



## 10. Health and Safety

The Health and Safety Element is divided into the following sections:

- General (Section 10.1)
- Geologic and Seismic Hazards (Section 10.2)
- Airport Hazards (Section 10.3)
- Hazardous Materials (Section 10.4)
- Flood Hazards (Section 10.5)
- Urban and Wildland Fire Hazards (Section 10.6)
- Emergency Response (Section 10.7)
- Noise (Section 10.8)
- Healthy Communities (Section 10.9)
- Work Plan/Implementation Measures (Section 10.10)

### **Key Terms**

The following terms are used throughout this Element to describe health and safety issues:

**“A” Weighted Sound Level.** Means a sound level in decibels as measured with a sound level meter using the “A” weighted network (scale) at slow meter response. The unit of measurement is referred to herein as dB. The “A” weighted network responds to the frequency content of noise in a manner similar to the human ear.

**CNEL.** Means Community Noise Equivalent Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. Nighttime and evening penalties are intended to compensate for the increased potential for annoyance during these more sensitive times of the day or night.

**Critical Facilities.** Facilities housing or serving many people, that are necessary in the event of an earthquake or flood, such as hospitals, fire, police, and emergency service facilities, utility “lifeline” facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

**Decibel (dB).** A unit of measurement describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure (which is 20 micronewtons per square meter).

**Equivalent Energy Level, “ $L_{eq}$ ”.** Means the sound level corresponding to a steady state sound level containing the same total energy as a time varying signal over a given sample period.  $L_{eq}$  is typically computed over 1, 8, and 24-hour sample periods.

**Fault.** A fault is a fracture in the Earth’s crust that is accompanied by displacement between the two sides of the fault. An active fault is defined as a fracture that has shifted in the last 10,000 to 12,000 years (Holocene Period). A potentially active fault is one that has been active in the past 1.6 million years (Quaternary Period). A sufficiently active fault is one that shows evidence of Holocene displacement on one or more of its segments or branches.

**Floodplain.** Land adjacent to a stream, slough, or river that is subject to flooding or inundation from a storm event. Federal Emergency Management Administration (FEMA) defines the floodplain to be the area inundated by a 100-year flood.

**Floodway.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Hazardous Materials.** A hazardous material is defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of (*CCR, Title 22, Division 4.5, Chapter 10, Article 2, § 66260.10*).

**$L_{dn}$ .** Means Day/Night Average Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. to account for increased human sensitivity during these hours.

**$L_{max}$ .** Means the maximum A-weighted noise level recorded during a noise event.

**Noise Sensitive Land Use.** Noise sensitive receptors that include residential areas, hospitals, convalescent homes and facilities, schools, and other similar land uses.

### **Existing Conditions**

Tulare County has many health and safety concerns, both human-made and naturally occurring, from noise, airport hazards, and hazardous materials, to flooding, and fires.

Tulare County is divided into two major physiographic and geologic provinces: the Sierra Nevada Mountains and the Central Valley. There are no known active faults in Tulare County. Tulare County rarely feels the effects of even the largest earthquakes from the nearest major fault line, the San Andreas Fault.

Tulare County also has human-made hazards such as airports, hazardous materials, and noise. Tulare County utilizes the Comprehensive Airport Land Use Plan (CALUP) to minimize danger to the public while still providing aviation services for public use airports in the County. Hazardous wastes are handled according to State and Federal law and the County’s Hazardous Waste Management Plan.

Tulare County’s noise producers include highways and roads, railroads, manufacturing plants, airports, and agricultural operations.

Land use, the built environment, and transportation options can also effect communities and contribute to the health, safety, and quality of life. One of the many means of preventing premature death is through crime prevention and promoting healthy lifestyles by means of community design.

Tulare County has a long history of flooding along its major rivers: the Kings, Kaweah, and Tule Rivers. In 1997, flooding occurred in Three Rivers, Springville, Lindsay, and Earlimart. In 2006, flooding occurred in Cutler-Orosi. Recent improvements to raise the elevation of the spillway at Terminous Dam and planned improvements to the Lake Success Dam will help to minimize future flood risk.

Tulare County has both urban and wildland fire hazards, creating the potential for injury, loss of life, and property damage.

Tulare County is served by several public safety and emergency response agencies. The County works closely with these agencies to ensure emergency preparedness.

### **Assembly Bill 162 (2007 Ca.Stats. 369) and Senate Bill 5 (2007 Ca.Stats. 364)**

Assembly Bill 162 (AB 162), adopted in 2007, amended Government Code Section 65302(d)(3) and (g)(2) to require cities and counties to identify information regarding flood hazards upon revision of the jurisdiction's housing element on or after January 1, 2009. The requirements of Government Code Section 65302 (d)(3) and (g)(2)(A) are addressed in this General Plan Update as follows:

Figure 10-1 (Flood Hazards and Faults) displays information based on historic and current data regarding flood waters. Figure 10-1 shows:

- 1) The flood hazard zones (i.e. 100 and 500 Year Flood Zones) from the National Flood Insurance Rate maps published by Federal Emergency Management Agency (FEMA);
- 2) The dam failure inundation maps prepared pursuant to Section 8589.5 that are available from California Emergency Management Agency;
- 3) The California Department of Water Resources (DWR) Awareness Floodplain Mapping Program maps.

Figure 10-2 (Fire Threat) shows:

- 1) Data on areas vulnerable to wildfire; and,
- 2) Urban development boundaries, hamlet development boundaries, and mountain service centers where existing and planned development will occur including structures, roads, utilities, and essential public facilities.

Used in conjunction, Figures 10-1 and 10-2 show areas where FEMA flood zones and fire threats overlap to identify areas vulnerable to flooding after wildfires; The Figures also show where flood hazard zones are within these urban boundaries.

Furthermore, Figure 10-1, along with Figure 8-1 (Tulare County Plan For Open Space) in Chapter 8, the Environmental Resource Management Element, Part I, identifies rivers, creeks, streams, flood corridors, and all open space land, including riparian habitat, that may accommodate floodwater for the purposes of groundwater recharge and stormwater management.

Senate Bill 5 (SB 5), also adopted in 2007, authorized the State Department of Water Resources (DWR) to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Sacramento-San Joaquin (SAC-SJ) Valley watershed. SB 5 requires that these maps contain the best available information on flood hazards and be provided to cities and counties in the SAC-SJ Valley watershed. This effort was completed by DWR in 2008. Tulare County is not in the SAC-SJ Valley watershed, and 200-year floodplains for Tulare County were not included as a part of that study. The DWR has two Levee Flood Protection Zone (LFPZ) maps within the Sacramento River

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Basin and the San Joaquin River Basin. According to the San Joaquin River Basin map there is no LFPZ for the Tulare County area. Furthermore, the County has not designated any levee protection zones. Areas subject to inundation in the event of the failure of the levees or floodwalls in proximity to the City of Visalia are included in the FEMA information set forth in Figures 10-1 and 8-1, "FEMA 100 Year Flood Zone" and "FEMA 500 Year Flood Zone."<sup>1</sup>

The designated floodway maps from the former Reclamation Board, a predecessor to the Central Valley Flood Protection Board with a larger study area, were used to establish the Tulare County Flood Prevention Ordinance (Ordinance Code of Tulare County, Part VII, Chapter 27) Flood Plain zones. The Ordinance defines "floodway" as:

"FLOODWAY" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. The floodway is delineated on the Flood Boundary Floodway Map, on maps adopted by the State Reclamation Board when acting within its jurisdiction, and/or on the County Zoning Map (signified by the F-1, Primary Flood Plain Zone). The designated floodway maps are provided in General Plan Figure 10-3.

In addition, the Tulare County Flood Control Master Plan (FCMP) was adopted by the Tulare County Board of Supervisors in 1972 upon the recommendations of the Tulare County Flood Control District. This Element of the General Plan addresses issues particularly related to flood control along natural watercourses in Tulare County. This adopted Element is incorporated into this General Plan Update document as Chapter 15 but is not being amended at this time.

The Tulare County Flood Control Master Plan also contains historical data on flooding, including locally prepared maps of areas subject to flooding, and sites that have been repeatedly damaged by flooding. Historical information about flood hazards from the United States Army Corps of Engineers (USACE) is also included in the Flood Control Master Plan as noted in its selected bibliography on page 58. According to the Army Corp of Engineers Cal EMA now controls authorship of any studies used to process flood information from the USACE by 1986. Furthermore, information from the Cal EMA website included in Figure 10-1, states that its information is based upon information from the USACE.<sup>2</sup> In July 2012 the County contacted the USACE by phone and by email, but has received no additional relevant information.

In accordance with 65302 (g) (2) (B and C) the County has included Policies (Section 10.5 Flood Hazards and 10.6 Urban and Wildland Fire Hazards) and Implementation Measures in sections 10.10 based upon the above information. The General Plan Policies and implementation measures used in conjunction with the County's zoning and flood ordinances provide a reasonable protection of county uses from unreasonable risk of flooding.

Existing and planned development in flood hazard zones can be viewed by comparing Figures 10-1 and Figure 4-1. Local, state, and federal agencies with responsibility for flood protection include; California Department of Water Resources, US Department of Interior, Geological Survey, Corp of

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<sup>1</sup> The levees in the Visalia area were not certified at the time of publication of the updated Visalia area Flood Insurance Rate Maps (FIRMs) in 2008. Uncertified levees are therefore not relied upon in mapping flood information, as discussed under 44 CFR § 65.10 or the previous freeboard policy in place since February 10, 1981 (51 Fed. Reg. 30305 (August 25, 1986)). FEMA guidance also notes that "Decertified and uncertified levees will not be depicted on flood maps as providing the required level of protection. The areas behind these levees will be mapped as a high-risk areas and flood insurance will be required for buildings behind the levee with a federally backed mortgage." (FEMA, The NFIP and Levees Frequently Asked Questions, October 2006, page 3.)

<sup>2</sup> See <http://myplan.calema.ca.gov/> under "Flood/CA Specific" noting that "100-Year Floodplains" information is based in part upon "USACE Comprehensive Study."

Engineers, Department of the Army, Tulare County Flood Control District, Tulare County Planning Division, Three Rivers Soil Conservation District, Natural Resource Soil Conservation Service Department of Agriculture, Division of Soil Conservation State of California, Bureau of Reclamation, Southern San Joaquin Valley Flood Control and Water Conservation Association, California Regional Water Quality Control Board, Central Valley Region, California Department of Conservation, Kings River Conservation District, California Water Resources Control Board, and the Kaweah Delta Water Conservation District.

**Additional Groundshaking and Landslide Information Resources**

Tulare County is characterized as Severity Zone “Nil” and “Low” groundshaking with zero (no) declared landslides according to the updated report “State of California Multi Hazard Mitigation Plan Chapter 6 - Other Hazards: Risks and Strategies” (published in October 2010) by the California Geological Survey, Department of California. This report does provide very general statewide maps of both "Landslide Hazard Potential" and "Declared Landslide (1950 to 2009) Events" and so is an additional resource for information that can be used in site specific project analysis in addition to Figure 10-4 Ground Shaking and Landslide Potential for Tulare County in this chapter. The referenced mapping specific to ground shaking and earthquake shaking potential within Tulare County taken from the Department of Conservation website indicate that Tulare County is located some distance from known, active faults and will experience lower levels of shaking less frequently. In most earthquakes, only weaker, masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking within Tulare County.

**10.1 General**

**HS-1** To protect County residents and visitors from injury and damage resulting from natural catastrophes, man-made events, and hazardous conditions.

**HS-1.1 Maintain Emergency Public Services**

The County shall ensure that during natural catastrophes and emergency situations, the County can continue to provide essential emergency services.

**HS-1.2 Development Constraints**

The County shall permit development only in areas where the potential danger to the health and safety of people and property can be mitigated to an acceptable level.

**HS-1.3 Hazardous Lands**

The County shall designate areas with a potential for significant hazardous conditions for open space, agriculture, and other appropriate low intensity uses.

**HS-1.4 Building and Codes**

Except as otherwise allowed by State law, the County shall ensure that all new buildings intended for human habitation are designed in compliance with the latest edition of the California Building Code, California Fire Code, and other adopted standards based on risk (e.g., seismic hazards, flooding), type of occupancy, and location (e.g., floodplain, fault).

**HS-1.5 Hazard Awareness and Public Education**

The County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, earthquakes, flooding, fire hazards, and emergency procedures.



## **HS-1.6 Public Safety Programs**

The County shall promote public safety programs, including neighborhood watch programs, child identification and fingerprinting, public awareness and prevention of fire hazards, and other public education efforts.

## **HS-1.7 Safe Housing and Structures**

The County shall continue to seek grant funding for the rehabilitation of deteriorated and dilapidated structures and provide available information regarding housing programs and other public services.

## **HS-1.8 Response Times Planning in GIS**

The County shall utilize its Geographic Information Systems (GIS) technology to track fire and law enforcement responses times and provide technical assistance to fire and law enforcement agencies.

## **HS-1.9 Emergency Access**

The County shall require, where feasible, road networks (public and private) to provide for safe and ready access for emergency equipment and provide alternate routes for evacuation.

## **HS-1.10 Emergency Services Near Assisted Living Housing**

In approving new facilities, such as nursing homes, housing for the elderly and other housing for the mentally and physically infirm, to the extent possible, the County shall ensure that such facilities are located within reasonable distance of fire and law enforcement stations.



*See also Chapter 14-Public Facilities and Services, Policy PFS-7.5: Fire Staffing and Response Time Standards and Policy PFS -7.9: Sheriff Response Time.*

## **HS-1.11 Site Investigations**

The County shall conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding.

## **HS-1.12 Addressing**

The County shall seek to expand the Street Names and House Numbering Ordinance to all areas of the County, including private roads, for emergency 911 purposes.

## **10.2 Geologic and Seismic Hazards**

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### **HS-2**

To reduce the risk to life and property and governmental costs from seismic and geologic hazards.

## **HS-2.1 Continued Evaluation of Earthquake Risks**

The County shall continue to evaluate areas to determine levels of earthquake risk.



*See Figure 10-4 Ground Shaking and Landslide Potential for Tulare County and Figure 10-5: Seismic/Geologic Hazard and Microzones Map.*

*Figure 10-1: Flood Hazards and Faults (11x17 fold out)*

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*Figure 10-2: Fire Threat (11x17 fold out)*

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*Figure 10-3 Designated Floodway Map (11x17 fold out)*

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*Figure 10-4 Ground Shaking and Landslide Potential for Tulare County (11x17 fold out)*

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Figure 10-4: Seismic /Geologic Hazards and Microzone (11x17 fold out)



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- HS-2.2 Landslide Areas**  
The County shall not allow development on existing unconsolidated landslide debris.
- HS-2.3 Hillside Development**  
The County shall discourage construction and grading on slopes in excess of 30 percent.
- HS-2.4 Structure Siting**  
The County shall permit development on soils sensitive to seismic activity permitted only after adequate site analysis, including appropriate siting, design of structure, and foundation integrity.
- HS-2.5 Financial Assistance for Seismic Upgrades**  
The County shall request Federal and State financial assistance to implement corrective seismic safety measures required for existing County buildings and structures.
- HS-2.6 Seismic Standards for Dams**  
The County shall continue to address seismic standards of dam safety as promulgated by the State Division of Safety of Dams, as applicable to all new and existing structures.
- HS-2.7 Subsidence**  
The County shall confirm that development is not located in any known areas of active subsidence. If urban development may be located in such an area, a special safety study will be prepared and needed safety measures implemented. The County shall also request that developments provide evidence that its long-term use of ground water resources, where applicable, will not result in notable subsidence attributed to the new extraction of groundwater resources for use by the development.
- HS-2.8 Alquist-Priolo Act Compliance**  
The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resource code, Chapter 7.5) unless the specific provision of the Act and Title 14 of the California Code of Regulations have been satisfied.

**10.3 Airport Hazards**

**HS-3** To minimize the possibility of the loss of life, injury, or damage to property as a result of airport hazards.

- HS-3.1 Airport Land Use Compatibility Plan**  
The County shall require that development around airports is consistent with the safety policies and land use compatibility guidelines contained in the adopted Tulare County Comprehensive Airport Land Use Plan (CALUP).

**i** Complete rules and regulations for ensuring airport land use compatibility are found in the Tulare County Comprehensive Airport Land Use Plan (PUC Section 21675(a)).

- HS-3.2 Compliance with Federal Aviation Administration (FAA) Regulations**  
The County shall ensure that development within the airport approach and departure zones is in compliance with Part 77 of the FAA Regulations (*FAA regulations that address objects affecting navigable airspace*).

## 10.4 Hazardous Materials

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### HS-4

To protect residents, visitors, and property from hazardous materials through their safe use, storage, transport, and disposal.

#### HS-4.1 Hazardous Materials

The County shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and Federal safety standards, including the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan.

#### HS-4.2 Establishment of Procedures to Transport Hazardous Wastes

The County shall continue to cooperate with the California Highway Patrol (CHP) to establish procedures for the movement of hazardous wastes and explosives within the County.

#### HS-4.3 Incompatible Land Uses

The County shall prevent incompatible land uses near properties that produce or store hazardous waste.

#### HS-4.4 Contamination Prevention

The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

#### HS-4.5 Increase Public Awareness

The County shall work to educate the public about household hazardous waste and the proper method of disposal.

#### HS-4.6 Pesticide Control

The County shall monitor studies of pesticide use and the effects of pesticide on residents and wildlife and require mitigation of the effects wherever feasible and appropriate.

#### HS-4.7 Coordination of Materials on Public Lands

The County shall work jointly with State and Federal land managers to coordinate the handling and disposal of hazardous materials on public lands *[New Policy]*.

#### HS-4.8 Hazardous Materials Studies

The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project.

#### HS-4.9 Pesticide Use

The County shall support an integrated pest management program which includes the biological control methods overseen by the Tulare County Agricultural Commissioners Office.

## 10.5 Flood Hazards

### HS-5

To minimize the possibility for loss of life, injury, or damage to property as a result of flood hazards.

#### HS-5.1 Development Compliance with Federal, State, and Local Regulations

The County shall ensure that all development within the designated floodway or floodplain zones conforms with FEMA regulations and the Tulare County Flood Damage Prevention Ordinance.

New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

#### HS-5.2 Development in Floodplain Zones

The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

1. Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
2. Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
3. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.



*See also the Tulare County Flood Control Master Plan (Chapter 15).*

#### HS-5.3 Participation in Federal Flood Insurance Program

The County shall continue to participate in the National Flood Insurance Program (NFIP).

#### HS-5.4 Multi-Purpose Flood Control Measures

The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.

#### HS-5.5 Development in Dam and Seiche Inundation Zones

The County shall review projects for their exposure to inundation due to dam failure. If a project presents a direct threat to human life, appropriate mitigation measures shall be taken, including restriction of development in the subject area.

#### HS-5.6 Impacts to Downstream Properties

The County shall ensure that new County flood control projects will not adversely impact downstream properties or contribute to flooding hazards.

#### HS-5.7 Mapping of Flood Hazard Areas

The County shall require tentative and final subdivision maps and approved site plans to delineate areas subject to flooding during a 100-year flood event.

## **HS-5.8 Road Location**

The County shall plan and site new roads to minimize disturbances to banks and existing channels and avoid excessive cuts and accumulations of waste soil and vegetative debris near natural drainage ways.

## **HS-5.9 Floodplain Development Restrictions**

The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

## **HS-5.10 Flood Control Design**

The County shall evaluate flood control projects involving further channeling, straightening, or lining of waterways until alternative multipurpose modes of treatment, such as wider berms and landscaped levees, in combination with recreation amenities, are studied.

## **HS-5.11 Natural Design**

The County shall encourage flood control designs that respect natural curves and vegetation of natural waterways while retaining dynamic flow and functional integrity.



*See also Figures 10-1 Flood Hazards and Faults and Figure 10-2 Fire Threat*

## **10.6 Urban and Wildland Fire Hazards**

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### **HS-6**

To minimize the exposure of County residents, visitors, and public and private property to the effects of urban and wildland fires.

#### **HS-6.1 New Building Fire Hazards**

The County shall ensure that all building permits in urban areas, as well as areas with potential for wildland fires, are reviewed by the County Fire Chief.

#### **HS-6.2 Development in Fire Hazard Zones**

The County shall ensure that development in extreme or high fire hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable State and County fire standards. This shall include promoting the use of fire resistant materials designed to reduce fire vulnerability within high or extreme fire hazard areas through use of Article 86-A of the 2001 California Fire Code and other nationally recognized standards, as may be updated periodically. Special consideration shall be given to the use of fire-resistant-materials and fire-resistant-construction in the underside of eaves, balconies, unenclosed roofs and floors, and other similar horizontal surfaces in areas with steep slopes.

#### **HS-6.3 Consultation with Fire Service Districts**

The County shall consult the appropriate fire service district in areas identified as subject to high and extreme fire hazard, for particular regulations or design requirements prior to issuance of a building permit or approval of subdivisions.

#### **HS-6.4 Encourage Cluster Development**

The County shall encourage cluster developments in areas identified as subject to high or extreme fire hazard, to provide for more localized and effective fire protection measures

such as consolidations of fuel build-up abatement, firebreak maintenance, fire fighting equipment access, and water service provision.

**HS-6.5 Fire Risk Recommendations**

The County shall encourage the County Fire Chief to make recommendations to property owners regarding hazards associated with the use of materials, types of structures, location of structures and subdivisions, road widths, location of fire hydrants, water supply, and other important considerations regarding fire hazard that may be technically feasible but not included in present ordinances or policies.

**HS-6.6 Wildland Fire Management Plans**

The County shall require the development of wildland fire management plans for projects adjoining significant areas of open space that may have high fuel loads.

**HS-6.7 Water Supply System**

The County shall require that water supply systems be adequate to serve the size and configuration of land developments, including satisfying fire flow requirements. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.

**HS-6.8 Private Water Supply**

The County shall require separately developed dwellings with individual private water supply to provide an acceptable guaranteed minimum supply of water for fire safety, in addition to the amount required for domestic needs.

**HS-6.9 Fuel Modification Programs**

The County shall actively support fuel modification and reduction programs on public and private lands throughout the County.

**HS-6.10 Fuel Breaks**

In the Foothill and Mountain Plan Areas, the County shall require fuel breaks of at least 100 feet around structures that are in a wildland fire area to limit the risk of fires and property loss. Secondary fuel breaks up to 200 feet in width shall be required when the County Fire Chief finds that additional precautions are necessary.

**HS-6.11 Fire Buffers**

The County shall strive to maintain fire buffers along heavily traveled roads within high and extreme hazard zones by thinning, disking, or controlled burning. Parks, golf courses, utility corridors, roads, and open space areas shall be encouraged to locate so they serve a secondary function as a fuel break.

**HS-6.12 Weed Abatement**

The County shall continue to encourage weed abatement programs throughout the County in order to promote fire safety.

**HS-6.13 Restoration of Disturbed Land**

The County shall support the restoration of disturbed lands resulting from wildfires.

**HS-6.14 Coordination with Cities**

The County shall coordinate with cities to develop cohesive fire safety plans with overlapping coverage.

## **HS-6.15 Coordination of Fuel Hazards on Public Lands**

The County shall work with local and Federal agencies to support efforts to reduce fuel related hazards on public lands.

## **10.7 Emergency Response**

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### **HS-7**

To provide effective emergency response to natural or human-made hazards and disasters.

#### **HS-7.1 Coordinate Emergency Response Services with Government Agencies**

The County shall coordinate emergency response with local, State, and Federal governmental agencies, community organizations, volunteer agencies, and other response partners during emergencies or disasters utilizing SEMS and NIMS.

#### **HS-7.2 Mutual Aid Agreement**

The County shall participate in established local, State, and Federal mutual aid systems. Where necessary and appropriate, the County shall enter into agreements to ensure the effective provision of emergency services, such as mass care, heavy rescue, hazardous materials, or other specialized function.

#### **HS-7.3 Maintain Emergency Evacuation Plans**

The County shall continue to create, revise, and maintain emergency plan for the broad range of natural and human-made disasters and response activities that could foreseeably impact Tulare County. This shall include, but not be limited to, flooding, dam failure, extreme weather, evacuation/transportation, mass care and shelter, and animal evacuation and sheltering. Emergency Planning projects shall be in line with the County's Strategic Plan and Emergency Operations Plan, and incorporate current guidance and initiatives from State and Federal Emergency Management Agencies.

#### **HS-7.4 Upgrading for Streets and Highways**

The County shall evaluate and upgrade vital streets and highways to an acceptable level for emergency services.

#### **HS-7.5 Emergency Centers**

The County shall require emergency backup systems to enable uninterrupted continuous operations as required by the California Essential Facilities Act.

#### **HS-7.6 Search and Rescue**

The County should continue to provide search and rescue operation capabilities for the Tulare County Sheriff's Department in mountainous areas, including those areas on the eastern side of the Sierra Nevada that are not served by all weather roads.

#### **HS-7.7 Joint Exercises**

The County shall encourage fire, law enforcement, emergency medical services, resource management, public health, and other governmental and non-governmental response partners to periodically conduct joint training exercises with the goal of developing the best possible coordinated action in the event of a natural or human-made disaster across all local jurisdictions.



## 10.8 Noise

### HS-8

To protect County residents and visitors from the harmful effects of excessive noise while promoting the County economic base.

#### HS-8.1 Economic Base Protection

The County shall protect its economic base by preventing the encroachment of incompatible land uses on known noise-producing industries, railroads, airports, and other sources.

#### HS-8.2 Noise Impacted Areas

The County shall designate areas as noise-impacted if exposed to existing or projected noise levels that exceed 60 dB Ldn (or Community Noise Equivalent Level (CNEL)) at the exterior of buildings.

#### HS-8.3 Noise Sensitive Land Uses

The County shall not approve new noise sensitive uses unless effective mitigation measures are incorporated into the design of such projects to reduce noise levels to 60 dB Ldn (or CNEL) or less within outdoor activity areas and 45 dB Ldn (or CNEL) or less within interior living spaces.

#### HS-8.4 Airport Noise Contours

The County shall ensure new noise sensitive land uses are located outside the 60 CNEL contour of all public use airports.

#### HS-8.5 State Noise Standards

The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code (UBC). Title 24 requires that interior noise levels not exceed 45 dB Ldn (or CNEL) with the windows and doors closed within new developments of multi-family dwellings, condominiums, hotels, or motels. Where it is not possible to reduce exterior noise levels within an acceptable range the County shall require the application of noise reduction technology to reduce interior noise levels to an acceptable level.

#### HS-8.6 Noise Level Criteria

The County shall ensure noise level criteria applied to land uses other than residential or other noise-sensitive uses are consistent with the recommendations of the California Office of Noise Control (CONC).



*Table 10.1: Land Use Compatibility for Community Noise Environments (see next page), is provided as a reference concerning the sensitivity of different land uses to their noise environment. It is intended to illustrate the range of noise levels which will allow the full range of activities normally associated with a given land use.*

#### HS-8.7 Inside Noise

The County shall ensure that in instances where the windows and doors must remain closed to achieve the required inside acoustical isolation, mechanical ventilation or air conditioning is provided.

### **HS-8.8 Adjacent Uses**

The County shall not permit development of new industrial, commercial, or other noise-generating land uses if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas designated and zoned for residential or other noise-sensitive uses, unless it is determined to be necessary to promote the public health, safety and welfare of the County.

### **HS-8.9 County Equipment**

The County shall strive to purchase equipment that complies with noise level performance standards set forth in the Health and Safety Element.

### **HS-8.10 Automobile Noise Enforcement**

The County shall encourage the CHP, Sheriff's office, and local police departments to actively enforce existing sections of the California Vehicle Code relating to adequate vehicle mufflers, modified exhaust systems, and other amplified noise.

### **HS-8.11 Peak Noise Generators**

The County shall limit noise generating activities, such as construction, to hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval.

### **HS-8.12 Foothill and Mountain Noise**

For areas designated by Tulare County as being within Foothill and Mountain Planning Areas and outside Foothill Development Corridors, the hourly Leq resulting from the development or new noise-sensitive land uses or new noise-generating sources shall not exceed 50 dB during the day (7:00 a.m.-10:00 p.m.) or 40 dB during the night (10:00 p.m.-7:00 a.m.) when measured at the boundary of areas containing or planned and zoned for residential or other noise-sensitive land uses. For these same areas and under the same circumstances, the maximum A-weighted noise level (Lmax) shall not exceed 70 dB during the day or 60 dB during the night.

### **HS-8.13 Noise Analysis**

The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there is development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels (such as those referenced in Table 10-1 of the Health and Safety Element).

### **HS-8.14 Sound Attenuation Features**

The County shall require sound attenuation features such as walls, berming, heavy landscaping, between commercial, industrial, and residential uses to reduce noise and vibration impacts.

### **HS-8.15 Noise Buffering**

The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks.

**Table 10.1 Land Use Compatibility for Community Noise Environments**

Land Use Category	Community Noise Exposure- $L_{dn}$ or CNEL (dB)						
	50	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes	[Noise compatibility chart for Residential - Low Density Single Family, Duplex, Mobile Homes]						
Residential – Multi-Family	[Noise compatibility chart for Residential – Multi-Family]						
Transient Lodging – Motels, Hotels	[Noise compatibility chart for Transient Lodging – Motels, Hotels]						
Schools, Libraries, Churches, Hospitals, Nursing Homes	[Noise compatibility chart for Schools, Libraries, Churches, Hospitals, Nursing Homes]						
Auditoriums, Concerts Halls, Amphitheaters	[Noise compatibility chart for Auditoriums, Concerts Halls, Amphitheaters]						
Sports Arenas, Outdoor Spectator Sports	[Noise compatibility chart for Sports Arenas, Outdoor Spectator Sports]						
Playgrounds, Neighborhood Parks	[Noise compatibility chart for Playgrounds, Neighborhood Parks]						
Golf Courses, Riding Stables, Water Recreation, Cemeteries	[Noise compatibility chart for Golf Courses, Riding Stables, Water Recreation, Cemeteries]						
Office Buildings, Business Commercial and Professional	[Noise compatibility chart for Office Buildings, Business Commercial and Professional]						
Industrial, Manufacturing, Utilities, Agriculture	[Noise compatibility chart for Industrial, Manufacturing, Utilities, Agriculture]						
<b>Normally Acceptable</b>	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.						
<b>Conditionally Acceptable</b>	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.						
<b>Normally Unacceptable</b>	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.						
<b>Clearly Unacceptable</b>	New construction or development generally should not be undertaken.						

[Source: Figure Noise-1. State Land Use Compatibility Standards for Community Noise Environment: California Governor’s Office of Planning and Research, October 2003]

**HS-8.16 State Noise Insulation**

The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code.

**HS-8.17 Coordinate with Caltrans**

The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near State roadways, by requiring noise buffering or insulation in new construction.

**HS-8.18 Construction Noise**

The County shall seek to limit the potential noise impacts of construction activities by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors.

**HS-8.19 Construction Noise Control**

The County shall ensure that construction contractors implement best practices guidelines (i.e. berms, screens, etc.) as appropriate and feasible to reduce construction-related noise-impacts on surrounding land uses.

## 10.9 Healthy Communities

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### HS-9

To support healthy lifestyles among residents of Tulare County through the built environment and land use decisions that play an important role in shaping the pattern of community development, in either promoting or discouraging good health for its citizens.

**HS-9.1 Healthy Communities**

To the maximum extent feasible, the County shall strive through its land use decisions to promote community health and safety for all neighborhoods in the County by encouraging patterns of development that are safe and influence crime prevention, promote a high-quality physical environment and encourage physical activity by means such as sidewalks and walking and biking paths that discourage automobile dependency in existing communities.

**HS-9.2 Walkable Communities**

The County shall require where feasible, the development of parks, open space, sidewalks and walking and biking paths that promote physical activity and discourage automobile dependency in all future communities.

**10.10 Work Plan/Implementation Measures**

The following table documents the Implementation Measures included with the General Plan to implement the goals and policies included in this Element.

<b>Implementation</b>	<b>Implements what Policy</b>	<b>Who is Responsible</b>	<b>2012-2015</b>	<b>2015-2020</b>	<b>2020-2030</b>	<b>On-Going</b>
1. The County shall maintain a program for training County staff in disaster preparedness and response.	HS-1.1	OES				■
2. The County shall review and update the Public Health All Hazards Preparedness and Response Plan at least every 5 years.	HS-1.1	HHSA; PHEP				■
3. The County shall maintain an Emergency Services Program. The program shall perform comprehensive Emergency Management for the Tulare Operational Area, in the major categories of: a. Preparedness (Including grants, planning, training and exercises), b. Response (including coordination with all local, State Federal, non-governmental, and volunteer agencies through the Emergency Operations Center), c. Recovery (including cost recovery, and other disaster assistance programs), d. Mitigation (including Local Hazard Mitigation Programs) The Emergency Services Program shall perform additional functions as prescribed by State (SEMS/CalEMA) and Federal (NIMA/FEMA) guidelines, including monitoring the adoption of NIMA by local jurisdictions.	HS-1.1 HS-1.5	OES				■
4. The County shall create a program that trains volunteers to assist police, fire, and County sheriff personnel how to perform effectively after a natural or human-made disaster.	HS-1.1 HS-1.5 HS-1.6	RMA; CAL FIRE; County Fire Department				■

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Implementation	Implements what Policy	Who is Responsible	2012-2015	2015-2020	2020-2030	On-Going
5. The County shall actively maintain the Emergency Council, as defined by County Ordinance (Part 1, Chapter 15). The Emergency Council shall perform various functions, including but not restricted to: a. Reviewing the preparation and progress of the cities and County in carrying out disaster and emergency services plan and functions. b. Coordination public agencies for efficiency in protection of public safety.	HS-1.1 HS-7.7	CAO HHSA				■
6. The County shall monitor and continue to seek funding to rehabilitate unsafe and dilapidated structures.	HS-1.7	RMA; CAL FIRE; County Fire Department; HHSA				■
7. The County shall develop standards for numbering buildings on private driveways to assist emergency service personnel in locating structures.	HS-1.4 HS-1.12	RMA		■		
8. The County shall develop a public education program to foster public awareness about fire hazards to reduce injury and loss of life and damage to property and degradation of the natural environment, particularly in conjunction with the public school system and "critical facility" personnel.	HS-1.5 HS-1.6	RMA; CAL FIRE; County Fire; County Sheriff	■			
9. The County shall pre-identify and periodically review evacuation routes in anticipation of an emergency. During an emergency requiring and evacuation, the County shall cooperatively select and publicize evacuation routes with the assistance of all involved agencies, based on the best – available information regarding the situation, in order to ensure a safe, orderly, and well-managed evacuation.	HS-1.5 HS-1.6 HS-1.9	RMA; OES; CAL FIRE; County Fire Department				■
10. The County shall work with other local agencies, including cities within the County, to develop coordinated GIS planning that identifies and maps the location of all public facilities and	HS-1.8	RMA		■		

Implementation	Implements what Policy	Who is Responsible	2012-2015	2015-2020	2020-2030	On-Going
<p>emergency response agencies. Contingency plans for emergency response and recovery should be incorporated into this mapping system.</p>						
<p>11. The County shall maintain a fire hazard severity map based on inputs from the Cal Fire and local fire districts within the County. The County shall use this map to determine if additional fire safety conditions should be applied as conditions of approval. If inside a fire hazard area, the County will consult with County Fire Department personnel, Cal Fire, and the U.S. Forest Service to determine appropriate protections.</p>	<p>HS-1.8 HS-6.6</p>	<p>RMA; CAL FIRE; County Fire Department</p>				■
<p>The County's fire hazard map will combine the following information:</p> <ul style="list-style-type: none"> <li>a. Number of fires by activity and area,</li> <li>b. Number of users in the area,</li> <li>c. Number of fires by ignition index in State responsibility areas, and</li> <li>d. Any other information request by the Emergency Council of the Tulare Operational Area as necessary.</li> </ul>						
<p>12. The County shall maintain its Hazardous Waste Management Plan and develop regulations for the placement of hazardous waste sites and develop standards for types of uses which would be compatible. Existing hazardous waste development requirements shall be enforced.</p>	<p>HS-4.1 HS-4.2 HS-4.3</p>	<p>RMA; HHSA, Env. Health</p>			■	
<p>13. The County shall develop standards for the type, location, and intensity of development adjacent to sites and facilities for the production, use, storage, and disposal of toxic and hazardous materials..</p>	<p>HS-4.3</p>	<p>RMA; CAL FIRE; County Fire Department</p>			■	
<p>14. The County shall maintain and annually update a Countywide database of FEMA flood plain maps to evaluate projects and provide to County residents, businesses, and developers.</p>	<p>HS-5.1 HS-5.2</p>	<p>RMA</p>				■



# Tulare County General Plan

<b>Implementation</b>	<b>Implements what Policy</b>	<b>Who is Responsible</b>	<b>2012-2015</b>	<b>2015-2020</b>	<b>2020-2030</b>	<b>On-Going</b>
15. The County shall adopt the following standards for use and development in areas of varying fire hazards and using the Fire Hazard Severity Scale as indicated below to review developments or uses within wildlands. The following minimum requirements should be met in relation to the three classes of Fire Hazard Severity as discussed within the context of the Health and Safety Element: a. Extreme Hazard – Extreme caution should be used in allowing development, particularly critical facilities. b. Moderate Hazard – Strict compliance with existing State statutes and local ordinances should provide adequate fire protection. c. Minimum Hazard – Development should be allowed, with recommendations for mitigation of hazard by Fire Warden.	HS-6.1 HS-6.2	RMA; CAL FIRE; County Fire Department	■			
16. The County shall work with the Fire Chief to develop a natural hazard disclosure statement for wildland fires to be recorded along with all development approvals in all moderate and extreme hazard areas.	HS-6.1 HS-6.2 HS-6.3	RMA; CAL FIRE; County Fire Department		■		
17. OES shall continue to conduct periodic emergency response exercises to ensure that all County departments respond efficiently and that emergency communications and other systems are to be properly maintained by RMA.	HS-7.1	OES; RMA				■
18. The County shall prepare and periodically update a set of measures and actions to comply with national and State Homeland Security standards for facility security.	HS-7.1	RMA; County Sheriff; CAL FIRE; County Fire Department				■
19. The County shall periodically update the Emergency Operations Plan to meet current Federal and State emergency requirements.	HS-7.3	OES				■
20. The County shall develop and implement procedures for	HS-8.5	RMA				■

## 10. Health & Safety

Implementation	Implements what Policy	Who is Responsible	2012-2015	2015-2020	2020-2030	On-Going
acoustical analysis of development proposals.						
21. The County shall adopt the Tulare County Noise Ordinance to incorporate standards set forth in the Health and Safety Element.	HS-8.3	RMA		■		
22. The County should develop and adopt a peak noise standards ordinance to regulate the operation and use of peak noise generating uses throughout the County and ensure residents and visitors are not subject to excessive peak noise nuisances.	HS-8.11	RMA	■			
23. The County shall work with the Tulare County Redevelopment Agency, special districts, private developers, and local communities to add health elements to community plans that promote physical activity.	HS-9.1	RMA; HHSA				■
24. Tulare County shall develop a healthy community checklist for new residential, commercial, office, and public developments that lists standards for land use, transportation, street design, parks, and open space.	HS-9.2	RMA; HHSA; Public Health Department				■
25. The County is to consider the preparation of a Healthy Communities Element in the General Plan.	HS-9.1	RMA; HHSA; Public Health Dept.		■		
26. The County shall maintain and periodically update the Hazardous Waste Management Plan, Emergency Operations Plan, and Area Plan as required by State and local regulations.	HS-4.1	HHSA				■

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