by the Modified Mercalli Scale. The effects of earthquakes of this magnitude on structures are described as minor to moderate, especially in un-reinforced masonry chimneys and architectural ornaments. Still, the best geologic evidence indicates that Colusa would

experience only low-intensity shaking from faults outside the County.

Liquefaction is a hazard associated with seismic activity. Liquefaction occurs when seismic waves act upon water in saturated soils, causing the soils to lose their cohesiveness and act like a liquid. As the description indicates, liquefaction tends to occur in soils that are moist, which generally includes soils near streams and bodies of water. Colusa is located on the west bank of the Sacramento River, on top of soils formed by deposits left from previous flooding. These soils tend to contain silts, which can become moist easily. Liquefaction could be a concern in areas with soils located near the Sacramento River.



GEOLOGICAL HAZARDS

Geological hazards, as defined in this Safety Element, include hazards such as landslides, mudslides, volcanic hazards, subsidence, unstable soils, and expansive soils. Soils in the Colusa area tend to be loams and silt loams. Because of the extremely flat topography, these soils do not have a tendency to become unstable. There is no danger of landslides or mudslides in Colusa or its Planning Area due to the flat topography. The nearest volcano is Lassen Peak, approximately 90 miles to the northeast. It is possible that Colusa could receive deposits of ash from an eruption of Lassen Peak, weather conditions permitting. However, the likelihood of any significant hazard from Lassen Peak is considered low.

Subsidence is defined as localized sinking of the ground surface. Subsidence can be caused by excessive groundwater withdrawal, extraction of gas or oil, or by tectonic movement. It can cause damage to all types of construction, such as buildings and roadways. The City of Colusa is in an area of known low subsidence. Groundwater levels have remained relatively steady, preventing subsidence from occurring.

Expansive soils are soils that expand as they gain moisture and contract as they lose moisture. These "shrink-swell" soils can do damage to building foundations and to infrastructure such as roadways and pipelines. Generally, expansive soils contain a significant amount of clay. Three

of the four predominant soil types identified within the Planning Area have a moderate shrink-swell potential: the Moonbend silt loam, the Colusa loam, and the Grandbend loam.

5.2.2 OUTLOOK - SEISMIC AND GEOLOGICAL HAZARDS

The City of Colusa is located in an area of California that experiences less seismic activity than other areas of the State. However, the City could be exposed to ground shaking from active earthquake faults in the region. Therefore, the City's ability to respond to a seismic event is important to the health, safety, and welfare of its citizens.

The City of Colusa contains many older commercial and residential buildings. Many of these buildings are constructed with masonry that may be un-reinforced against seismic shocks. Absent any seismic retrofitting, these buildings, or portions of these buildings, could suffer moderate to severe damage or collapse, endangering people both within and outside these structures. As described above, the City could experience earthquakes of an intensity that could damage un-reinforced masonry buildings or building elements. Older residential buildings constructed with masonry are also potentially vulnerable to damage. The extent of this vulnerability is unknown at this time.

5.2.3 GOALS, POLICIES, AND IMPLEMENTING ACTIONS FOR SEISMIC AND GEOLOGICAL HAZARDS

Goal SAF-1:

To minimize injury and property damage due to seismic and geologic hazards.

Policy SAF-1.1:

The City shall continue to mitigate the potential impacts of seismic and geologic hazards.

Implementing Action SAF-1.1.a: Development Review

The City will continue to refer all development proposals to the Fire and Building Department/Building Division, Public Works Department, and City Engineer to address potential seismic or geologic impacts. The City will require development applicants to provide specific data requirements pertaining to potential seismic and geologic hazards and, where necessary, require geotechnical reporting by a licensed soils or geotechnical engineer. In all development review, the City will continue to enforce the Uniform Building Code, including seismic design provisions. These review requirements will apply to all public and private building construction.

Implementing Action SAF-1.1.b: Ordinance and Regulation Review and Update

The City will review and revise its Subdivision Ordinance as needed to incorporate specific data and design requirements related to ground failure and other seismic and geological hazards that are contained in this General Plan update.

Implementing Action SAF-1.1.c: Un-reinforced Masonry Plan

The City will consider a plan to identify older masonry structures that could be significantly impacted due to an earthquake. The plan may include, but may not be

limited to, an inventory of un-reinforced masonry buildings and an assessment of their damage potential, a program to retrofit un-reinforced masonry buildings or to take other actions to reduce the potential risk, and funding sources for the adopted program.

Policy SAF-1.2:

The City will continue to maintain current information on seismic hazards and take appropriate action if significant seismic hazards, including potentially active faults, are discovered within the City or the Planning Area.

Implementing Action SAF-1.2.a: Seismic Information Update

The City will monitor California Geological Survey studies for potentially active faults in the vicinity of Colusa. Information on a previously unknown or inactive fault that is discovered or becomes active can be obtained by monitoring such studies. If any such fault in the region is discovered, the City will consider modifications to its development and building codes to reduce potential hazards. The City will periodically update its maps and information on seismic hazards for use in evaluating development proposals. As part of its annual review of the General Plan, the City will update its information on seismic and geologic hazards.

5.3.1 SETTING - FLOOD HAZARDS

HYDROLOGY/DRAINAGE

The Sacramento River forms a natural boundary for the City of Colusa. The River originates in the mountains of Siskiyou County and flows generally in a north-south direction until it empties into Suisun Bay. Other streams in the vicinity of Colusa include Lurline Creek, Freshwater Creek, and Salt Creek. These creeks flow west to east from the foothills toward Colusa, but are redirected south by the Colusa canal located three miles west of the City.

It is not unusual for cities located in areas of relatively flat topography, such as Colusa, to have drainage problems. The City has experienced drainage problems on its east side, which have been examined in studies dating back to 1936.



To the west of the City is a drainage feature called the Colusa Basin, served by the Colusa Drain. The Colusa Basin drains approximately 230,000 acres along the west side of the Sacramento River, discharging into the Sacramento River at Knights Landing, northeast of the City of Woodland.

FLOODING

The Federal Emergency Management Agency (FEMA) has mapped the flood hazard zones for the City of Colusa and most of the surrounding vicinity. The 100-year floodplain designation (Zone X) indicates the probable maximum extent of flooding during a storm with a one percent probability of occurrence in any given year. The 100-year flood is the standard generally used in flood hazard planning. **Figure 5.1** illustrates the 100-year floodplain boundary (Zone X), based on the Flood Insurance Rate Maps (FIRMs) for Colusa and surrounding area. **Figure 5.1** shows that most land in the City limits lies outside the 100-year flood hazard (within Flood Zone X), due mainly to the protection afforded by the levee running parallel to Main Street in the downtown area.

However, flooding within the City's Planning Area occurs, and can do so even during mild storms. Periods of flooding can cause significant circulation problems and has resulted in some property damage in flood-prone areas. Flooding events cause inconveniences and potential safety hazards to motorists traveling through the flooded streets and property owners attempting to access parked cars. Minor flooding events can appear as quickly as one hour after significant rainstorms. While flooding may occur as quickly as one hour after the initiation of a storm event, generally speaking, the flooded areas drain within two or three hours after the end of the storm event.

DAMS AND LEVEES

Five reservoirs, which retain water from the Sacramento River or its tributaries, could cause damage in the City of Colusa if their dams were to fail: Lake Oroville, Shasta Lake, Whiskeytown Lake, Black Butte Lake, and East Park Reservoir. The Governor's Office of Emergency Services (OES) maintains maps of inundation resulting from hypothetical severe dam failure, which may occur primarily due to earthquake activity or unusual weather conditions. Floodwaters would reach the Colusa according to the following time projections: Lake Oroville - 8 hours; Lake Shasta - 42 hours; Black Butte Lake - 35 hours; Whiskeytown Lake - 82 hours; and East Park Reservoir - 35 hours.

Colusa is situated on the southern bank of a bend in the Sacramento River, which drains the



northern half of the Central Valley. No other major bodies of water are located within the Planning Area. The river levee that protects the City from catastrophic flooding falls under the jurisdiction of Reclamation District No. 108 and is maintained by the Sacramento West Levee District.

The main channel for the Colusa Drain is an excavated earthen channel. The channel has levees on both sides for the most part, and levee height varies to a maximum of approximately six feet. Additional levees along tributary drains connect to the Colusa Drain.

The information presented above shall be used for emergency planning and is based on worst-case scenarios. The time factors indicated appear to allow for safe evacuation out of the Colusa area both to the south and west. Also, it should be noted that the probability of dam failure at any given time is low. The Division of Safety of Dams, a division of the California Department of Water Resources, inspects dams under state jurisdiction on a periodic basis for structural integrity. Responsibility for the safety of dams under federal jurisdiction belongs to the

agency constructing the dam. Federal agency programs to maintain dam safety are based on the *Federal Guidelines for Dam Safety* prepared by FEMA.

5.3.2 OUTLOOK - FLOOD HAZARDS

Future development will significantly increase the amount of impervious surface areas in the City while decreasing natural vegetation. Such conditions limit water percolation and, without adequate mitigation, can increase stormwater runoff and decrease the time required to reach peak discharge rates. The City is committed to minimizing damage due to flood hazards by identifying floodplain boundaries and limiting development in areas where flooding is likely to occur.

The levee adjacent to downtown Colusa plays a major role in protecting the City from flooding by the Sacramento River. The City shall cooperate with all agencies seeking to maintain the levee system, and the City shall not allow development to occur that would threaten the structural integrity of the levee.

Localized flooding does occur within the City, primarily on the east side. The flooding has been serious enough to threaten public safety and property. Future development of properties east of Bridge Street and State Route (SR) 20 must adequately address and mitigate impacts upon storm water drainage systems. The studies noted in Section 5.3.1 above document the need for a comprehensive solution to storm- and surface-water drainage and disposal.

The Disaster Mitigation Act of 2000 (DMA) requires local governments to develop and submit mitigation plans by November 1, 2004, as a condition of receiving Hazard Mitigation Grant Program and other related funds. FEMA will continue to make funds available for hazard mitigation planning. Also, FEMA distributes monies for Flood Mitigation Assistance to states that, in turn, provide funds to communities. Allocation of these funds is focused on repetitive loss properties.

5.3.3 GOALS, POLICIES, AND IMPLEMENTING ACTIONS FOR FLOOD HAZARDS

Goal SAF-2:

To minimize the potential for loss of life and damage to property due to flooding.

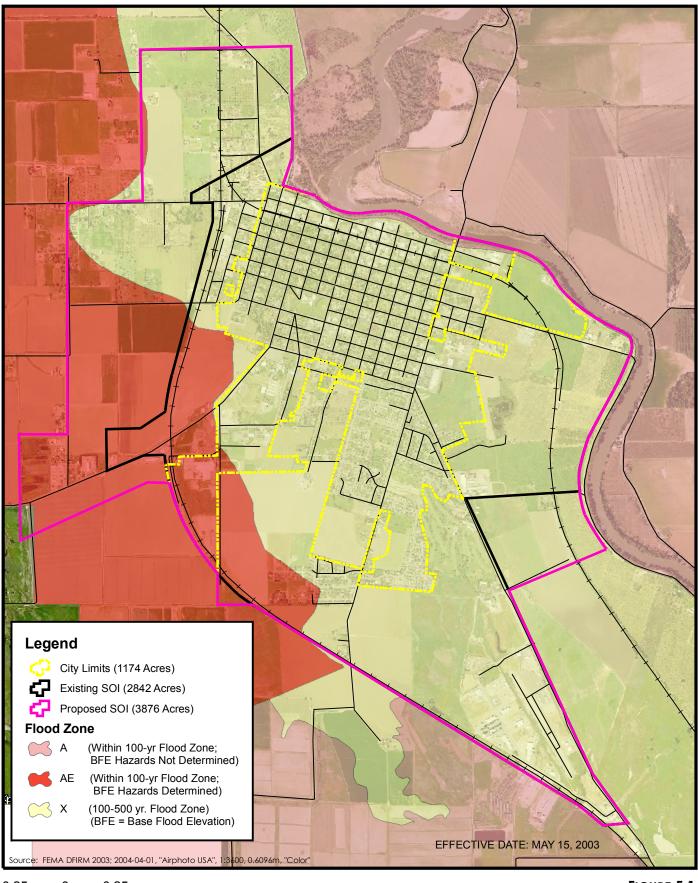
Policy SAF-2.1:

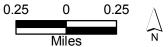
The City shall continue to regulate all uses and development in areas subject to potential flooding through land use planning, zoning and other appropriate actions.

Implementing Action SAF-2.1.a: Development Review

The City will refer all development proposals to the Fire and Building Department/Building Division, Public Works Department, and City Engineer to address potential flooding. Where necessary, the environmental review for projects will include a full inventory of flood concerns and require the applicant to provide specific data pertaining to flooding hazards. Where necessary, the City will also require development projects in areas subject to flood hazards to reduce or alleviate flood hazards conditions through hydrological studies and mitigation measures.

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Implementing Action SAF-2.1.b: Ordinance and Regulation Review and Update

The City will review and revise its Zoning and Subdivision Ordinances as needed to incorporate specific data and design requirements related to flooding hazards that are contained in this General Plan update and other future flood hazard studies.

Implementing Action SAF-2.1.c: Federal, State, and Local Funding

The City will pursue mechanisms to finance flood prevention and storm maintenance programs, including local, state, and federal sources. If necessary, the City will consider alternative funding sources, including development impact fees and the establishment of a drainage utility and assessment district.

Policy SAF-2.2:

The City shall minimize the potential for flood damage to buildings and other structures, particularly from storm water runoff.

Implementing Action SAF-2.2.a: Storm Drainage Master Plan

The City will adopt a Storm Drainage Master Plan for Colusa. The Master Plan will identify drainage facilities that will be constructed to eliminate or mitigate drainage problems in the City, and describe the means for financing the proposed improvements. The Storm Drainage Master Plan will be consistent with any Capital Improvements Plan prepared by the City and will address Regional Water Quality Control Board water quality standards, including Best Management Practices for storm drainage.

Implementing Action SAF-2.2.b: Development Review

The City will require new development to ensure that the cumulative rate of peak runoff does not exceed pre-development levels. New development and redevelopment of existing sites will provide storm water detention or retention facilities (on- or offsite), if necessary, to prevent flooding due to runoff or where existing storm drainage facilities are unable to accommodate increased storm water drainage.

Implementing Action SAF-2.2.c: Ordinance and Regulation Review and Update

The City will review and revise its Subdivision Ordinance as needed to incorporate specific data and design requirements related to storm water drainage that are contained in this General Plan update.

Policy SAF-2.3:

The City shall work to increase community awareness of flooding hazards and to coordinate flood control activities with other interested agencies.

Implementing Action SAF-2.3.a: Interagency Coordination

The City will work with the community and other agencies to help identify flood hazards and to identify options for the mitigation of such hazard areas. The City will also participate in FEMA's Cooperating Technical Partners Program to advance the update of the City's Flood Insurance Rate Maps as needed.

Implementing Action SAF-2.3.b: Local Hazard Mitigation Plan

The City will adopt and implement provisions of a Local Hazard Mitigation Plan, consistent with the requirements of FEMA.

Implementing Action SAF-2.3.c: Disaster Management Act

The City will coordinate flood hazard mitigation efforts with Colusa County to seek compliance with the Disaster Management Act of 2000, in order to ensure eligibility for funding through FEMA grant programs.

5.4.1 SETTING - FIRE HAZARDS

Fires can be significant hazards in developed areas. Even well-constructed buildings may suffer damage from fires started accidentally or intentionally. In addition, structures located adjacent to fields and wildlands may be vulnerable to fires started on such lands. In addition to property damage, fires pose a threat to human life.

The City of Colusa, surrounded by agricultural fields, is in an area of low potential for wildfires. Cultivated and irrigated fields have a low incidence of fire, unless these fields are burned as part of agricultural operations. Such burning would pose a threat only to City structures adjacent to these fields. However, in recent years the State of California has sought to discourage burning of agricultural fields, particularly rice fields that are widespread in Colusa County. The City of Colusa Fire Chief has expressed concern that this could lead to a greater potential for vegetation fires, as fields are not maintained. This could become more of a concern as the City annexes agricultural fields that may not be developed immediately. Fires originating in these fields could threaten adjacent existing buildings.



The riparian area adjacent to the Sacramento River is a potential source of wildland fires, started by either natural or human causes. This hazard would be greatest during the summer and early autumn. Lack of rain lowers river levels, and low humidity and high temperatures cause some vegetation to lose moisture. Given its proximity to the Sacramento River, the riparian area is unlikely to go completely dry, except during times of severe drought. Most of the riparian area is separated from the City by the levee in the downtown area. However, it is possible that fires in the riparian area would jump over the levee and threaten adjacent buildings.

In summary, the potential fire hazard to Colusa from adjacent open space and agricultural areas is not considered significant. Fires started in buildings and other structures in the City are considered a more significant threat.

FIRE PROTECTION

The City of Colusa Fire Department provides firefighting services within the City limits. The City of Colusa Fire Department also participates in a countywide mutual aid program with six other fire protection agencies within Colusa County. Fire Department career staff consists of the Fire Chief, Assistant Fire Chief, Fire Captain/Mechanic, and two (2) Fire Apparatus Engineers (FAE). Volunteer staff consists of a Division Chief, four (4) captains, four (4) Driver/Operators, and 17 firefighters. Of the entire staff, 12 personnel are trained as Emergency Medical Technicians, and all other personnel are trained as First Responders. Shift personnel work 24-hour rotating shifts year-round.

The Fire Department has one fire station in the City of Colusa, located at 750 Market Street. Firefighting equipment consists of four engine pumpers (three with a capacity of more than 1,250 gallons per minute [gpm] and one with a capacity of 1,000 gpm), one ladder truck with a 1,500-gpm capacity and 500-gallon water tank, and one grass rig with a 300-gpm capacity and 500-gallon tank. One reserve ambulance is housed for emergency backup only, but it is rarely dispatched.

Total service calls for the Fire Department in 2004 were 450. Of these, 235 were for emergency medical service. According to the Fire Chief, the Fire Department can provide an average three- to four-minute response time to anywhere within the current service area. Access problems are slight throughout the City of Colusa, as most of the City's streets are configured in a grid pattern that facilitates emergency vehicle movement. Traffic is the primary issue the Fire Department considers when answering a service call.

The Fire Department currently has an Insurance Services Office (ISO) rating of 3. An ISO rating is based on the public protection classification program, which rates a given city's fire service for water supply, equipment, personnel, alarm and dispatch, and training. A city's ISO rating is a prime factor in determining fire insurance rates within that community. The rating is on a scale of 1 to 10, with 1 representing the best level of fire protection.

5.4.2 OUTLOOK - FIRE HAZARDS

State restrictions on agricultural field burning could lead to a reduction in properly maintained fields. Vegetation in these fields could pose a fire hazard, particularly during the dry season, generally from May to October. Also, annexation of this type of land may increase the fire hazard to existing structures adjacent to the annexed land, particularly if it remains in an undeveloped state. The City and its Fire Department should consider developing a strategy that would reduce the potential fire hazard posed by these undeveloped areas. One option could include weed abatement, which could be required as a condition of approval for new development or annexation.

Recent construction practices and building code revisions have significantly reduced the incidence of fires in buildings. However, older structures within the City may not have been brought up to recent code standards and, therefore, may pose a greater potential fire hazard. The City should actively identify these structures and enforce measures that would abate or address potential hazards. Options could include a nuisance abatement program and low- or no-interest loans for fire safety building upgrades.

As a city's population increases, fire department personnel typically need to increase to maintain steady levels of service. The nationally-accepted standard is one fire department employee per 1,000 residents. Based on the range of population projections in the Land Use

Element, the Colusa Fire Department would potentially need seven to 11 additional firefighting personnel by the year 2020. The Fire Department currently does not have adequate staff to serve the projected population increases. However, budget changes, development fees, and changes in training requirements could influence future staffing levels.

5.4.3 GOALS, POLICIES AND IMPLEMENTING ACTIONS FOR FIRE HAZARDS

Goal SAF-3:

To minimize the potential for loss of life, property, and the environment due to fire.

Policy SAF-3.1:

The City shall require new development and redevelopment projects to incorporate fire-safe design and practices in new construction.

Implementing Action SAF-3.1.a: Fire and Safety Codes

Through the Colusa Fire Department, the City will continue to enforce state and federal codes relating to fire and safety. Specifically, the Fire Department will apply the Uniform Codes to their inspection procedures, including but not limited to the Uniform Fire Code, California Fire Code, National Electrical Code, Uniform Mechanical Code, and codes relating to hazardous materials disposal. Where appropriate, the Fire Department will refer code violations to the City's Building Department for enforcement.

The City may consider the adoption of an ordinance requiring the abatement of structural hazards in unreinforced masonry buildings.

Implementing Action SAF-3.1.b: Development Review

Through the project review process, the City will continue to ensure that landscaping, lighting, building siting and design, adequate water pressure and peak load storage capacity, and building construction materials reduce the opportunity for fire hazards. The City will also continue to implement requirements for non-combustible roofs.

The City will continue to require access for emergency vehicles and firefighting equipment on all new development and redevelopment projects. Whenever feasible, the City will encourage new development or redevelopment projects to maintain the basic grid pattern of the City's streets to facilitate access.

Policy SAF-3.2:

The City shall work to reduce fire hazard risks in existing buildings.

Implementing Action SAF-3.2.a: Fire Department Review and Fire Safety Management

The City will include Fire Department review and comments on proposed building plans to address safety concerns. The Department will require property owners to maintain their structures in compliance with safety standards identified in adopted Fire Codes. The Department will promote smoke detector installation in existing structures and adopt requirements for the installation of fire suppression equipment as a condition for granting a permit on new development or redevelopment projects. Part of the City's fire safety

and management program will promote fire extinguisher installation in existing structures through the distribution of informational brochures and notices to City residents and businesses.

Policy SAF-3.3:

The City shall work to reduce fire hazard risks posed by undeveloped areas with vegetation.

Implementing Action SAF-3.3.a: Weed Abatement Program

The City will implement a weed abatement program to control the growth of grasses, weeds and other vegetation on undeveloped properties. The program may include the issuance of notices to property owners with penalties for noncompliance.

Implementing Action SAF-3.3.b: Ordinance and Regulation Review and Update

The City will consider adoption of a fire buffer ordinance requiring owners of undeveloped properties to establish and maintain a buffer around the edges of their properties, which could prevent the spread of fires into or out of the undeveloped properties.

Policy SAF-3.4:

The City shall maintain adequate fire protection services for its residents and businesses.

Implementing Action SAF-3.4.a: Interagency Coordination

The City will continue to participate in its mutual aid agreements with other fire protection agencies. With the support of the City, the Department will strive to maintain its strong ISO rating of 3.

Implementing Action SAF-3.4.b: City Budget and Rate Review

During its annual budget review, the City will consider the needs of the Colusa Fire Department and will support those needs with budget revenues, grants, and impact fees. As part of the budget review process, the City will review impact fee rates to ensure they adequately reflect a fair share of funding by development and other Fire Department service recipients.

5.5.1 Setting - Hazardous Materials

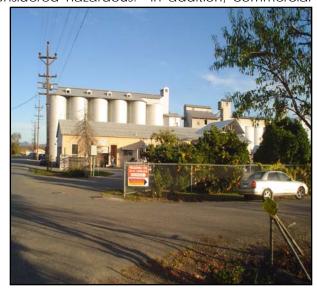
Hazardous materials consist of any substance which has the potential to cause injury to people. These can include flammable liquids and gases, poisons, corrosives, explosives, radioactive materials, and medical supplies and wastes. The transport, storage and disposal of hazardous material, and the cleanup (remediation) of hazardous sites are regulated by a number of federal, state, and local agencies, including the U.S. Environmental Protection Agency (EPA), California Environmental Protection Agency (CalEPA), and the California Department of Toxic Substances Control.

Several industrial operations are located within the Colusa area, mainly around the Colusa County Airport, that use, transport, or store hazardous materials. A small number of operations are located closer to the City, including a petroleum products storage facility at Lurline Avenue

and Fourteenth Street. While these operations are small in scale compared to those in larger urban areas, they use and store materials considered hazardous. In addition, commercial

activities, such as gasoline stations and vehicle repair shops, use and/or store potentially hazardous substances.

Within the City there are no known sites contaminated by hazardous substances on which a cleanup action has not been taken. The State tracks potential contamination sites and remediation status through databases such as the Leaking Underground Storage Tank database (LUST), Cal Sites, and the Hazardous Substance and Waste Site list ("Cortese List"). A recent check of these databases identified 17 hazardous material sites in Colusa and vicinity, all of which involve leaking underground storage tanks. However, most of the sites have undergone successful remediation and are no longer considered contaminated. Two sites are



undergoing remediation or post-remediation monitoring, and will likely be considered "clean" in the near future. One site, the Colusa County Airport, has not undertaken active remediation efforts. However, recent monitoring well test data has indicated that contamination levels have dissipated to a level that is considered to be safe by the State of Callfornia. As a result, it is anticipated that in the near-term, onsite monitoring wells will be removed, and active monitoring will be completed.

The greatest danger of hazardous substance exposure for residents of the City of Colusa is from potential spills from vehicles transporting hazardous substances along SR 20 and SR 20/45, either by accidents or by leakages. This type of event would be the most likely cause for an emergency evacuation of the City due to hazardous substances.

HOUSEHOLD PRODUCTS

The most common hazardous materials are those found or used in the home. Waste oil is a common hazardous material that is often improperly disposed of and can contaminate surface water through runoff. Other household hazardous wastes (paint, pesticides, cleaning products, and other chemicals) are common and often improperly stored in garages and homes. Because of their widespread use in households throughout the community, these products constitute the most common health hazard associated with hazardous materials to Colusa residents.

ASBESTOS

Asbestos is a strong and incombustible fiber widely used in the past for insulation. Asbestos is often found in the walls and ceilings of older buildings. Asbestos was commonly used in the past as an insulating material because it had the desirable characteristic of being fire-resistant. However, it can pose a health risk when very small particles become airborne. These dust-like particles can easily be inhaled or swallowed, where their microscopically sharp structures can puncture tiny air sacs in the lungs, resulting in long-term health problems.

LEAD-BASED PAINT

Paint used in many houses and apartments built before 1978 may contain lead. The lead from paint, paint chips, and dust can pose serious health hazards if not handled properly. People can breathe or ingest lead through exposure to objects covered with lead dust, contaminated garden soil, or paint chips. Peeling, chipping, chalking, or cracking lead-based paint is a hazard that needs immediate attention. Since babies and young children often put objects in their mouths, and since children's brains and nervous systems are more sensitive to the damaging effects of lead, the hazard is greater for children than for adults.

Exposure to lead dust often occurs through improper removal and disposal of lead-based paint in the home. Lead dust can form when lead-based paint is dry-scraped, dry-sanded, or heated. Lead in soil can be a hazard when children play in bare soil or when soil is transported into the house on people's shoes.

The City's Building Inspector is available to advise the public about proper abatement and disposal procedures during the demolition or renovation of old buildings. The Building Inspector and the Fire Inspector provide education to the public concerning lead-based paint hazards.

INDUSTRIAL PRODUCTS

More than 60,000 chemicals are produced in the United States. Over 11,000 of these chemicals are used for commercial purposes. In the City of Colusa and vicinity, various industrial, commercial, and service industries use or store hazardous materials, including pesticides, acids, solvents, caustics, plastics, and heavy metals.

Chapter 6.95, §25503 of the California Health and Safety Code, specifies the thresholds that trigger the requirement of businesses to report the quantity and locations of hazardous materials to the regulatory authority on an annual basis. In Colusa, businesses are required to submit their Hazardous Material Business Plans (HMBPs) to the Colusa County Department of Environmental Health. A plan must be submitted for each site that stores above the threshold quantities of a hazardous material or any amount of hazardous waste. The HMBP includes an inventory of hazardous materials stored at a facility with specific physical and chemical descriptions of each material.

The HMBP is required to be reviewed annually and updated if there are any material changes that affect the quantity or location of hazardous materials. The HMBP also includes a Consolidated Contingency Plan or Emergency Response Plan, which describes the emergency response procedures to be taken in case of a hazardous material spill or fire. The Emergency Response Plan provides facility identification information, emergency contacts, and response procedures to be taken in the event of a hazardous material emergency. Emergency equipment capabilities, emergency services, and employee training also are outlined in the Plan.

TRUCK TRANSPORT OF HAZARDOUS MATERIALS

Trucks traveling through Colusa commonly carry a variety of hazardous materials, including gasoline and various crude oil derivatives and other chemicals known to cause human health problems. When properly contained, these materials present no hazard to the community. In the event of an accident or spill, these materials may be released, either in liquid or gas form. In the case of some chemicals, such as chlorine, highly toxic fumes may be carried through the air a significant distance from the site of their release. Although standard accident and hazardous

materials recovery procedures are enforced by the state and adhered to by private transportation companies, the City is at moderate risk because of the volume of truck traffic on SR 20 and SR 20/45.

The Colusa County Sheriff's Office, along with City of Colusa Fire Department, is the primary responder to any such incidents, based on the City's Hazardous Materials Management Plan. The Plan identifies the specific locations of flammable or toxic materials are used and stored, allowing appropriate response to a hazardous material emergency.

5.5.2 OUTLOOK—HAZARDOUS MATERIALS

Many of the potential risks associated with hazardous materials can be reduced through the City's provision and distribution of educational materials about and adoption of staff recommendations for projects using, storing, or transporting such materials. Education about the handling and disposal of household products, asbestos, and lead-based paints will be an ongoing effort to ensure the safety of Colusa residents. One component of this educational outreach might include information about alternatives to potentially hazardous household products. Many household products that contain non-toxic ingredients are becoming available on the market, and some common household ingredients can be used to make cleaners and other products that are less hazardous to human health and the environment. Information on such "green" alternatives is available on several Internet sites, a list of which the City could be included in the public outreach materials.

Local, state, and federal regulations will largely be relied upon for ensuring that reporting requirements are met and business plans are prepared by those business operations that involve the transport, handling, and storage of hazardous materials. The City will help to ensure compliance with these regulations to the greatest extent possible in the course of its normal permit and inspection processes.

As previously noted, pesticide contamination would be a significant issue mainly with vacant land on the edge of the City that is planned for development or with agricultural land that is annexed to the City. In such areas, it would be prudent to conduct soils testing and cleanup, if necessary, before allowing intensive development to occur.

Many old structures in Colusa, particularly those constructed before 1979, could potentially contain asbestos. It should be assumed that the demolition of older structures in the City might present this hazard. Proper asbestos abatement and disposal procedures shall be undertaken during the demolition of old buildings.

5.5.3 GOALS, POLICIES AND IMPLEMENTING ACTIONS FOR HAZARDOUS MATERIALS

Goal SAF-4:

To protect the community's health, safety, natural resources, and property by regulating the use, storage, transport, and disposal of hazardous materials.

Policy SAF-4.1:

The City shall require the disclosure of the use and storage of hazardous materials in existing and proposed industrial, commercial, and public-use activities, and the siting of hazardous waste disposal facilities, in accordance with federal, state and local regulations.

<u>Implementing Action SAF-4.1.a: California Health and Safety Code Chapter 6.95 and Title 40, Code of Federal Regulations</u>

The City will comply with and enforce, to the extent feasible, Chapter 6.95, §25503 of the California Health and Safety Code governing the storage of hazardous materials. Where appropriate, the City shall also ensure compliance with Title 40, Part 112, of the Code of Federal Regulations, which requires preparation of a Spill Prevention, Control and Countermeasures (SPCC) Plan, a similar but more detailed plan than the Hazardous Materials Business Plan required under the State Code, for businesses that store hazardous wastes in excess of standards set in the statute. These statutes will apply to hazardous chemical storage at all City-owned and operated facilities.

Implementing Action SAF-4.1.b: Development Review

The City will refer any development proposal that may be affected by, or affect, the storage, handling, disposal, or transportation of hazardous materials to the Fire Department, the Colusa County Sheriff's Office, and other appropriate agencies for review. When required, a Hazardous Material Business Plan will be prepared and submitted in accordance with County procedures. The Business Plan will contain all provisions required by Assembly Bill 2185, Department of Transportation (DOT), and Cal-OSHA regulations for environmental controls of hazardous materials, and other provisions that may be required by the County.

Policy SAF-4.2:

The City shall ensure that it maintains sufficient resources, contacts, and personnel to provide the public with emergency notification in the event of a hazardous materials spill or airborne release.

Implementing Action SAF-4.2.a: Interagency Coordination

The City will utilize contacts with County agencies and special districts to develop coordinated plans to respond to hazardous material spills or releases. The City will also keep abreast of and, where appropriate, implement Office of Emergency Services hazardous spill prevention and planning programs.

Policy SAF-4.3:

The City shall conduct education and outreach to City residents regarding hazardous materials.

Implementing Action SAF-4.3.a: Hazardous Materials Education

The City will continue its information programs regarding hazardous materials, including asbestos and lead-based paint. In addition, the City may expand its program by offering information on less hazardous alternatives to household products that could present hazards to human health and the environment.

5.6.1 SETTING—AIRPORT HAZARDS

The Colusa County Airport is the only airport within the Planning Area and the only public airport in Colusa County. It is located approximately one-half mile southeast of the City of Colusa on approximately 81 acres of land. The airport is located within the jurisdiction of and is managed by the County of Colusa. The airport was established in 1961 and received a permit from the State's Division of Aeronautics the same year.

The Federal Aviation Administration (FAA) classifies Colusa County Airport as a Basic Utility Stage II airport. This is an airport that can serve approximately 75 percent of the single-engine airplanes used for personal and business purposes, as well as high-performance single-engine aircraft and light twin-engine aircraft typically used for business and air-taxi purposes. The airport has one paved runway 3,000 feet long, 60 feet wide, and laid out in a northwest-southeast orientation parallel with the adjacent SR 20. The approved traffic pattern for the runway keeps all arriving and departing aircraft to the east of the airport, where primarily agricultural land exists. A lighted windsock and a standard rotating beacon mark the airport. There are 22 airport-owned T-hangars, five privately-owned hangars, 42 open tie-downs, one large hangar, two agricultural operation hangars, and a caretaker's residence. Services available at the airport include transit and taxi service, fuel sales, and crop dusting service.

The airport is located adjacent to and west of SR 20. It is surrounded on the south, west, and north by commercial and industrial facilities, business and personal services, and public services. As previously noted, the east side of the airport is agricultural land, currently pasture and orchard. Residences, businesses, and other activities located adjacent to or near the Colusa County Airport could be exposed to hazards arising from airport operations. Land use activities located within the flight path of aircraft could be exposed to potential accidents involving aircraft. Nearby buildings could be exposed to accidents or interfere with airport operations well as

COMPREHENSIVE LAND USE PLAN

The Colusa County Airport Land Use Commission adopted the Colusa County Airport Comprehensive Land Use Plan (CLUP) on June 5, 1995. The CLUP provides the land use compatibility guidelines on which compatibility of land uses with airport operations are determined. It also establishes the planning boundaries around the airport. These boundaries are established for height, noise, and safety. Following adoption by the Airport Land Use Commission, a CLUP is transmitted to all jurisdictions affected by the plan. Under California Government Code §65302.3, local jurisdictions must take action within 180 days to assure that its land use regulations are consistent with CLUP provisions. In addition to the provisions of the adopted CLUP and the provisions of Government Code §65302.3, §11010.13(b) and §1102.6a of the California Civil Code establish additional notification requirements for land use applications occurring within an "Airport Influence Area". An Airport Influence Area is defined as a radius area approximately two statute miles beyond an active airport, inside of which a formal "Notice of Airport in the Vicinity" is required.

Concerns of airport land use planning, as defined and described in the adopted CLUP, fall into three categories: height restrictions, noise compatibility, and safety of persons on the ground. The CLUP evaluates all three categories. Since the Noise Element discusses airport noise issues, this Safety Element will focus on the first and third categories.

STRUCTURE HEIGHT

Height restrictions are necessary to ensure that objects will not impair flight safety or decrease the operational capacity of the airport. Federal Aviation Regulation (FAR) Part 77 defines a series of imaginary surfaces surrounding airports. Any object or structure that would penetrate any of these imaginary surfaces is considered by the FAA to be an obstruction to air navigation. Applicants for projects that penetrate certain imaginary surfaces are required to notify the FAA of their intent. The FAA then initiates an aeronautical study to analyze if the project would be a hazard to air navigation. While the FAA can determine that a project would constitute a hazard to air navigation, it cannot prohibit construction. However, California law does prohibit the construction of any structure that would constitute an air navigation hazard as defined in FAR

Part 77, unless a permit is issued by the California Department of Transportation, Division of Aeronautics.

The CLUP for Colusa County Airport has adopted the imaginary surfaces defined in FAR Part 77. In general, to determine if a project would constitute a hazard to air navigation, notice is required to be given to the FAA if construction or alteration penetrates these imaginary surfaces or is more than 200 feet in height above the ground level at the project site. Most of the structures within the Colusa city limits that are in the vicinity of the airport are single-family residences or multifamily complexes no higher than two stories. These structures do not penetrate the imaginary surfaces defined in FAR Part 77 and, therefore, present no hazard to air navigation or are exposed to air hazards due to height.

SAFETY ZONES

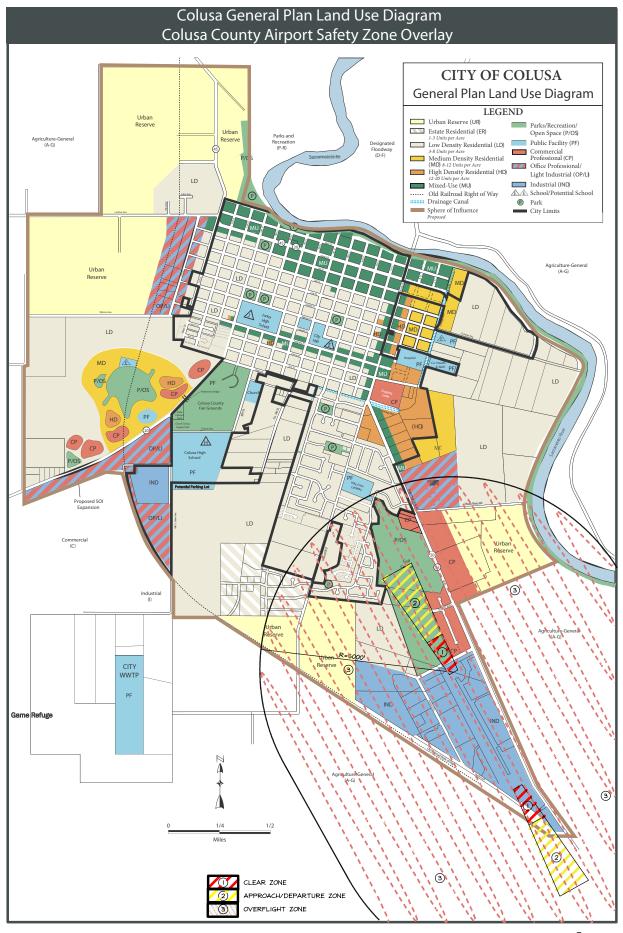
Areas around airports are exposed to the possibility of aircraft accidents, even with well-maintained aircraft and highly trained pilots. Airport safety areas are established to minimize the number of people exposed to aircraft crash hazards. This is accomplished by placing restrictions on land uses in various designated safety areas.

The CLUP for the Colusa County Airport designates three safety areas: the clear zone, the approach/departure zone, and the over flight zone. The clear zone is near the end of the runway and is the most restrictive of the safety areas. The approach/departure zone is located under the takeoff and landing slopes and is less restrictive. The over flight zone is the area under the air traffic pattern and is the least restrictive of the safety areas. **Figure 5.2** shows the safety areas established around Colusa County Airport. As designated by the Colusa County Airport Land Use Commission, the safety areas are as follows (numbering corresponds to number labels in **Figure 5.2**):

- 1) Clear zone beginning 200 feet beyond the end of the paved runway surface and centered along the extended runway. It has an inner width of 250 feet, extends outward for a length of 1,000 feet, and has an outer width of 450 feet.
- 2) Approach/departure zone beginning at the outer end of the clear zone and centered along the extended runway. It has an inner width of 450 feet, extends outward for a length of 2,000 feet, and has an outer width of 850 feet.
- 3) **Overflight zone** generally coincides with the area overflown by aircraft during normal traffic pattern procedures but outside of the clear and the approach/departure zones.

According to the land use compatibility guidelines in the CLUP, virtually all land uses are incompatible in the clear zone, except for roadways, open space and natural areas, pastures, and agricultural row crops. None of the land currently within the Colusa City limits is located within the clear zone. However, the Planning Area does contain a portion of land designated for Parks/Recreation within the clear zone (see Land Use Diagram Figure 2.3).

The approach/departure zone allows for some commercial and industrial uses, but it prohibits all residential uses. Most of the approach/departure zone that is within the Planning Area covers land designated as Parks/Recreation. According to the CLUP, recreational uses within the approach/departure zone are limited to open space and natural areas, golf courses, and riding stables.





The overflight zone appears to cover part of the Planning Area in the southeast. According to the Land Use Diagram, most of the land within the overflight zone that is within the Planning Area is designated Low Density Residential, which allows primarily for single-family residences. The CLUP indicates that single-family detached residences are a compatible land use in the overflight zone, provided that the density is five acres or more per single-family residence.

5.6.2 OUTLOOK - AIRPORT HAZARDS

Colusa County has proposed a number of new facilities and airport improvements. The ultimate construction of these facilities will depend on securing adequate funding. Facilities and improvements proposed include construction of new hangars, acquisition of additional property, improvement of the airport's drainage system, and slurry seal of the existing runway, taxiway, apron, and tie-downs. A proposed extension of the runway is planned but has been postponed at this time. The future number of fixed-base aircraft and operations is projected to increase due to various factors, including the reform of product liability laws, the proposed upgrades to airport facilities, and the continued viability and vitality of the agricultural industry in Colusa County.

5.6.3 GOALS, POLICIES AND IMPLEMENTING ACTIONS FOR AIRPORT HAZARDS

Goal SAF-5

To ensure public safety during airport operations.

Policy SAF-5.1:

The City shall require development projects within the overflight zone of the Colusa County Airport to consider all applicable safety policies, City standards, and land use compatibility guidelines.

Implementing Action SAF-5.1.a: Development Review

The City will refer all development projects within the overflight zone of the Colusa County Airport to the Colusa County Airport Land Use Commission for its review and comment. As part of the development review process for projects within the overflight zone of the Airport, the City will apply airport/land use safety compatibility criteria to site design review to ensure compatibility between airport operations and proposed land uses.

Implementing Action SAF-5.1.b: Interagency Coordination

The City will work with the Colusa County Airport Land Use Commission to assist with the updating of the airport's Comprehensive Land Use Plan (CLUP).

Implementing Action SAF-5.1.c: Public Disclosure

The City will inform applicants whose projects fall within the Airport Influence Area that disclosure statements regarding the presence of an active airport are required. See Business & Professions Code §11010 and Civil Code §1102.6(d) for language regarding disclosure by realtors and the two-mile "bubble".

5.7.1 SETTING—OTHER EMERGENCY SERVICES

This section discusses emergency services other than fire protection. These include police protection, emergency medical services, and health services. Section 5.4, Fire Hazards, describes existing fire protection services in the City of Colusa and includes goals, policies, and implementing actions related to those services. In addition, the Municipal Facilities and Service Element describe fire and police facilities.

POLICE PROTECTION

The City of Colusa Police Department provides police protection services within the City of Colusa. The main station is located at 260 6th Street. The Police Department has nine sworn full-time officers, including the Chief of Police, one lieutenant, two sergeants, and five officers. There is one personnel position consisting of a non-sworn secretary. Additionally, the Police Department has been authorized a tenth position which will become its first full-time detective position. The Police Department uses seven vehicles for its services.

Patrol shifts for the Police Department consist of one officer during the 7:00 a.m. to 5:00 p.m. shift, one officer during the 5:00 p.m. to 3:00 a.m. shift, and one officer during the 9:00 p.m. to 7:00 a.m. shift. A fourth supplemental shift serves at the department's discretion for days or nights, depending on immediate needs. The most prevalent crime problems in Colusa are property thefts, assaults, vandalism, and traffic incidents. There is a very low level of serious crime. While the incidence of serious crime is low, the number of calls for service to the Police Department has risen from 3,229 in 1999 to 5,638 in 2005 (Colusa PD, 2006).

The Colusa County Sheriff's Department provides police services to the unincorporated portion of the Planning Area. Since the Sheriff's Department headquarters are located in Colusa, response time to calls in the unincorporated area surrounding Colusa is relatively short. The Sheriff's Department provides contracted dispatch services to the Colusa Police Department.

HOSPITAL AND EMERGENCY MEDICAL SERVICES

The Colusa Fire Department, through an agreement with Colusa County Emergency Medical Services (EMS), assumes the first response to all medical emergency calls in the City. Shift personnel on the initial response apparatus are certified as Emergency Medical Technicians (EMTs). The Fire Department currently has twelve first responder EMTs on staff, along with nine EMS personnel (cross-trained). In 2003, 199 calls were received for emergency medical service. Enloe Hospital, based in Chico, provides ambulance service.

Colusa's role in health services issues is somewhat limited. The City is not directly involved with the establishment or management of any health care facilities. Nevertheless, Colusa is a growing community with an ever-increasing need for health services that is recognized by the City in its planning efforts.

The Colusa Regional Medical Center (CRMC), located at 1999 East Webster Street, is a private, non-profit community facility which is governed by a local volunteer board of directors. The Medical Center is a 48-bed acute care facility providing a 24-hour emergency room, an intensive care unit, a medical/surgical unit, skilled nursing facility, laboratory, pharmacy, home health services, rehabilitation services, diagnostic imaging, and other medical services. A medical office building adjacent to the hospital houses six physicians. Trauma level care is provided via airlift to either UC Davis Medical Center in Sacramento or Enloe Medical Center in Chico. CRMC is currently evaluating the level of emergency care that will be required under

new legislation enacted in 2006. CRMC also supports three Rural Health Clinics located in Colusa, Stonyford, and Williams and is studying the need for additional clinics in order to accommodate growth in population throughout the County.

The hospital facility is dated and is undergoing ongoing facility and equipment upgrades. The County meets the criteria as a Health Professional Shortage Area, and CRMC is developing a recruitment plan to attract more physicians to the community in order to meet the access standards of the minimum of one primary care physician for every 3,500 residents. CRMC is also recruiting specialty care physicians in order to provide the full spectrum of medical care to local residents. (Kirby, February 6, 2007)

5.7.2 OUTLOOK—OTHER EMERGENCY SERVICES

POLICE PROTECTION

The existing Colusa General Plan recommends a standard of two sworn police officers per 1,000 population. At the current population, Colusa is approximately two sworn officers short of meeting this standard. Moreover, based on the range of population projections in the Land Use Element, Colusa would require from four (4) to 11 additional sworn officers by the year 2020. A Municipal Service Review of City of Colusa services characterizes current law enforcement services in Colusa as adequate. However, as the City's population grows, maintaining this adequacy may become an issue.

HOSPITAL AND EMERGENCY MEDICAL SERVICES

Colusa County's population is growing at a rate where demand for medical services exceeds what CRMC is able to provide. In addition to new and upgraded facilities, there are requirements for emergency preparedness (e.g., bioterrorism, toxic exposure and treatment, etc.) that must be met. However, as the demand continues to increase for medical services, CRMC will continue to be faced with shortages in facility space and staffing. It is anticipated that the size of the emergency department will need to be increased in proportion to increases in population and emergency service calls. (Kirby, February 6, 2007)

Consequently, the City and County will need to work cooperatively with the Medical Center to facilitate improved medical care for all residents of Colusa and the surrounding area. Siting and construction of medical facilities can be accomplished through the assistance of City or County staff (depending on jurisdiction) with their respective development review processes, and local government assistance with applications for state and federal funding, if required.

5.7.3 GOALS, POLICIES AND IMPLEMENTING ACTIONS FOR OTHER EMERGENCY SERVICES

Goal SAF-6:

To provide police and emergency medical services in a well-planned, cost-effective, and professional manner.

Policy SAF-6.1:

The City shall strive to provide high-quality police services for City residents and businesses with adequate facilities, modern technology, and current training to maximize job performance.

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<u>Implementing Action SAF-6.1.a: Law Enforcement Technology and Service Level Update</u>

The City will continue to emphasize the use of modern technology in providing effective law enforcement for the community and support such technology through the budget process. The City will strive to maintain its stated response time standards, which it is currently meeting, of three to five minutes for all calls, especially emergencies.

Implementing Action SAF-6.1.b: Mutual Aid Agreements

The City will continue to participate in its mutual aid agreements and coordination between the City's police department and other law enforcement agencies.

Implementing Action SAF-6.1.c: City Budget and Rate Review

During its annual budget review, the City will consider the needs of the Colusa Police Department and will support those needs with budget revenues, grants, and impact fees. As part of the budget review process, the City will review impact fee rates to ensure they adequately reflect a fair share of funding by development.

Policy SAF-6.2:

The City shall incorporate police protection considerations into City and community activities.

Implementing Action SAF-6.2.a: Development Review

The City will refer development proposals to the Colusa Police Department for review and comment. The review process will consider the provision of access to lands for emergency services, street access to all structures, and crime prevention programs.

Implementing Action SAF-6.2.b: Public Awareness/Education

The City will promote ongoing public safety programs, including Neighborhood Watch and other public education and crime prevention efforts.

Policy SAF-6.3:

The City shall continue its efforts toward increasing the ability of the Colusa Fire Department to provide paramedic services.

Implementing Action SAF-6.3.a: EMS Training and Equipment

The City will continue to support EMS training for Colusa Fire Department personnel. Through the budget process the City will plan and provide for the most up-to-date EMS equipment for Colusa Fire Department personnel.

Policy SAF-6.4:

The City shall strive to maintain its quick response time for emergency medical calls.

Implementing Action SAF-6.4.a: Interagency Coordination

The Colusa Fire Department will continue its agreement with Colusa Regional Medical

Center to provide first response to all medical emergency calls in the City.

Goal SAF-7:

To ensure a range of health care services are conveniently available to City residents.

Policy SAF-7.1:

The City shall encourage and support the establishment and maintenance of a public hospital to provide health care services to the residents of Colusa.

<u>Implementing Action SAF-7.1.a: Ordinance and Regulation Review and Update</u>

During its annual review of the General Plan, the City will consider the need for health care facility sites and potential locations and make appropriate amendments if necessary. The City will also review and revise its Zoning Ordinance as needed to incorporate design and performance requirements related to health care facilities.

Policy SAF-7.2:

The City shall support changes in zoning and performance standards, when necessary, to facilitate the sensible siting and construction of health care facilities.

Implementing Action SAF-7.2.a: Ordinance and Regulation Review and Update

During its annual review of the General Plan, the City will consider the need for health care facility sites and potential locations, and make appropriate amendments if necessary. The City will also review and revise its Zoning Ordinance as needed to incorporate design and performance requirements related to health care facilities.

Policy SAF-7.3:

The City shall assist local health service and care providers in pursuing funding opportunities, both public and private, for the planning, construction and staffing of health and medical facilities.

Implementing Action SAF-7.3.a: Federal, State and Local Funding

The City will take the lead role, and/or partner with, nonprofit organizations in applying for funds that they cannot pursue directly because of their legal status (e.g., Community Development Block Grant program).

5.8.1 SETTING—EMERGENCY PLANS AND EVACUATION ROUTES

COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

The City's Comprehensive Emergency Management Plan provides direction for responding to disastrous occurrences in Colusa. This Plan facilitates accomplishing the underlying goal of the Safety Element, which is to protect the life, property, and environment of community residents, businesses, employees, and visitors. It also serves as a key component in implementing the City's policies that address emergency response.

The plan defines the primary and support roles of City agencies and departments in after-incident damage assessment and reporting requirements. In addition, the plan provides for the operation of police, fire, and health services, as well as transportation alternatives in the event of a multi-hazard emergency. City evacuation procedures are described and are submitted to the State Office of Emergency Services (OES) for approval.

EVACUATION ROUTES

Likely reasons for a potential emergency evacuation of the City of Colusa include a hazardous materials spill from vehicles transporting these materials along SR 20 and SR 20/45 or flooding resulting from levee overtopping or failure. Potential evacuation routes include SR 20 (east and west), SR 20/45 (north), Lurline Avenue (west), Wescott Road (south), and Bridge Street (north). Due to the relatively low number of vehicles currently required to completely evacuate the City and the City's grid street system, an organized evacuation using all available routes could be accomplished in a short period of time.

5.8.2 OUTLOOK—EMERGENCY PLANS AND EVACUATION ROUTES

Since the General Plan was last updated, national events have brought greater attention to the need for comprehensive emergency planning, including planning for evacuations. The terrorist attacks against New York and Washington on September 11, 2001 showed that natural disasters are not the only situations that call for emergency planning. These attacks also highlighted the importance of coordinating responses by government at all levels, of communication among first responders, and of dealing with unusual threats, such as the use of biological agents.

In spite of the havoc that could be caused by terrorist attacks, natural disasters remain the most likely types of events to occur in Colusa that would prompt emergency action. As mentioned above, flooding would be a possible disaster facing Colusa. Floods in Yuba County in 1986 and 1997 show that levees do not guarantee complete protection from this type of disaster. The City should always be aware of potential emergency situations and plan accordingly.

Disasters often highlight aspects of emergency planning that are overlooked. For instance, Hurricane Katrina in 2005 clearly demonstrated the problems associated with evacuating residents from a large city, particularly those residents who had no personal transportation. Katrina also illustrated the serious impacts that a disaster may have on areas not directly hit by the event, as states outside the hurricane zone began receiving evacuees, sometimes by the thousands. In emergency planning, the City of Colusa should consider the potential impacts from likely disasters in nearby areas, such as flooding in Sacramento, Marysville/Yuba City, or an earthquake in the San Francisco Bay Area.

5.8.3 GOALS, POLICIES AND IMPLEMENTING ACTIONS FOR EMERGENCY PLANS AND EVACUATION ROUTES

Goal SAF-8:

To ensure a coordinated and effective response to emergencies affecting the City.

Policy SAF-8.1:

The City shall establish and maintain an effective emergency response program that proactively anticipates potential community needs.

Implementing Action SAF-8.1.a: Community-Based Disaster Plan

The City will institute community-based disaster response planning that involves local businesses and neighborhoods.

<u>Implementing Action SAF-8.1.b: Training for City Employees</u>

The City will continue to train City public safety employees in the Safety Assessment Program offered by the Governor's Office of Emergency Services.

Implementing Action SAF-8.1.c: Interagency Coordination

The City will continue to coordinate disaster response preparedness planning efforts through fire department programs and in coordination with the American Red Cross and other community agencies.

Implementing Action SAF-8.1.d: Capital Improvement Program

The City will explore the use of a Capital Improvement Program or similar planning and funding mechanism to establish a readily accessible supply of funds for use by the City in times of an emergency or major disaster.

Policy SAF-8.2:

The City shall comply with and periodically update the Comprehensive Emergency Management Plan and ensure that participants are prepared to efficiently carry out their assignments.

Implementing Action SAF-8.2.a: Comprehensive Emergency Management Plan

The City will include a public safety "ingress" component to the City's updated Comprehensive Emergency Management Plan that discusses ways to facilitate arrival of public safety employees from outlying areas when damaged infrastructure prevents them from driving to Colusa in emergency situations.

The Comprehensive Emergency Management Plan will identify needed facilities, equipment, and supplies to assist City residents in the first days following an emergency or major disaster.

Policy SAF-8.3:

The City shall collaborate with appropriate local, state, and federal agencies to improve disaster preparedness and response.

Implementing Action SAF-8.3.a: Emergency Preparedness Drills

The City will seek to hold regular (at least one per year) emergency preparedness drills, participants in which will include the City's Fire Department, Police Department, and Public Works Department. The City will invite and encourage agencies that are not part of the City to participate in these drills.

Implementing Action SAF-8.3.b: Interagency Coordination

The City will coordinate with other agencies on issues of seismic safety and flood control. Coordination between the City and County will occur through mechanisms such as the distribution of development proposals for review and comment. The City will cooperate with federal, state, and local agencies – including the U.S. Army Corps of Engineers, State Reclamation Board, and Federal Emergency Management Agency (FEMA) – on seismic safety and flood control issues related to these agencies.

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