

SAFETY ELEMENT

1.0 Introduction

In accordance with the State General Plan Guidelines, the safety element includes maps of known hazards including seismic and other geologic hazards, and other hazards described below. It addresses potential hazards from the following sources: ground failure and other geologic hazards; seismic activity; fire; flooding; hazardous materials; and airport operations. General public protection issues are also addressed.

1.1 Legal Authority

As directed by the State legislature, this element of the General Plan is intended to further "the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides, subsidence and other geologic hazards known to the legislative body; flooding; and wild land and urban fires (Government Code Section 65302(g))."

This element identifies the hazards that Calaveras County must consider when making land use decisions. Based on analysis of local hazards and an evaluation of their associated risks to life and property, this element recognizes a degree of acceptable risk and provides the basis for planning and coordination of risk management with State and federal agencies in order to ensure that public projects, plans and programs of other government agencies reflect public safety issues for County residents.

1.2 Relationship to Other Elements

The Safety Element is integrated with the other elements of the General Plan to protect residents and visitors from unreasonable risks associated with the categories identified. Areas potentially affected by known hazards are depicted on the maps which accompany the Safety Element text. The Safety Element is expected to affect land use policies and is coordinated with the Land Use Element. Safety considerations may affect the Open Space and Conservation Elements, and may present additional justification for lowering density in conjunction with land use decisions, based partly on seismic and landslide risk. The Safety Element is also related to the Housing and Circulation Elements in that it discusses hazards that may affect decision-making in these areas.

2.0 Seismic, Geologic, and Soil Hazards

2.1 Seismicity

Calaveras County lies within the Sierra Block, an area of historically low seismicity. Although the County has felt groundshaking from earthquakes with epicenters located elsewhere, no major earthquakes have been recorded within the County. The closest known source of large earthquakes is the Sierra Frontal Fault System along the eastern margin of the Sierra Nevada, which includes the Carson Valley Fault. This fault is located within a few miles of eastern portions of the County, and has been evaluated as capable of generating earthquakes of up to the magnitude 7.0 range on the Mercalli Scale. Table VII-1 describes the Mercalli Intensity Scale.

The Melones-Bear Mountain Fault System (also known as the Sierra Foothills Fault System) crosses the western portion of Calaveras County. While the northern portion of this system (outside of Calaveras County) is thought to be capable of a magnitude 6.5 earthquake, the level of activity on the portion of the system within Calaveras County is still unknown. However, the risk of surface rupture is not considered sufficient to restrict the development found in the County.

Other fault systems that could affect Calaveras County are the San Andreas Fault, the Hayward Fault, the Calaveras Fault, and the Greenville Fault. Because of their distance from Calaveras County, however, events on these systems are expected to have relatively minor effects in Calaveras County (magnitude 4.0 to 5.0).

TABLE VII-1	
MODIFIED MERCALLI INTENSITY SCALE (ABRIDGED)	
Intensity	Effects
I	Not felt except by a very few under especially favorable circumstances.
II	Felt by only a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motorcars may rock slightly. Vibrations like a passing truck.
IV	During the day, felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, and doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motorcars rocked noticeably.
V	Felt by nearly everyone; many awakened. Some dishes, windows, and doors broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of towers, poles, and other tall objects sometimes noticed.
VI	Felt by all; many are frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by person driving motor vehicles.
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Chimneys, factory stacks, columns, monuments, and walls fall. Heavy furniture overturned. Disturbs persons driving motorcars.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; damage greater in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed, along with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

Source: United States Geological Survey, 1985.

2.2 Groundshaking

The potential for seismically induced ground shaking is lower in Calaveras County than in most of California. All of Calaveras County may be subjected to shaking of intensity 4.0 to 5.0 on the Mercalli Scale during the infrequent events that occur on the relatively distant branches of the San Andreas Fault System or on the Owens Valley portion of the Sierran Frontal Fault System. The eastern portions of the County may be subjected to somewhat stronger shaking (intensity 6.0 to 7.0 on the Mercalli Scale) if rupture occurs on the Carson Valley Fault. Similar intensities could occur in the western portion of the County if a magnitude 6.0 earthquake were to occur on a nearby branch of the Melones-Bear Valley Fault System. Such an event is considered very unlikely.

2.3 Liquefaction Hazards

Liquefaction is the transformation of uncemented, saturated sand or silt to a liquified state by the ground shaking of an earthquake. This only occurs in soils with very little or no clay. Liquefaction potential is a function of the level of ground shaking at a given site. Although the potential for damage from liquefaction is generally less than ground shaking, it is considerably higher than the potential damage from surface rupture.

Sites in Calaveras County with liquefaction potential would be those on alluvial deposits having groundwater and sand or silt layers of uniform grain sizes within about 30 feet of the surface. Such conditions are generally not present in the county. The areas of alluvial soils (Soil Groups 1 and 2 in Table VII-2 on page VII-4) have some amounts of clay which minimize the liquefaction potential.

2.4 Slope Instability

A landslide is defined as the downslope movement of soil and rock material under the influence of gravity. The formation of landslides under natural conditions depends on several factors including:

Steepness of slopes (landslides occur more readily on steep slopes);

The type of materials (unconsolidated, soft sediments or surface deposits will move downslope more easily than consolidated, hard bedrock);

Structural properties of the materials (the orientation of the rock-layering unit or sediments relative to slope direction);

Water (landslides are generally more frequent in areas of seasonally high rainfall);

Vegetation type (trees and plants with penetrating roots increase ground stability);

Proximity to areas undergoing active erosion (rapid undercutting makes nearby slopes more susceptible to landslides); and

Earthquake-generated ground shaking (strong ground shaking can trigger immediate ground failure or loosen materials and lead to future failure). (J. Laurence Mintier and Associates, 1992.)

There are several areas of the county with steep slopes of 50 percent or greater and therefore have landslide potential. Areas with steep slopes are shown on Slopes and Fault Zones map, Page VII-5. The areas of particular landslide concern are those that include high elevations and steep ravines and gulches associated with river and stream channels.

Artificial slopes associated with the existing mill tailings could also be unstable. Most likely, the tailings will progressively slump and gradually flatten out over time. Slope failures have the potential to impact local drainage courses and/or downstream water quality.

2.5 Expansive Soils

Soils with a high clay content are usually expansive. Minerals in certain clays swell with increased moisture content and then contract during dry periods. The volume changes associated with seasonal variations in moisture content (called shrink-swell characteristics) can damage shallow building foundations and pavement. On slopes, the continuous shrinking and swelling of expansive soils can cause the soil to migrate downslope, which can also disrupt foundations and bury utility lines. The specific soil groups with moderate to high shrink-swell potential are listed in Table VII-2. The location of each soils group can be found on Soil Types map, Page IV-2.

TABLE VII-2 SOILS GROUPS WITH MODERATE TO HIGH SHRINK-SWELL POTENTIAL Calaveras County, 1993	
Soils Group	Description
Group 1	Very deep alluvial soils, moderately good drainage and slight to moderate erosion hazard. Shrink-swell behavior is moderate.
Group 2	Shallow, well-drained gravelly soils with finer subsoils, good natural drainage and a slight to moderate erosion hazard. Shrink-swell behavior is moderate.
Group 5	Deep to shallow, well-drained, slightly acid, and rocky soils. Drainage is good with slight to moderate erosion hazard. Shrink-swell behavior is high.
Group 6	Acid, rocky, or stony soil over slate rock. Erosion hazard is moderate to severe. Shrink-swell behavior is moderate.

Source: Crawford Multari & Starr, 1993.

2.6 Erosion

The discussion of soils found in the Conservation Element of this General Plan noted areas with high erosion hazards in the county. Table VII-3 identifies the soil groups with moderate to high erosion hazard. Erosion Potential map, Page VII-7, identifies the areas with soils and slope characteristics that have high and moderate erosion potential.

Slopes and Fault Zones map

Erosion Potential map

TABLE VII-3 SOILS GROUPS WITH MODERATE TO HIGH EROSION POTENTIAL Calaveras County, 1993	
Soils Group	Description
Group 6	Acid, rocky, or stony soil over slate rock. Erosion hazard is moderate to severe.
Group 7	Moderately coarse, acid soils over weathered granite. Natural drainage is good. Erosion hazard is moderate to high.
Group 8	Moderately deep, well-drained, acid soils. Natural drainage is good, but erosion hazard is moderate to high.
Group 9	Rocky outcroppings, where the soil mantle is less than 2 inches thick. Erosion hazard is very high.

Source: Crawford Multari & Starr, 1993.

GENERAL PLAN RECOMMENDATIONS

Goal VII-1 : Adequately protect life and property from unreasonable risks associated with geological and seismic hazards.

Policy VII-1A: Review future subdivisions in areas of 50 percent or greater slope for slope stability and incorporate appropriate mitigation measures.

Implementation Measure VII-1A-1: Future single-family residential subdivisions having parcel sizes of less than 20 acres shall not be permitted in areas of 50 percent or greater slope. Large developments may contain areas with 50 percent slopes, provided the areas have the appropriate density zoning designation.

Implementation Measure VII-1A-2: Amend the Zoning and Subdivision Ordinances to include procedures for reviewing slope stability.

Policy VII-1B: Review all proposed buildings in the County for compliance with current building standards relating to seismic safety and slope stability.

Implementation Measure VII-1B-1 : Incorporate conditions into building permits that will prevent or minimize damage to structures to be located in areas of potential slope instability.

Implementation Measure VII-1B-2 : Enforce the Uniform Building Code regarding seismic safety and slope stability.

Policy VII-1C: Review proposals to locate dams or other major facilities in the County for geologic and seismic safety.

Implementation Measure VII-1C-1: Require site-specific safety studies of all proposed dams and other major facilities.

3.0 Fire Hazards

Fires in Calaveras County occur in both urban and wildland settings. Fires can be classified primarily as structure or wildland fires.

Structural fire hazards are identified by evaluating the type of construction, type of occupancy, and available fire protection. Structure fires destroy life, property, historical features and economic resources. A study by the National Fire Protection Association reveals that over 50% of businesses that suffer large losses due to fire do not survive.

Rural areas like Calaveras County face special challenges, including widely scattered population, long response times, inadequate water supplies, limited budgets for apparatus and training, limited opportunity to develop skills in actual fire due to the small number of fires in any one community.

Rural areas have the highest fire death and property loss rates. Based on the most recent national data, the rate of fire deaths per million population in communities with less than 2,500 is roughly double the rate in all other communities, 50% higher than the largest cities. Property damage due to fire averages \$10 per person per year in mid-size cities and \$40 per person per year in rural communities. (Source: NFPA Fire Protection Handbook, 16th ed.)

Wildland fire hazards are identified by evaluating the type and amount of fuels, the weather, and the topography. Wildland fires can result in severe damage to valuable natural resources and important open spaces and recreation areas. Wildland fires destroy commercial timber, homes, increase erosion on steep slopes, and degrade reservoir water quality.

Fuel refers to the quantity of flammable vegetation and other materials per unit of land area, moisture content, chemical content, and the distribution and ratio of dead vegetation to living vegetation.

Fuel found in Calaveras County can be divided into light, medium and heavy categories. The light category includes grassy or rocky areas, meadows, urban areas and cultivated lands. The medium category includes areas of conifer and hardwood tree stands. The heavy category includes areas of shrubs and brush. Fire Protection Zones map, Page VII-10, shows the general distribution of fuel types in the County.

Weather significantly affects fire intensity and behavior. Wind is the most critical factor. As wind velocity increases, the rate of fire spread also increases. Relative humidity also has a direct effect, as drier air produces drier, more combustible vegetation. Precipitation further affects the moisture content of dead and living vegetation. Fire weather is sampled daily during the wildland fire season at over 350 stations located throughout California. Based on this sampling, critical fire weather frequency is classified into three categories. Calaveras County falls into the highest frequency class.

Topography plays several important roles in determining how fires spread. Generally, topography causes fires to burn more rapidly upslope than downslope. Heat from fires below rises and pre-heats the vegetation on higher slopes. By the time fire reaches upslope areas, the trees and brush are already warm, very dry, and easy to ignite. The steeper the slope, the greater the rate of fire spread.

Fire Protection Zones map

In addition, travel times for relief vehicles and personnel are generally longer in areas of steep topography since the few roads that exist are usually steep, narrow and winding. As slope increases, it becomes less safe to use hand crews, and forces must be pulled back to the nearest road or ridge top to construct fire lines. The problem of fires spotting ahead of the main fire front also becomes greater as slope increases. For all the above reasons, topography is an important consideration in classifying fire hazard.

All of Calaveras County is designated as having a Very High fire rating, as shown on Fire Protection Zones map, Page VII-10. The sub-classifications shown on Fire Protection Zones map, Page VII-10 are based on other vegetation, slope, and population characteristics:

TABLE VII-4 WILDLAND FIRE PROTECTION ZONES Calaveras County, 1993	
Zone	Characteristics
1	Low elevation grasslands, populated
2	Mid elevation oak and woodlands, populated
3	Timber on steep slopes but no associated river
4	Timber on steep slopes associated with the Mokelumne river
5	Timber and brush, populated
6	Timber on steep slopes associated with the Stanislaus River, populated
7	Local responsibility area. The City of Angels Fire Department or Town of San Andreas Fire District has authority.

Source: California Department of Forestry, 1993.

3.1 Fire Protection Services and Fire Rating

Fire protection services in Calaveras County are provided by volunteer fire departments, special districts, county agencies, state agencies, and federal agencies.

There are eleven fire protection districts, a public utility district, one city fire department, and the Calaveras County Fire Department organized to fight fires in the County. The County has agreements with seven of the fire protection districts in which an exchange of services, emergency response and financial support, is delineated. The California Department of Forestry and the United States Forest Service are responsible for and provide wildland fire protection within their jurisdiction, which together encompass virtually all of Calaveras County, excepting the City of Angels and part of the San Andreas Fire Protection District.

A fire protection master plan for the County has been drafted, but is still under revision. Options being explored include status quo, consolidation of districts and/or County fire protection agencies, and dissolution of the County Fire Department.

For purposes of underwriting fire insurance, communities are classified with respect to their fire defenses and physical characteristics. These classifications are referred to as ISO (Insurance Services Office) ratings and range on a scale of 1 to 10. ISO rating 1 represents the highest level of fire protection and ISO rating 10 represents the lowest level of protection. Calaveras County currently ranges in ISO ratings from 4 to 10.

A community's ISO rating takes into account water supply, fire department capabilities, communities, regulations, hazards and climate. The availability of an adequate water supply and delivery system is a major consideration.

The emphasis of fire protection in Calaveras County is fire suppression. This vitally necessary service is, however, the last resort action. Prevention, detection and automatic extinguishment can precede the need for fire suppression. Principal courses of action in fire protection include a) fire protection education and awareness, b) code adoption and enforcement, and c) fire suppression.

Approximately two-thirds of the County's population are served by district water systems. The remaining one-third of the County's population is served by ground water sources. Water supply for fire purposes in areas where fire hydrant systems are not available depends upon the ability of local fire protection districts to transport water to the site of a fire, or upon individuals who have developed their own water storage systems.

GENERAL PLAN RECOMMENDATIONS

Goal VII-2: Adequately protect natural resources, life and property from fire hazards.

Policy VII-2A: Work cooperatively with all fire protection agencies toward managing wildland fires.

Implementation Measure VII-2A-1: Protect structures from wildland fires by requiring minimum fire breaks around all structures as part of final building inspection.

Implementation Measure VII-2A-2: Work with state and federal agencies for joint enforcement of adopted wildland prevention codes.

Policy VII-2B: Evaluate new development for fire safety.

Implementation Measure VII-2B-1: Encourage new development to attain the following ISO ratings:

Land Use and Parcel Size	Fire Protection Level
<ul style="list-style-type: none"> • Single Family Residential parcel size <20 acres 	ISO 8
<ul style="list-style-type: none"> • Single Family Residential parcel size 20+ acres 	ISO 9
<ul style="list-style-type: none"> • Multiple Family Residential 	ISO 7
<ul style="list-style-type: none"> • Commercial Development and Recreation-oriented Commercial Development 	ISO 7
<ul style="list-style-type: none"> • Industrial Development 	

Implementation Measure VII-2B-2 : Require adequate access for emergency fire equipment to new development by applying standards contained in the County Road Ordinance.

Implementation Measure VII-2B-3 : Update the County Fire Ordinance addressing model fire codes, ISO ratings, and other fire safety regulations.

Implementation Measure VII-2B-4 : Apply the Fire and Life Safety Regulations of the County Code to all new construction.

Goal VII-3 : Improve fire protection services within the County.

Policy VII-3A : Consider new means of delivering fire protection services.

Implementation Measure VII-3A-1 : Support the tanker truck system to serve areas without district water systems.

Implementation Measure VII-3A-2 : Create and adopt a fire protection master plan, and implement its recommendations.

Policy VII-3B : Encourage the development of financial programs to improve fire protection services.

Implementation Measure VII-3B-1 : Investigate the use of fees to assist in the financing of fire protection facilities and services.

Implementation Measure VII-3B-2 : Investigate and pursue additional funding mechanisms available to fund County fire protection.

4.0 Flood Hazards

This section addresses three basic types of potential flood hazards: stream-side overbank flows; areas of flat terrain with slow surface drainage; and inundation due to structural dam failure.

Flooding may occur in the County from heavy rainfall with saturated soils, an unusually rapid snow melt, or a combination of those factors. Overbank flow along the main channel of the Mokelumne and Stanislaus Rivers usually results from heavy snow melt coupled with heavy rainfall. This is also true of the mid-elevation tributaries of the Mokelumne River and the upper reaches of the Calaveras River system. Farther west, the source of flood flow waters are heavy rainfall associated with repeated winter storms and a saturated soil mantle. Summer thunderstorms are also occasionally a source of flood flows.

Flood potential can also be affected by land development and associated alteration of natural vegetative cover. Areas of concentrated development can contribute significantly to increased runoff as a result of roof and impervious surface areas. Removal of natural vegetation without new ground cover planting can have similar effects. Large scale alteration of vegetation as a result of wildland fires can also increase flood potential.

Flood Zones map

Surface Water map

Flooding hazards have been statistically evaluated to establish the likely extent of a 100-year flood. This is a flood level that may be expected to occur once every 100 years or to have a 1 percent chance of occurring in any given year. The flood plain areas within Calaveras County associated with the 100-year flood have been mapped by the Federal Emergency Management Agency (FEMA), as shown in Flood Zones map, Page VII-14. More detailed FEMA maps are available for use for evaluation of the flood hazard associated with specific properties.

4.1 Dam Failure Inundation

In and bordering Calaveras County, there are numerous dams used for downstream flood control, water storage and hydroelectric generation. Some of the dams and their respective reservoirs are located in steep river canyons. In the extremely unlikely event of structural dam failure, the inundation areas of these dams closely follow stream courses and then broaden once they reach the flat lands located west of the County.

GENERAL PLAN RECOMMENDATIONS

Goal VII-4: Adequately protect life and property from flood hazards in the County.

Policy VII-4A: Review building proposals for flood safety.

Implementation Measure VII-4A-1: Require that any 100 year flood plains be shown on all building plot plans.

Implementation Measure VII-4A-2: Require that all future buildings within slow surface drainage areas be placed above such areas or on properly designed foundation systems.

Implementation Measure VII-4A-3: Enforce the Uniform Building Code regarding flood protection.

Policy VII-4B : Limit future land subdivisions within inundation areas of dam sites.

Implementation Measure VII-4B-1: Utilize the Environmental Protection combining zone to regulate areas subject to inundation and other flood hazards.

Implementation Measure VII-4B-2: Allow density transfer to areas of a site not located within inundation areas.

Implementation Measure VII-4B-3: When reviewing project proposals, precise delineation of the inundation areas of the dam sites will be accepted as the limiting boundary for the subdivision without requiring a General Plan Amendment, when substantial credible evidence is submitted as to the delineation of the innundation area.

5.0 Hazardous Materials

The General Plan Guidelines of the Governor's Office of Planning and Research define hazardous materials as injurious substances, including pesticides, herbicides, toxic metals and chemicals, liquified natural gas, explosives, volatile chemicals, and nuclear fuels.

The Guidelines for the preparation of Hazardous Waste Management Plans developed by the California Department of Health Services define hazardous wastes as a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either:

Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

Pose a substantial present or potential hazard to human health or environment when improperly treated, stores, transported, or disposed of, or otherwise managed.

The Tanner Hazardous Waste Management Planning Law (AB 2948-Tanner, 1986) requires counties to develop local plans to manage hazardous wastes. The Calaveras County Hazardous Waste Management Plan was adopted in 1990 and addresses the policies and programs to manage hazardous wastes.

5.1 Indigenous Hazardous Materials

Hazardous materials indigenous to Calaveras County are those derived from the extraction and processing of toxic metals. Mining has been the backbone of the County's economy since the Gold Rush. Copper and asbestos are two minerals having toxic qualities that have been mined in Calaveras County. Currently, there are no copper or asbestos mines operating in the County. The asbestos mine located near the Stanislaus River between New Melones Reservoir and Lake Tulloch originated in the early 1900's. In 1990, the open pit mine was converted to an asbestos-containing waste landfill.

5.2 Imported Hazardous Materials

Imported hazardous materials are produced elsewhere and brought into the County either for specific purposes or as airborne pollution.

Materials used for specific purposes include: pesticides and herbicides used by agriculture; liquified gas used for energy; and chemicals and explosives used in mineral extraction and processing. The use of these materials is regulated by either federal, state or local government.

Airborne hazardous materials drift into the County by wind. The most common form is air pollution from valley cities and agricultural enterprises. Calaveras County is a member of a regional air district, currently in the Mountain Counties Air District.

Much more hazardous airborne material to which Calaveras County may be potentially exposed would be radiation from the Rancho Seco nuclear power plant, if it were to operate again. Ranch Seco, owned and operated by the Sacramento Municipal Utility District (SMUD), is located approximately fifteen miles from the northwest corner of Calaveras County. Nearly the entire County is within the 50-mile radius "ingestion planning zone." Within that zone, radioactivity could accumulate in food, fodder and water, and eventually be ingested by humans. Parts of Calaveras County, including the communities of Valley Springs, Burson, and Wallace are also within the "extended planning zone." In the event of a major accident, people in that zone would be temporarily sheltered or relocated outside of the zone. However, the plant has been closed since 1983, and currently there are no plans to reopen the facility.

GENERAL PLAN RECOMMENDATIONS

Goal VII-5: Adequately protect life and property from hazardous materials.

Policy VII-5A: Work cooperatively with state and federal agencies in the safe handling of hazardous materials.

Implementation Measure VII-5A-1: Require compliance with federal, state and local safety provisions in the use of hazardous materials in the County.

Policy VII-5B: Assure that mining and processing of toxic metals in the County do not adversely affect the environment.

Implementation Measure VII-5B-1: Enforce all statutes and regulations governing surface mining and reclamation.

Policy VII-5C: Review zoning, use permit, and development requests for compatibility with any nearby use or processing of hazardous materials.

Implementation Measure VII-5C-1: Identify known hazardous waste disposal sites and potentially hazardous or toxic mine waste disposal sites and deny development of residential and commercial uses near those sites.

Goal VII-6: Adequately protect life from radiation in the event of an accident at the Rancho Seco nuclear power plant.

Policy VII-6A: Work cooperatively with the Office of Emergency Services toward protecting humans, plants, and crops from radiation.

Implementation Measure VII-6A-1: Assign responsibility to a person or persons within local government for coordination of all emergency and disaster situations.

6.0 Airport Operations

An airport is considered any area of land or water used or intended to be used for the landing and takeoff of aircraft. Currently, Calaveras County has one public use airport, the Maury Rasmussen Field, and a number of private airstrips. The primary safety issues deal with minimizing risks to both persons on the ground and for the occupants of the aircraft. Both the Federal Aviation Administration and the State Division of Aeronautics contain safety regulations.

GENERAL PLAN RECOMMENDATIONS

Goal VII-7: Adequately protect life and property from the hazards associated with airports and aircraft.

Policy VII-7A: Assure that airports in the County do not adversely affect the safety of persons on the ground or the occupants of the aircraft.

Implementation Measure VII-7A-1: Enforce all statutes and regulations governing airport operations.

Implementation Measure VII-7A-2: Require all projects within the Calaveras County Airport Special Plan.

7.0 General Safety

Every community is provided a margin of safety with public protection services which include police protection, fire protection, public health, Office of Emergency Services, and adult and child protective services. In the unincorporated territory, the County Sheriff's Department is responsible for law enforcement, marine safety and County Jail functions. State highways and County roads are patrolled by the California Highway Patrol.

GENERAL PLAN RECOMMENDATIONS

Goal VII-8: Protect the general safety of Calaveras County residents, property owners and visitors.

Policy VII-8A: Maintain adequate public protection services.

Implementation Measure VII-8A-1: When reviewing development projects, consider the impact on public protection services.