

# Amador County

## CAL FIRE Land Use Planning

### General Plan Safety Element Assessment Tier 1

June 27, 2016

Board of Forestry and Fire Protection



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**Purpose and Background:** The State Board of Forestry and Fire Protection (Board) is required to review and make recommendations for the safety element of general plan updates in accordance with Government Code (GC) 65302.5. The review and recommendations apply to those general plans with State Responsibility Area (SRA) (Public Resources Code (PRC) 4125) or Very High Fire Hazard Severity Zone Local Responsibility Area (VHFHSZ LRA) (GC 51177(i), PRC 4125).

The statutory requirements for the Board review and recommendations pursuant to GC 65302.5 (a)(1) and (2), and (b) are as follows:

- *“The draft elements...to the fire safety element of a county’s or a city’s general plan...shall be submitted to the Board at least 90 days prior to... the adoption or amendment to the safety element of its general plan [for each county or city with SRA or VHFHSZ].”*
- *“The Board shall... review the draft or an existing safety element and report its written recommendations to the planning agency within 60 days of its receipt of the draft or existing safety element....”*
- *“Prior to adoption of the draft element..., the Board of Supervisors... shall consider the recommendations made by the Board... If the Board of Supervisors...determines not to accept all or some of the recommendations..., the Board of Supervisors... shall communicate in writing to the Board its reasons for not accepting the recommendations.”*

**Methodology for Review and Recommendations:** The Board established a standardized method to review the safety element of general plans. The methodology includes 1) examining the safety element for inclusion of factors that are important for mitigation of wildfire hazard and risks, and 2) making recommendations related to these factors. The evaluation factors and recommendations below were developed using CAL FIRE technical documents and input from local fire departments.

Enclosed is the most expansive set of recommendations suggested by the Board, known as a Tier 1 Assessment. These recommendations are directed at communities that include:

- Overall high population densities; or
- High proportion of SRA or 20% or more of a city’s acreage is VHFHSZ LRA; or
- Population centers in or adjacent to VHFHSZ SRA, if there is no designated VHFHSZ LRA in the county; or
- Within the context of neighboring jurisdictions, the location of VHFHSZ in the jurisdiction creates an overall picture of contiguous fuels that threaten population or economic centers.

As local fuels, boundaries, populations, and other variables change throughout time, Board staff have the discretion to re-assign a jurisdiction into a lower or higher assessment tier. Staff will consider:

- Variations in population and population density; or
- Changes in proportion of land designated VHFHSZ (lower or higher); or
- Firefighting capabilities (paid, volunteer, equipment, etc) and contract changes; or

- Past planning efforts and involvement of organizations such as local Fire Safe Councils and new initiatives or efforts that have emerged over time; or
- Changes to the context of VHFHSZ within the region – does the VHFHSZ in a jurisdiction combine with neighboring fuels to create a continual pattern of very high fire risk in a way that it hadn't previously?

A full list of communities to be evaluated under Tier 1 are listed below.

### Counties (alphabetical)

Alameda	Glenn	Monterey	San Diego	Solano
Alpine	Humboldt	Napa	San Joaquin	Sonoma
Amador	Kern	Nevada	San Luis Obispo	Stanislaus
Butte	Lake	Orange	San Mateo	Tehama
Calaveras	Lassen	Placer	Santa Barbara	Trinity
Alameda	Los Angeles	Plumas	Santa Clara	Tulare
Alpine	Madera	Riverside	Santa Cruz	Tuolumne
Contra Costa	Marin	Sacramento	Shasta	Ventura
Del Norte	Mariposa	San Benito	Sierra	Yolo
El Dorado	Mendocino	San Bernardino	Siskiyou	Yuba
Fresno				

### Cities (alphabetical by county)

<b>Alameda</b>	<b>Los Angeles con't</b>	<b>Napa</b>	<b>Riverside con't</b>	<b>San Mateo</b>
Oakland	Glendale	Calistoga	Lake Elsinore	Hillsborough
<b>Butte</b>	Glendora	<b>Nevada</b>	Murrieta	San Carlos
Paradise	Hidden Hills	Calistoga	<b>San Bernardino</b>	Woodside
<b>Contra Costa</b>	Irwindale	Grass Valley	Big Bear Lake	<b>Santa Barbara</b>
El Cerrito	La Canada Flintridge	Nevada City	Colton	Santa Barbara
Lafayette	La Habra Heights	Truckee	Grand Terrace	<b>Santa Clara</b>
Orinda	La Verne	<b>Orange</b>	Highland	Los Gatos
Richmond	Los Angeles	Aliso Viejo	Loma Linda	Monte Sereno
<b>El Dorado</b>	Malibu	Anaheim	Rancho Cucamonga	Saratoga
Placerville	Monrovia	Brea	Redlands	<b>Shasta</b>
South Lake Tahoe	Palmdale	Laguna Beach	San Bernardino	Redding
<b>Lake</b>	Palos Verdes Estates	Laguna Niguel	Yucaipa	Shasta Lake
Clearlake	Pasadena	Lake Forest	<b>San Diego</b>	<b>Siskiyou</b>
<b>Los Angeles</b>	Rancho Palos Verdes	Newport Beach	Encinitas	Dunsmuir
Agoura Hills	Rolling Hills	Rancho Santa Margarita	Escondido	Fort Jones
Avalon	Rolling Hills Estates	San Clemente	Poway	Mount Shasta
Azusa	San Dimas	Yorba Linda	San Diego	Weed
Beverly Hills	Santa Clarita	<b>Placer</b>	San Marcos	<b>Tuolumne</b>
Bradbury	Sierra Madre	Colfax	Santee	Sonoma
Burbank	Westlake Village	<b>Plumas</b>	<b>San Luis Obispo</b>	<b>Ventura</b>
Calabasas	Whittier	Portola	Atascadero	Moorpark
Claremont	<b>Marin</b>	<b>Riverside</b>	Pismo Beach	Ojai
Diamond Bar	Mill Valley	Banning	<b>San Mateo</b>	Simi Valley
Duarte	<b>Monterey</b>	Beaumont	Belmont	Thousand Oaks
	Carmel	Calimesa	Half Moon Bay	

## Review Process and Timeline

The county/local jurisdiction and CAL FIRE Land Use Planning staff will receive and review technical guidance documents, the Board assessment, and relevant information from CAL FIRE and the Governor's Office of Planning and Research.



The county or local jurisdiction will work closely with CAL FIRE Land Use Planning staff during the development of the general plan and the safety element in particular.



**At least 90 days prior to the adoption or amendment of the General Plan:** The county or local jurisdiction will submit the safety element to the Board of Forestry & Fire Protection for review. Jurisdictions are encouraged to send safety elements to the Board prior to the 90 day statutory requirement for greater collaboration.



**No more than 60 days later:** The Board will consider staff recommendations and approve as-is or with changes at the next Board meeting. This deadline may be modified upon mutual agreement between Board staff and local jurisdictions.

## Tier 1 General Plan Safety Element Recommendations

Jurisdiction: Amador County	Notes:	CAL FIRE Unit: AEU	Date Received: 6/23/2016
County: Amador County	LUPP Reviewer: FC C Mitchell	UNIT CONTACT: Darin McFarlin	Date Reviewed: 6/27/2016

### GENERAL COMMENTS TO UNIT/JURISDICTION

The following comments are based on the State Board of Forestry and Fire Protection (Board) Safety Element Assessment documents. These comments are not those of the Board and are only intended to provide guidance to the local Unit or local government jurisdiction.

After a review of the General Plan Safety Element, the following recommendations below have been made in reference to Fire Hazard Planning (General Plan Technical Advice Series) and Office of Planning and Research (OPR).

**General Recommendations for the Safety Element (SE):** The Amador County Safety Element was pre-reviewed and given pre-recommendations prior to submittal to BOF. The Amador County plan has been updated to include majority of the recommendations and forwarded to the BOF for final review.

- Provide reference (links) to any Fire Department Mutual Aid and Automatic Aid Agreements throughout the County.
- Provide reference and policy identifying the assets at risk relating to the wildfire threat within the Safety Element.
- Recommend reference to this website with all other plans. <http://www.caloes.ca.gov/PlanningPreparednessSite/Documents/14%20Recovery%20Executive%20Summary%2010-30-13.pdf>
- Other recommendations provided in “additional comments” by each topic.

Please click on the appropriate box to “check” whether the plan satisfies each point. Standard recommendations are included in the checklist but please highlight or add additional comments as necessary.

### 1.0 Wildfire Protection Planning

1.1 General Plan references and incorporates County or Unit Fire Plan.  Yes  Partial  No

**Recommendation:** Identify, reference or create (if necessary) a fire plan for the geographic

scope of the General Plan. General Plan should incorporate the general concepts and standards from any county fire plan, fire protection agency (federal or state) fire plan, and local hazard mitigation plan. Identify or reference the local Unit Fire Plan and, if applicable, the Community Wildfire Prevention Plan.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Ensure fire plans incorporated by reference into the General Plan contain evaluations of fire hazards, assessment of assets at risk, prioritization of hazard mitigation actions, and implementation and monitoring components.

**Priority:**  High  Medium  Low  N/A

**Additional Wildfire Protection Planning Recommendations:**

*Pre-recommendations have been incorporated into the SE prior to this final review.*

**2.0 Land Use Planning:**

2.1 Goals and policies include mitigation of fire hazard for future development.  Yes  Partial  No

**Recommendation:** Establish goals and policies for specific ordinances addressing evacuation and emergency vehicle access; water supplies and fire flow; fuel modification for defensible space; and home addressing and signing.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Specify the local ordinances, code sections, or regulations addressing the above standards, particularly any ordinances that address right-of-way, easement, and other reasonable offsite and onsite improvements for a division of land which qualifies for a Parcel Map rather than a Tentative/Final Map under the Subdivision Map Act.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Develop fire safe development codes used as standards for fire protection for new development in State Responsibility Area (SRA) within the entity's jurisdiction that meet or exceed statewide standards in Title 14 California Code of Regulations Section 1270 et seq.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Adopt, and have certified by the BOF, local fire safe ordinances which meet or exceed standards in 14 CCR § 1270 for State Responsibility Area.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Consider mitigation of previously developed areas that do not meet Title 14 California Code of Regulations Section 1270 et seq. or equivalent local ordinance.

**Priority:**  High  Medium  Low  N/A

2.2 Disclose wildland urban interface hazards, including Fire Hazard Severity Zone designations

and other vulnerable areas as determined by CAL FIRE or fire prevention organizations. Describe or map any Firewise Communities or other fire safe communities as determined by the National Fire Protection Association, Fire Safe Council, or other organizations. Yes Partial No

**Recommendation:** Specify whether the entity has a Very High Fire Hazard Severity Zones (VHFHSZ) designation pursuant GC 51175 and include a map of the zones that clearly indicates any area designated VHFHSZ.

**Priority:** High Medium Low N/A

**Recommendation:** Adopt CAL FIRE recommended Fire Hazard Severity Zones including model ordinances developed by the Office of the State Fire Marshal for establishing VHFHSZ areas.

**Priority:** High Medium Low N/A

**Recommendation:** Discuss and/or include local fire hazard maps.

**Priority:** High Medium Low N/A

- 2.3 The design and location of new development provides for adequate infrastructure for the safe ingress of emergency response vehicles and simultaneously allows civilian egress during an emergency: Yes Partial No

**Recommendation:** Develop a policy that approval of parcel maps and tentative maps is conditional based on meeting regulations adopted pursuant to §4290 and 4291 of the Public Resources Code, particularly those regarding road standards for ingress, egress, and fire equipment access.

**Priority:** High Medium Low N/A

**Recommendation:** Develop pre-plans for fire prone areas that address civilian evacuations to temporary safety locations.

**Priority:** High Medium Low N/A

- 2.4 When approving parcel maps and use permits, consideration is given to providing adequate water supply infrastructure that meets zoning and fire protection needs. Yes Partial No

**Recommendation:** Develop a policy that approval of parcel maps is conditional based on meeting zoning requirements and fire safe development codes.

**Priority:** High Medium Low N/A

**Additional Land Use Planning Recommendations:**

*Pre-recommendations have been incorporated into the SE/HMP prior to this final review.*

**3.0 Housing/Structures and Neighborhoods:**

- 3.1 Incorporation of current fire safe building codes. Yes Partial No

**Recommendation:** Adopt building codes for new development in State Responsibility Areas or incorporated areas with VHFHSZ that are based on those established by the Office of the State Fire Marshal in Title 19 and Title 24 CCR, referred to as the “Wildland Urban Interface Building Codes.”

**Priority:**  High  Medium  Low  N/A

- 3.2 Identification and actions for substandard fire safe housing and neighborhoods relative to fire hazard area.  Yes  Partial  No

**Recommendation:** Identify and map existing housing structures that do not conform to contemporary fire standards in terms of building materials, perimeter access, and vegetative hazards in VHFHSZ or SRA by fire hazard zone designation.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Identify plans and actions to improve substandard housing structures and neighborhoods. Plans and actions should include structural rehabilitation, occupancy reduction, demolition, reconstruction, neighborhood –wide fuels hazard reduction projects, community education, and other community based solutions.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Identify plans and actions for existing residential structures and neighborhoods, and particularly substandard residential structures and neighborhoods, to be improved to meet current fire safe ordinances pertaining to access, water flow, signing, and vegetation clearing.

**Priority:**  High  Medium  Low  N/A

- 3.3 Consideration of diverse occupancies and their effects on wildfire protection.  
 Yes  Partial  No

**Recommendation:** Ensure risks to uniquely occupied structures, such as seasonally occupied homes, multiple dwelling structures, or other structures with unique occupancy characteristics, are considered for appropriate and unique wildfire protection needs.

**Priority:**  High  Medium  Low  N/A

- 3.4 Fire engineering features for structures in VHFHSZ.  Yes  Partial  No

**Recommendation:** Ensure new development proposals contain specific fire protection plans, actions, and codes for fire engineering features for structures in VHFHSZ. Examples include codes requiring automatic sprinklers in VHFHSZ.

**Priority:**  High  Medium  Low  N/A

**Additional Housing/Structures and Neighborhoods Recommendations:**

*Pre-recommendations have been incorporated into the SE prior to this final review.*

**4.0 Conservation and Open Space:**

4.1 Identification of critical natural resource values relative to fire hazard areas. Yes Partial No

**Recommendation:** Identify critical natural resources and other “open space” values within the geographic scope of the General Plan.

**Priority:** High  Medium  Low N/A

4.2 Inclusion of resource management activities to enhance protection of open space and natural resource values. Yes Partial No

**Recommendation:** Develop plans and action items for vegetation management that provides fire damage mitigation and protection of open space values. Plans should address protection of natural resource financial values, establishment of fire resilient natural resources, protection of watershed qualities, and protection of endangered species habitats. Actions should consider prescribed burning, fuel breaks, and vegetation thinning and removal

**Priority:** High  Medium  Low N/A

**Recommendation:** Establish goals and policies for reducing the wildland fire hazards within the entity’s boundaries, especially on vacant residential lots and greenbelts and, with the relevant partners, on adjacent private wildlands or federal lands with fire hazards that threaten the entity’s jurisdiction.

**Priority:** High  Medium  Low N/A

4.3 Integration of open space into fire safety effectiveness. Yes Partial No

**Recommendation:** Establish goals and policies for incorporating systematic fire protection improvements for open space. Specifics policies should address facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with agencies/private landowners managing open space adjacent to the GP area, water sources for fire suppression, and other fire prevention and suppression needs.

**Priority:** High  Medium  Low N/A

4.4 Urban forestry plans relative to fire protection. Yes Partial No

**Recommendation:** Ensure residential areas have appropriate fire resistant landscapes and discontinuous vegetation adjacent to open space or wildland areas.

**Priority:** High  Medium  Low N/A

**Recommendation:** Evaluate and resolve existing laws and local ordinances which conflict with fire protection requirements. Examples include conflicts with vegetation hazard reduction ordinances and listed species habitat protection requirements.

**Priority:** High  Medium  Low N/A

4.5 Mitigation for unique pest, disease and other forest health issues leading to hazardous

situations. Yes Partial No

**Recommendation:** Establish goals and policies that address unique pest, disease, exotic species and other forest health issues in open space areas for purposes of reducing fire hazard and supporting ecological integrity.

**Priority:** High Medium Low N/A

**Additional Conservation and Open Space Recommendations:**

*Pre-recommendations have been incorporated into the SE prior to this final review.*

**5.0 Circulation and Access:**

5.1 Adequate access to high hazard wildland/open space areas. Yes Partial No

**Recommendation:** Establish goals and policies for adequate access in Very High Fire Hazard Severity Zones that meet or exceed standards in Title 14 CCR 1270 for lands with no structures, and maintain conditions of access in a suitable fashion for suppression access or public evacuation.

**Priority:** High Medium Low N/A

5.2 Standards for evacuation of residential areas in high hazard areas. Yes Partial No

**Recommendation:** Goals and policies should be established to delineate residential evacuation routes and evacuation plans in high or very high fire hazard residential areas.

**Priority:** High Medium Low N/A

5.3 Incorporate a policy that provides for a fuel maintenance program along roadways in the agency having jurisdiction. Yes Partial No

**Recommendation:** Develop an adaptive vegetation management plan that considers fuels, topography, weather (prevailing winds and wind event specific to the area), fire ignitions and fire history.

**Priority:** High Medium Low N/A

5.4 Adequacy of existing and future transportation system to incorporate fire infrastructure elements. Yes Partial No

**Recommendation:** Establish goals and policies for proposed and existing transportation systems to facilitate fire infrastructure elements such as turnouts, helispots and safety zones.

**Priority:** High Medium Low N/A

**6.0 Defensible Space**

- 6.1 Develop geographic specific fire risk reduction mitigation measures using fuel modification.  
Yes Partial No

**Recommendation:** Include policies and recommendations that incorporate fire safe buffers and greenbelts as part of the development planning. Ensure that land uses designated near very fire hazard severity zones are compatible with wildland fire protection strategies/capabilities.

**Priority:** High Medium Low N/A

- 6.2 Fuel modification around homes. Yes Partial No

**Recommendation:** Establish ordinances in SRA or VHFHSZ for vegetation fire hazard reduction around structures that meet or exceed the Board of Forestry and Fire Protection's Defensible Space Guidelines for SRA and the Very High Fire Hazard severity zones, including vacant lots.

See [http://www.bof.fire.ca.gov/pdfs/Copyof4291finalguidelines9\\_29\\_06.pdf](http://www.bof.fire.ca.gov/pdfs/Copyof4291finalguidelines9_29_06.pdf)

**Priority:** High Medium Low N/A

**Recommendation:** Reduce fuel around communities and subdivisions, considering fuels, topography, weather (prevailing winds and wind event specific to the area), fire ignitions and fire history.

**Priority:** High Medium Low N/A

- 6.3 Fire suppression defense zones. Yes Partial No

**Recommendation:** Establish goals and policies that create wildfire defense zones for emergency services, including fuel breaks or other staging areas where WUI firefighting tactics could be most effectively deployed.

**Priority:** High Medium Low N/A

**Additional Defensible Space Recommendations:**

*Pre-recommendations have been incorporated into the SE prior to this final review.*

**7.0 Emergency Services:**

- 7.1 Map/describe existing emergency service facilities and areas lacking services, specifically noting any areas in SRA or VHFHSZs. Yes Partial No

**Recommendation:** Include descriptions of emergency services including available equipment, personnel, and maps of facility locations.

**Priority:** High Medium Low N/A

**Recommendation:** Initiate studies and analyses to identify appropriate staffing levels and equipment needs commensurate with the current and projected emergency response

environment.

**Priority:**  High  Medium  Low  N/A

7.2 Assessment and projection of future emergency service needs.  Yes  Partial  No

**Recommendation:** Ensure new development includes appropriate facilities, equipment, personnel and capacity to assist and support wildfire suppression emergency service needs. Future emergency service needs should be:

- Established consistent with state or national standards.
- Developed based on criteria for determining suppression resource allocation that includes elements such as identified values and assets at risk, ignition density, vegetation type and condition, as well as local weather and topography.
- Local Agency Formation municipal services reviews for evaluating level of service, response times, equipment condition levels and other relevant emergency service information.

**Priority:**  High  Medium  Low  N/A

7.3 Adequacy of training.  Yes  Partial  No

**Recommendation:** Establish goals and policies for emergency service training that meets or exceeds state or national standards.

**Priority:**  High  Medium  Low  N/A

7.4 Inter-fire service coordination preparedness/mutual aid and multi-jurisdictional fire service agreements.  Yes  Partial  No

**Recommendation:** Adopt the Standardized Emergency Management System for responding to large scale disasters requiring a multi-agency response. Ensure and review mutual aid/automatic aid and other cooperative agreements with adjoining emergency service providers.

**Priority:**  High  Medium  Low  N/A

**Additional Emergency Services Recommendations:**

*Pre-recommendations have been incorporated into the SE prior to this final review.*

**8.0 Post Fire Safety, Recovery and Maintenance:**

The post fire recommendations address an opportunity for the community and landowners to re-evaluate land uses and practices that affect future wildfire hazards and risk. They also provide for immediate post-fire life and safety considerations to mitigate potential losses to life, human assets and critical natural resources.

8.1 Evaluation of redevelopment.  Yes  Partial  No

**Recommendation:** In High and Very hazardous areas, ensure redevelopment utilizes state of the art fire resistant building and development standards to improve past ‘substandard’ fire safe

conditions.

**Priority:**  High  Medium  Low  N/A

8.2 Long term maintenance of fire hazard reduction mitigation projects.  Yes  Partial  No

**Recommendation:** Provide polices and goals for maintenance of the post-fire-recovery projects, activities, or infrastructure.

**Priority:**  High  Medium  Low  N/A

8.3 Reevaluate hazardous conditions and provide for future fire safe conditions.  Yes  Partial  No

**Recommendation:** Incorporate goals and policies that provide for reassessment of fire hazards following wildfire events. Adjust fire prevention and suppression needs for both short and long term fire protection.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Develop burn area recovery plans that incorporate strategic fire safe measures developed during the fire suppression, such as access roads, fire lines, safety zones, and fuelbreaks, and helispots.

**Priority:**  High  Medium  Low  N/A

8.4 Post fire life and safety assessments.  Yes  Partial  No

**Recommendation:** Develop frameworks for rapid post-fire assessment and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Identity flood and landslide vulnerability areas related to post wildfire conditions.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Establish goals and policies that address the intersection of flood /landslide/post fire burn areas into long term public safety protection plans. These should include treatment assessment of fire related flood risk to life, methods to control storm runoff in burn areas, revegetation of burn areas, and drainage crossing maintenance.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.

**Priority:**  High  Medium  Low  N/A

8.5 Restore sustainable landscapes and restore functioning ecosystems.  Yes  Partial  No

**Recommendation:** Develop burn area recovery plans, evaluation processes and implementation actions that encourage tree and biomass salvage, reforestation activities, create

resilient and sustainable landscapes, and restore functioning ecosystems.

**Priority:**  High  Medium  Low  N/A

8.6 Incorporate wildlife habitat/endangered species considerations.  Yes  Partial  No

**Recommendation:** Establish goals and policies for consideration of wildlife habitat/endangered species into long term fire area recovery and protection plans, including environmental protection agreements such as natural community conservation plans.

**Priority:**  High  Medium  Low  N/A

8.7 Native species reintroduction.  Yes  Partial  No

**Recommendation:** Incorporate native species habitat needs as part of long term fire protection and fire restoration plans.

**Priority:**  High  Medium  Low  N/A

**Additional Post Fire Safety, Recovery and Maintenance Recommendations:**

A link was referenced to post incident recovery, however recommend that Amador County develop its own recovery plan for the County to include a recovery plan for all disasters. Refer to Cal OES website:

<http://www.caloes.ca.gov/PlanningPreparednessSite/Documents/14%20Recovery%20Executive%20Summary%2010-30-13.pdf>

**9.0 Terrorist and homeland security impacts on wildfire protection:**

These recommendations are included to address fire protection needs related to terrorist acts or other homeland security preparedness and response actions. Both preparedness and incident response can adversely impact fire protection. Adverse effects include substantially decreasing emergency resources' availability, responsiveness and effectiveness by diverting resources, interrupting communications, or restricting emergency access.

9.1 Emergency response barriers.  Yes  Partial  No

**Recommendation:** Identify goals and policies that address vital access routes that if removed would prevent fire fighter access (bridges, dams, etc.). Develop an alternative emergency access plan for these areas.

**Priority:**  High  Medium  Low  N/A

9.2 Prioritizing asset protection from fire when faced with a lack of suppression forces.

Yes  Partial  No

**Recommendation:** Identify and prioritize protection needs for assets at risk in the absence of response forces.

**Priority:**  High  Medium  Low  N/A

**Recommendation:** Establish fire defense strategies (such as fire ignition resistant areas) that provide adequate fire protection without dependency on fire resources (both air and ground) and could serve as safety zones for the public or emergency support personnel.

**Priority:**  High  Medium  Low  N/A

9.3 Communication channels during incidents.  Yes  Partial  No

**Recommendation:** Establish goals and policies consistent with the Governor’s Blue Ribbon Fire Commission of 2005 for communications and interoperability. Example goals and policies should address fire personnel capability to communicate effectively across multiple frequency bands and update and expansion of current handheld and mobile radios used on major mutual aid incidents.

**Priority:**  High  Medium  Low  N/A

**Additional Recommendations:**

Develop a disaster recovery plan specific to Amador County necessity by priority in the future to meet your goal and policy for the plan.

\*NOTE:

The old safety element was pre-reviewed and CALFIRE LUPP and Amador County Planning Officials worked on the updated 2016 SE. Majority of the recommendations discussed were added to the new document.

Additional recommendations made per this current review document.



# SAFETY

*Final*

## PURPOSE

The purpose of the Safety Element is to reduce or avoid potential hazards to community residents, structures, community facilities, and infrastructure. This element identifies actions needed to manage crisis situations such as earthquakes, fires, and floods. Specific policies and guidance to regulate development in hazard-prone areas (such as floodplains, seismic risk areas, or high fire-danger areas) are included. The objectives of the Safety Element include:

- Reduce risks associated with earthquakes, fires, floods, and other natural and human-caused disasters; and,
- Respond effectively to emergencies.

## SCOPE AND CONTENT

The Safety Element is intended to satisfy the requirements of California planning law, and is a mandatory component of the County's General Plan. Government Code section 65302(g) presents a list of hazards which must be covered by the Element if they pertain to conditions in the county. These hazards include:

- Seismically induced conditions including ground shaking, surface rupture, ground failure, tsunami, seiche, and dam failure;
- Slope instability leading to mudslides and landslides;
- Subsidence, liquefaction, and other geologic hazards;
- Flooding;
- Avalanche;
- Wild land and urban fires; and,
- Evacuation routes.

State law also allows additional issues to be addressed by specific communities. This Safety Element addresses other issues, including mining sites, hazardous material use, and emergency preparedness.

The Safety Element contains goals and policies to reduce the dangers posed by various hazards. These goals and policies will in many cases be related to goals and policies for other General Plan elements, including



the Land Use Element (for instance, the standards for allowable development in flood-prone areas). A well-planned and maintained circulation network is an essential public safety concern. Evacuation routes utilizing the circulation system are also described in the Safety Element. The provision of viable evacuation routes is inextricably linked to the planned circulation system described in the Circulation Element.

## **SAFETY CONSIDERATIONS IN AMADOR COUNTY**

As in all communities, natural conditions and human activities in Amador County affect the quality of life and safety of residents. Reducing risks associated with these hazards, and preparing for emergency situations is essential to creating and maintaining a safe and healthy environment.

Public health and private property are protected through prevention and emergency preparedness planning. The County has established goals and policies to safeguard community health, and prepare for emergency situations. The sections below briefly describe some of the hazards resulting from natural conditions and human activities in Amador County, and provide context for the goals and policies that follow. The Safety Element includes implementation programs describing specific actions the County will take to protect public safety. In addition, the County's Multi-Hazard Mitigation Plan is adopted by reference as a part of the Safety Element. This plan can be found in Appendix S-1.

### **Flood Hazards**

Floods can be among the most frequent and costly natural disasters in terms of human hardship and economic loss, and can be caused by a number of different weather events. Floods can cause substantial damage to structures, landscapes, and utilities, as well as endanger life and safety. Public health hazards are also common with flood events that include standing water and wet materials in structures. This can breed microorganisms (including bacteria, mold, and viruses) causing disease, triggering allergic reactions, and damaging materials after the flood dissipates.

Flood risk is greatest in the floodplain located adjacent to a stream channel. Floodplains are illustrated on inundation maps, which show areas of potential flooding and water depths, and most often refer to areas that could be inundated by a 100-year flood (a flood that has a one-percent chance in any given year of being equaled or exceeded). The 100-year flood is the national minimum standard for regulated floodplains through the National Flood Insurance Program (NFIP). The State of California additionally requires flood hazards within the 200-year floodplain to be considered in General Plans. The Department of Water



Resources has prepared maps illustrating the best available 200-year floodplain.

Flood potential can increase through land use and land surface changes. A change in the environment can create localized flooding problems both inside and outside of natural floodplains by altering or confining natural drainage channels. Such changes are most often the result of human activity.

Amador County contains multiple rivers, streams, creeks, and associated watersheds. The county is situated in a region that dramatically drops in elevation from the Sierra Nevada Mountains in the easternmost portion of the county to the central and western portions, where excess rain or snow can contribute to downstream flooding. Flood flows generally follow defined stream channels, drainages, and watersheds. Floods causing severe damage or risk have historically occurred primarily in developed portions of the county. Flooding events generally occur in areas near waterways, and have caused significant damage in the western portion of the county near population centers, such as Jackson, Lone, and Sutter Creek. Figure S-1 illustrates the locations of local, state- and federally-designated flood hazard areas, as required by Government Code Section 65302 (g) (2). Please note that all figures presented in this document illustrate a snapshot of conditions using the best data available in 2009. For current data, please contact the Planning Department.

Inundation can also occur as the result of partial or complete collapse of a dam or impoundment and often results from prolonged rainfall and flooding. The primary danger from dam failure is high velocity flooding of properties located downstream. Numerous dams provide downstream flood protection, water storage, and hydroelectric generation in the county and along its borders. Some dams and their reservoirs are located in steep river canyons. In the unlikely event of structural dam failure, inundation areas of these dams would closely follow stream courses and then broaden once they reach the flat lands located in the west end of the county. Areas subject to flooding from a dam failure would primarily be those located along these streams and drainages. These maps are on file at the County and are incorporated into the General Plan by reference for consideration in land use decisions.

### Fire Hazards and Protection

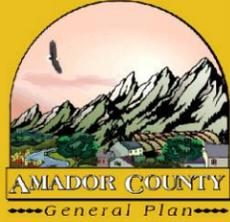
Risk and vulnerability from wildfire in Amador County primarily result from the combination of dense vegetation and geographic and topographic features which create potential for natural- and human-caused fires. According to the Amador County Fire Reduction Plan, the county has a very high risk to experience catastrophic wildfires. Given the distribution and quantity of wildland vegetation, most of the county is a wildland urban interface (WUI) zone. Figure S-2 illustrates fire threat levels in Amador County.



A comparison of Figure S-2, “Fire Hazard Severity Zones” with Land Use Element Figure LU-1, “Land Use Diagram” identifies the location and distribution of land uses in relation to Very High, High, and Moderate Fire Hazard Severity Zones, and State responsibility areas. State responsibility areas cover the majority of Amador County excluding those areas identified in Figure S-2 as federal land (federal responsibility areas) and incorporated cities (local responsibility areas). The General Plan proposed land uses directs development outside of Very High Fire Hazard Severity Zones and State responsibility areas, and into Town Centers (TCs), Regional Service Centers (RSCs), and existing communities with essential public facilities (i.e. hospitals) and adequate infrastructure (i.e. public water systems, fire hydrants). Multiple-family residential and sensitive uses (e.g. care homes, schools, large day care facilities, etc.) are generally located in cities and in the Martell RSC which are not located in Very High Fire Hazard Severity Zones and which have the necessary services and infrastructure these uses require. The General Plan also proposes decreasing the allowable density of development for areas located in Very High Fire Hazard Severity Zones and State responsibility areas, including:

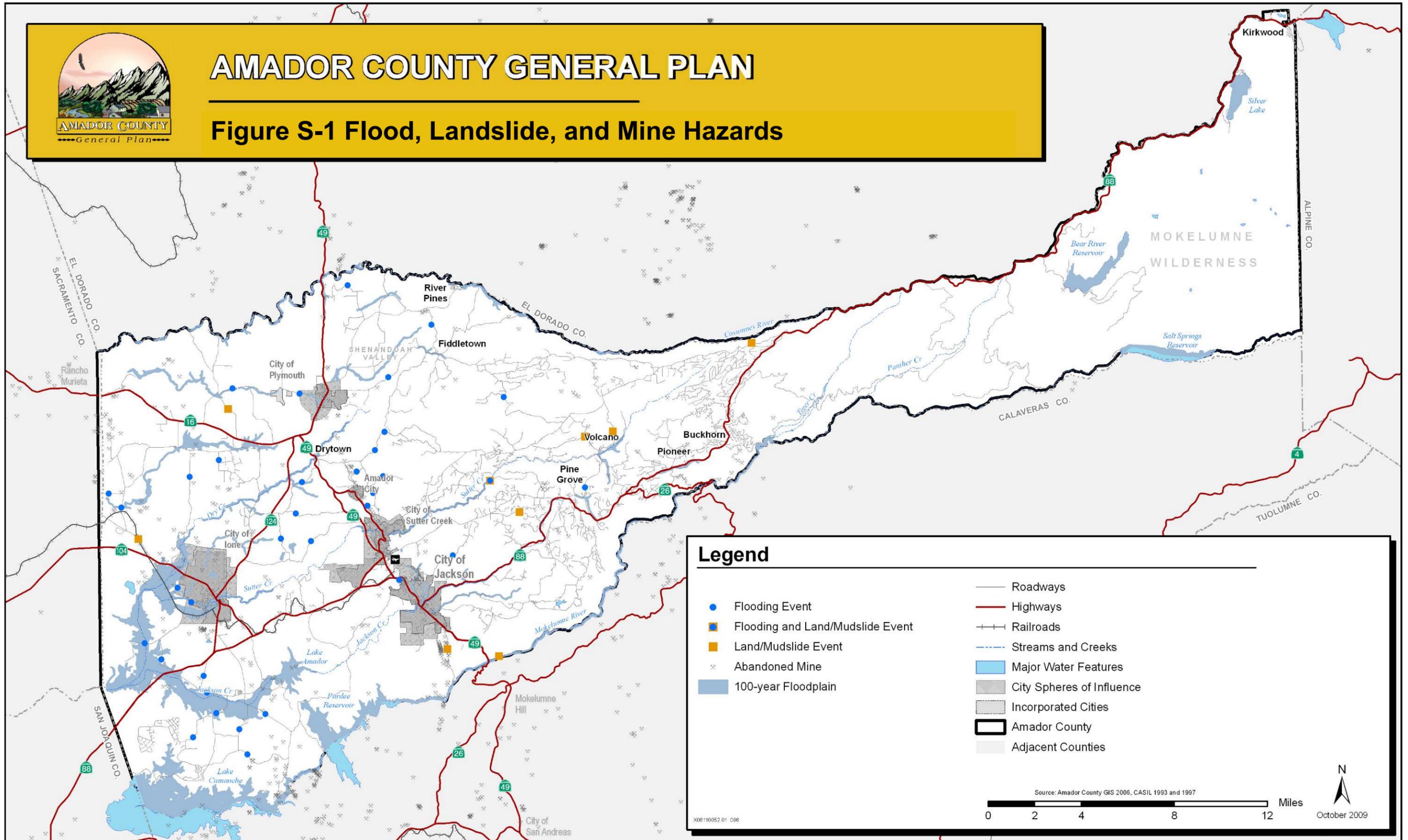
- Decreasing the density in the Amador Pines area (located above Buckhorn) from 1- to 5-acre density to 5- to 20-acre density.
- Decreasing the density in the Camanche North Shore Planning Special Planning Area from 18 dwelling units per acre to one unit per 1- to 5-acre density.
- Decreasing the density in areas near Willow Creek Road (west of Amador City) and Buena Vista (south of Lone) from 1- to 5-acre density to 40-acre density.
- Decreasing the density in areas near Fiddletown, in the Burke Ranch subdivision, and areas north of the City of Sutter Creek and Amador City from 1- to 5-acre density to 5- to 20-acre density.

Fire hazards continue to increase from rapid population growth and residential construction in WUI zone areas. Dense vegetation provides fuel, which when combined with drought, high temperatures, low relative humidity, and high winds, creates prime conditions for frequent and catastrophic fires.



# AMADOR COUNTY GENERAL PLAN

## Figure S-1 Flood, Landslide, and Mine Hazards



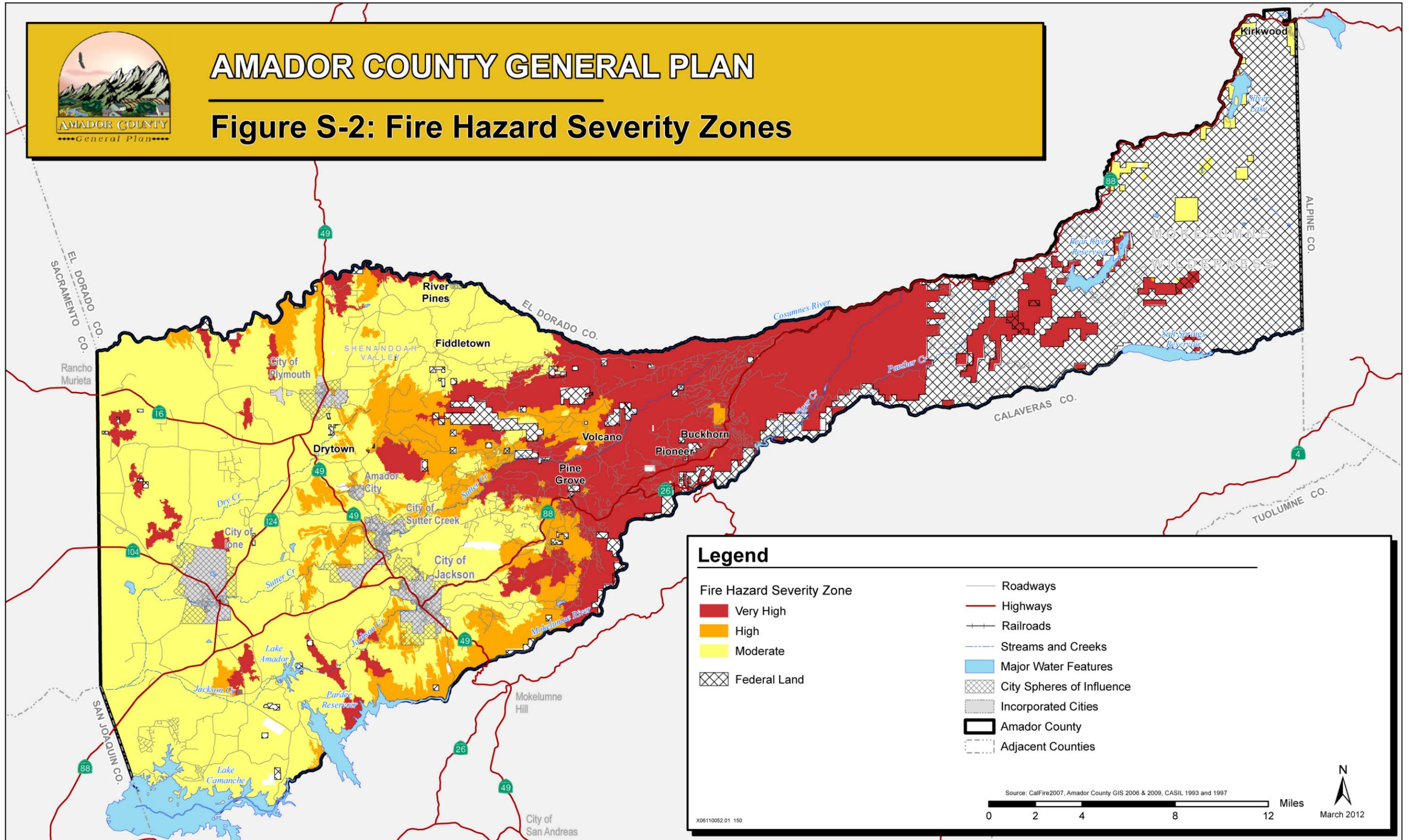


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# AMADOR COUNTY GENERAL PLAN

## Figure S-2: Fire Hazard Severity Zones



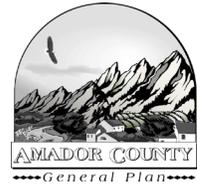


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Providing adequate water supplies is essential to high-quality fire protection services. In rural areas, large numbers of residents are not located near a water hydrant. As a result, providing water for putting out fires relies on the water carrying capacities of fire engines available to each fire protection district. Most rural areas do not allow for efficient placement of water hydrants and, therefore, rely primarily on the capabilities of fire engines, which are often operated by volunteer fire departments. Over the past decade, wildfires have primarily occurred upcountry. The largest of these was the Power Fire in 2004 which burned approximately 16,800 acres of U.S. Forest Service land and private timberland in the upcountry area east of Dew Drop. Previous to that the largest fire in Amador County was the Rancheria Creek Fire in September of 1961 which burned 34,104 acres in a 3.5 mile wide and 13.5 mile long area starting southeast of Fiddletown. The fire initially burned easterly and then turned westerly toward lone before circling back to Sutter Creek destroying approximately 10 homes and the gymnasium at the Amador County High School valued at over \$243,750 before being stopped. The fire also inflicted over one million dollars in damages to fences, outbuildings, and range land. More recently, in July of 2014, the 4,240 acre Sand Fire located east of State Route 49 along the Cosumnes River, burned approximately 500 acres in Amador County with the remaining acreage being burned in neighboring El Dorado County. In 2015, the Butte Fire burned a total of approximately 70,868 acres. The fire resulted in 475 residences and 343 outbuildings burned, and 45 structures damaged. The Butte Fire also resulted in 2 civilian fatalities and 1 injury. However, only 7 percent (approximately 5,000 acres) of the Butte Fire burn area was located in Amador County; the primary burn area was in Calaveras County. The fire may have been caused by an overhead power line coming into contact with a tree. Additional information regarding wildland fires is available from the Amador County Sheriff's Office of Emergency Services (<http://www.co.amador.ca.us/departments/office-of-emergency-services/wildland-fires>), the CAL FIRE fire incident database (<http://cdfdata.fire.ca.gov/incidents/>), and the U.S. National Forest Service Incident Information Center (<http://inciweb.nwccg.gov/>). However, most As shown in Figure S-2, much of the county is characterized as high- or very high fire threat level.

The U.S. Geological Survey (USGS) and the U.S. Forest Service have developed the Fire Potential Index (FPI), which depicts the wildfire potential for forests, shrublands, and grasslands. FPI maps use satellite-derived information to assess the impact of vegetation on fire danger. The FPI is updated daily to reflect changing weather conditions and is used in daily wildfire decision making. FPI data is available at: <http://firedanger.cr.usgs.gov/viewer/viewer.htm>. In addition, to monitor the risk of actively burning wildfires, the USGS, in cooperation with the National Interagency Fire Center, developed GeoMAC—an Internet-based mapping tool that provides a national view of current wildfire situations to fire managers and the public. GeoMAC data is available at: <http://www.geomac.gov/viewer/viewer.shtml>.



### *Geologic Hazards*

Geologic hazards include seismic (earthquake) hazards, as well as volcanoes, landslides, and avalanches.

### *Seismic Hazards*

Seismic hazards in Amador County are considered to be relatively minor compared to other areas of California. No Alquist-Priolo Earthquake Fault Zone is located in the county, and areas subject to liquefaction, ground failure, or surface rupture are not identified on State hazard maps. However, ground shaking has been felt in Amador County from earthquakes with epicenters elsewhere. The western portions of the county may experience ground shaking from distant earthquakes on faults to the west and east. Both the San Andreas fault (source of the 6.9 estimated Richter magnitude Loma Prieta earthquake causing damage in the Bay Area in 1989) and the closer Hayward fault have the potential for earthquake events with a greater than 6.7 magnitude.

Another potential source for earthquakes in Amador County is a series of faults associated with the western edge of the Central Valley, recently defined as the Coast Range Central Valley (CRCV) boundary thrust fault system. Various documents define portions of this little known system as the Midland Fault Zone or the Dunnigan Hills fault where the 1892 Vacaville-Winters earthquake occurred. A southern part of the CRCV system may have been the source of the very damaging 1983 Coalinga earthquake.

According to maps recently developed by the Department of Conservation's California Geological Survey, Amador County has potential for ground shaking from earthquakes. The seismic hazard in this area is related to faults on both sides of the California-Nevada border. The eastern, upcountry portion of the county is at greatest risk from earthquakes. The most recent moderately strong earthquake affecting the area occurred on September 12, 1994 near South Lake Tahoe, measuring 6.1 on the Richter scale. Structural damage from ground shaking has not historically been reported in Amador County.

### *Subsidence*

Subsidence occurs when earth material sinks due to the underlying presence of natural or artificial voids. In Amador County, past mining activity has caused subsidence in some areas. Subsidence can result in serious structural damage to buildings, roads, underground utilities, irrigation ditches, and pipelines. Figure S-1 illustrates the location of some known former mines, which may represent locations where subsidence is likely to occur.



### *Landslides, Debris Flows, and Avalanches*

Landslides include a wide variety of processes resulting in downward and outward movement of soil, rock, and vegetation. Common names for landslide types include slumps, rockslides, debris slides, lateral spreading, debris avalanches, earth flows, and soil creep. Although landslides are primarily associated with slopes greater than 15 percent, they can also occur in relatively flat areas and as cut-and-fill failures, river bluff failures, lateral spreading landslides, collapse of wine-waste piles, failures associated with quarries, and open-pit mines. Landslides may be triggered by both natural- and human-caused activity.

Debris flows also occur in some parts of the county, generally in the immediate vicinity of drainage swales or steep ravines. Debris flows occur when surface soil in or near steeply sloping drainage swales becomes saturated with water during unusually heavy rains and begins to flow down a slope at a rapid rate. Figure S-1 illustrates the location of historic landslide and debris flow events.

Rainfall, topography, and geology affect landslides and debris flows. Mining, construction, and changes to surface drainage areas also affect landslide potential. Landslides often accompany other natural hazard events such as floods, wildfires, and earthquakes. Landslides can occur either slowly or very suddenly; can damage and destroy structures, roads, utilities, and forested areas; and can cause injuries and death.

Avalanches occur when the weight of new snow increases stress faster than strength of the snowpack develops, causing the slope to fail. Avalanche conditions develop more quickly on steeper slopes and where wind-blown snow is common. The combination of steep slopes, abundant snow, weather, snowpack, and a trigger to cause movement create avalanches. Avalanche-prone areas are found upcountry along SR 88 in the Devil's Gate and Kirkwood areas, where these combinations readily occur. Most avalanches occur during and shortly after storms between January and March. Avalanches generally affect a few snowboarders, skiers, and hikers who venture into backcountry areas during or after winter storms. Avalanches cause road closures, and can damage structures and forests.

### *Mining and Hazardous Materials Sites*

The Gold Rush of 1849 brought gold mining to Amador County on a large scale, and mining activities have continued to the present day. The county has more than 300 known historic mine locations, along with other hazardous materials storage and release sites. Figure S-1 illustrates the location of historic mine locations. These sites can pose a health risk to residents due to their effects on surface water, groundwater, and/or soils.



The County will use existing hazardous materials inventory information to guide decisions on future development applications, and will prepare an inventory of historic mine locations. The inventory will be used to avoid subsidence hazards as well as hazards posed by exposure to mine wastes.

### **Emergency Preparedness**

Despite the best efforts of the County and individuals, disasters and emergencies will occur in the future. Amador County's emergency preparedness strategy consists of implementing the disaster response plan, public education, coordinating with other governmental agencies, and identifying evacuation routes. The primary responsibility of the Amador County Sheriff's Office of Emergency Services (OES) is to coordinate the county government's response to disasters or other large scale emergencies. The office is charged with providing the necessary planning, coordination, response support, and communications with all agencies affected by large scale emergencies or disasters. The OES website ([www.amadorgov.org/departments/office-of-emergency-services](http://www.amadorgov.org/departments/office-of-emergency-services)) includes links to the County's plans associated with emergency services and related to the Safety Element, including:

- Amador County Emergency Operations Plan;
- Amador County Long Term Care Facility Evacuation Plan;
- Amador County Hazardous Materials Plan;
- Amador County Auxiliary Communications Plan; and
- Amador County Road Atlas.

Other emergency preparedness and response resources include:

- Amador-El Dorado Unit Strategic Fire Plan (<http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf1537.pdf>);
- A State of California resource for consumers who are seeking information about what they need to do to recover from a disaster ([www.rebuildyourlife.ca.gov](http://www.rebuildyourlife.ca.gov)); and
- Amador Fire Safe Council ([www.amadorfiresafe.org](http://www.amadorfiresafe.org)).



## RELATED PLANS AND PROGRAMS

Many plans and programs enacted through State and local legislation directly relate to the Safety Element. These plans and programs are administered by agencies with powers to enforce State and local laws.

### *California Environmental Quality Act (CEQA) and Guidelines*

The California Environmental Quality Act (CEQA) was adopted by the State legislature in response to a public mandate for a thorough environmental analysis of projects that might adversely affect the environment. Public safety hazards are recognized as environmental impacts under CEQA. The provisions of the law and environmental review procedures are described in the CEQA Statutes and the CEQA Guidelines. Implementation of CEQA ensures that during the land use decision-making stage, County officials and the general public will be able to assess safety impacts.

### *Landslide Hazard Identification Program*

The Landslide Hazard Identification Program requires the State Geologist to prepare maps of landslide hazards within urbanizing areas, including portions of Amador County. Public agencies are encouraged to use these maps for land use planning and to support decisions regarding building, grading and development applications.

### *Amador County Code*

The County has adopted the most recent sections of the California Building Standards Code (Title 24), including the Uniform Building, Mechanical, Fire, Electrical, and Plumbing Codes, which contain structural requirements for both current and new buildings. These codes are designed to ensure structural integrity during seismic and other hazardous events, and to prevent injury, loss of life and substantial property damage. To protect public safety, construction in Amador County is subject to these structural codes. Amador County Code Chapter 15.30, "Fire and Life Safety Regulations" have been adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in State responsibility areas.



### *Amador County Multi-Hazard Mitigation Plan*

The Multi-Hazard Mitigation Plan describes the County's actions to reduce or eliminate long-term risk to human life and property from hazards. Hazard mitigation planning is the process through which natural hazards potentially threatening communities are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies that would lessen the impacts are determined, prioritized, and implemented. The Multi-Hazard Mitigation Plan is incorporated by reference within this Safety Element, and attached to the General Plan as Appendix S-1.

### Fire Hazards and Protection

#### *Fire Protection Areas and Districts*

The U.S. Forest Service (USFS) provides fire protection on federally owned lands (i.e., federal responsibility areas) in Amador County, which primarily include the El Dorado National Forest located in the easternmost portion of the county. CAL FIRE provides fire protection ~~in~~ to federal and local areas through local agreements in addition to all State responsibility areas, which cover the majority of Amador County excluding only federal responsibility areas and local responsibility areas.

Local fire protection services in Amador County are provided by seven separate, but cooperative, districts, which include Amador Fire Protection District, Lone Fire Department, Jackson Fire Department, Jackson Valley Fire Protection District, Lockwood Fire Protection District, Sutter Creek Fire Protection District, and Kirkwood Public Utilities District. These local fire protection districts are responsible for responding to structural fires and wildland fires, as well as providing emergency medical services within their service area.

All of these departments are staffed by volunteer personnel with the exception of CAL FIRE, the USFS, and Mule Creek State Prison. USFS fire engines are only staffed during the wildland fire season and stop operations in the winter and spring months. ~~To assure year-round staffing of fire engines, a~~ An agreement between Amador County and CAL FIRE provides for staffing of the three State fire stations outside of wildland fire ~~season and~~ for year-round dispatch services to all local government fire departments in Amador County.



### ***Amador Fire Protection District***

The Amador Fire Protection District (AFPD) was organized in 1990 by approval of the voters and resolution of the Amador County Board of Supervisors. The District is responsible for emergency fire, rescue, and medical aid service in approximately 85 percent of unincorporated Amador County. AFPD provides services through the efforts of volunteer firefighters and response of firefighters in surrounding fire departments/districts through automatic aid and mutual aid agreements. In addition, AFPD contracts with CAL FIRE for year-round dispatch fire protection services to all local government fire departments in Amador County.

The District operates seven fire stations and provides emergency fire, rescue, and medical aid service to the communities and surrounding areas of Amador Pines, Pioneer, Pine Grove, Pine Acres, Volcano, Martell, Drytown, Willow Springs, Fiddletown, River Pines, and the City of Plymouth.

### ***Jackson Valley Fire Protection District***

The Jackson Valley Fire Protection District provides fire protection services primarily to an area located in the southwest corner of Amador County north of Lake Camanche and northwest of Pardee Reservoir. The District operates two fire stations.

### ***Lockwood Fire Protection District***

The Lockwood Fire Protection District provides fire protection services primarily for the area along Shake Ridge Road, located in north central Amador County and extending from Quartz Mountain Road to the CAL FIRE fire station at Dew Drop. The District operates two fire stations.

### ***Kirkwood Meadows Fire Department***

The Kirkwood Meadows Fire Department provides fire protection services primarily to the Kirkwood Resort area at the northeastern tip of Amador County. The Department operates one fire station.

### ***City Fire Departments***

Volunteer fire departments composed of some paid and volunteer firefighters provide fire protection services to the cities of Lone, Sutter Creek, Plymouth, Amador City, and Jackson.

### ***Community Facilities District 2006-1***

In 2006, the Board of Supervisors established Community Facilities District (CFD) 2006-1, which provides funding for fire protection services.



Property owners in CFD 2006-1 are responsible for payment of an annual special tax which is used to fund additional service costs for fire protection. Annexation into CFD 2006-1 is a required condition of certain County approvals, including subdivision approvals and some use permits in the unincorporated County.

## ISSUES, GOALS AND POLICIES

The Safety Element addresses natural conditions and human activities that can potentially threaten public health and safety. Natural hazards in Amador County include the potential for flooding, wildland fire hazards, earthquakes and associated hazards, avalanche hazards, and geologic conditions such as unstable soils and landslides. Human-caused hazards include those associated with mining and use of hazardous materials. Understanding these hazards and preparing to deal with them on both an incident-related and ongoing basis are important objectives. The following goals, ~~and policies and implementation programs~~ can reduce the risks associated with these hazards, and help the County to prepare for emergency situations.

### Flood Hazards

Flood risk is generally focused on low lying areas near streams and rivers, including Dry Creek, Sutter Creek, and Jackson Creek. Flood risk associated with dam failure is also a factor near rivers and streams. Developed uses are already present within the 100-year floodplain, particularly within incorporated areas of the county.

The County's approach to flood hazard management includes limiting new construction in floodplain areas, requiring floodproofing for structures built in flood-prone areas, and an expressed preference for parks, open space, and other passive uses in flood-prone areas. Essential facilities such as hospitals, emergency shelters, fire stations, and public safety facilities should be located outside flood hazard areas. In addition, both existing and new structures and improvements can be designed differently to reduce stormwater runoff. Possible changes might include increased use of permeable pavement, narrower and smaller streets and parking areas, and low-impact drainage features such as swales and detention or retention basins.

**Goal S-1: Prevent loss of life or property from flooding.**

Policy S-1.1: Direct future development (as defined in "Floodplain Management Regulations" set forth in the Amador County Code) to areas outside the floodway portion of the 100-year floodplain.



- Policy S-1.2: Limit development in other areas prone to flooding, including the floodway fringe, other portions of floodplains and inundation areas. Require structures in these areas to incorporate floodproofing measures, including elevation above the 100-year floodplain profile.
- Policy S-1.3: Reduce urban runoff and maintain the carrying capacity of floodplains or flood channels. Require provision of on-site retention and detention basins in new development applications as needed to reduce downstream flooding hazards.
- Policy S-1.4: Designate agriculture, passive parks, open space, and other low-intensity uses within floodplain areas.
- Policy S-1.5: Provide for construction of dams and water retention facilities on agricultural lands to support agricultural land uses, consistent with state and federal law.

### Fire Hazards and Protection

Amador County is at very high risk to experience catastrophic wildfires. Most of the county is considered to be in a WUI zone. Wildfires occurring in the WUI zone pose severe risks to life, property, and infrastructure and are one of the most dangerous and complicated fire situations firefighters encounter.

The County seeks to guide future development toward areas with better fire suppression infrastructure and/or lower fire risk. In addition, the County supports improved fire response and suppression. Reviewing building setbacks, building code requirements, and infrastructure requirements for future development applications are some of the many steps the County will take to ensure wildland fire preparedness does not decline in the future.

#### **Goal S-2: Reduce fire risks to current and future structures.**

- Policy S-2.1: Consistent with state regulations and local code requirements, Require new buildings to be constructed to provide fire-defensible spaces, separated from property lines and other buildings on the same or adjacent properties by adequate building setbacks clear of brush and fuel. Require new buildings in areas of moderate to high fire risk to be constructed using building materials and designs that increase fire resistance.



Policy S-2.2: Guide new development to areas where adequate fire protection, roads, and water service are available to support fire response.

Policy S-2.3: Incorporate fire safety site planning techniques within new development applications in high- or very-high fire risk areas. Encourage building envelope or cluster development techniques to increase defensible areas.

Policy S-2.4: Work with fire districts or other agencies and property owners to coordinate efforts to prevent wildfires and grassfires including consolidation of fuel buildup abatement efforts, firefighting equipment access, and water service provision.

Policy S-2.5: Work with fire districts and other agencies to educate the public regarding fire risks and periods of elevated or extreme risk due to drought or other factors.

**Goal S-3: Maintain or improve fire response times.**

Policy S-3.1: Support efforts by fire districts to obtain adequate funding to provide fire protection at desired levels. Implement impact fees if needed to provide adequate fire service.

Policy S-3.2: Encourage cooperation and regional agreements among fire districts and state and federal fire agencies to maximize fire protection capabilities across the county.

The Implementation Plan sets forth implementation programs to carry out the above goals and policies. These include Programs P-6 (effective county services), P-12 (emergency response), D-1 (development proposal evaluation), D-2 (fire-safe development), D-10 (evacuation planning and routes), C-3 (transportation coordination), C-4 (interagency coordination), and F-3 (fire services funding).

**Geologic and Seismic Hazards**

Seismic hazards in Amador County are considered to be relatively minor compared to other areas of California. Ground shaking has been felt from earthquakes with epicenters elsewhere. Subsidence, landslides, and avalanches also pose risks in some areas. The County seeks to reduce future damage from seismic hazards, and to reduce landslides and avalanches by avoiding development practices which steepen slopes or place structures in the path of these phenomena.

**Goal S-4: Protect people and property from seismic hazards.**



Policy S-4.1: Enforce site-specific seismic design category requirements per the California Building Code (CBC) to minimize earthquake damage.

Policy S-4.2: Require minimum setbacks for habitable construction along streams between the stream bank and structure, based upon the susceptibility of the bank to seismic shaking-induced lurching.

Policy S-4.3: Discourage new construction of structures or improvements in or near a seismic risk area or geologic hazard area unless these projects meet design standards to minimize or eliminate seismic risk.

**Goal S-5: Protect people and property from landslides, mudslides, and avalanches.**

Policy S-5.1: Use the development review process to lessen the potential for erosion and landslides. Restrict site grading which steepens unstable slopes.

Policy S-5.2: Limit development in areas with high landslide, mudslide, or avalanche susceptibility.

**Mining and Hazardous Materials Sites**

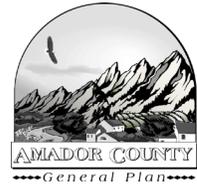
Hazardous materials storage and release sites have the potential to affect public health and safety if human contact with these materials is not minimized or avoided. Mine sites can pose additional risks, including subsidence.

**Goal S-6: Protect people and resources from hazards posed by mining facilities and hazardous materials sites.**

Policy S-6.1: Coordinate with State and federal agencies to limit hazardous materials risks through the land use planning process. Utilize existing County hazardous materials facility information to identify areas of hazardous materials use, and restrict the use of hazardous materials to non-residential and non-sensitive areas.

Policy S-6.2: Locate hazardous materials facilities so as to limit potential hazards related to the proximity of sensitive populations and the distance and routes traveled for local deliveries.

Policy S-6.3: Encourage the use of programs and products to reduce and replace the use of hazardous materials where feasible.



Policy S-6.4: Develop a map and inventory of former mine locations to alert property owners to areas with potential subsidence issues.

Policy S-6.5: Work with other agencies to limit the effects of former mining activities.

### *Public Safety and Emergency Preparedness*

No amount of planning or preparation can avoid all emergency situations. Amador County bears a risk of being affected by a variety of natural and human-caused disasters. Citizens and first responders must be prepared to react to such an emergency.

**Goal S-7: Respond appropriately and efficiently to natural or human-caused emergencies.**

Policy S-7.1: Maintain a disaster response plan to coordinate response actions.

Policy S-7.2: Continue to coordinate with other local public safety and law enforcement agencies to ensure effective emergency response.

Policy S-7.3: Work with other agencies to designate evacuation routes for various natural or human-caused emergencies.

Policy S-7.4: Maintain the operational integrity of essential public facilities during emergencies, including flood emergencies.