

# Proposed Safety Element Amendments

Staff recommends the following amendments to the Safety Element (strikethrough removes text and new text underlined):

## CHAPTER 1: NATURAL HAZARDS

### 3.0 FIRE HAZARDS

#### 3.1 Fire Related Hazards

Fire hazards exist in both developed and undeveloped areas. Those occurring in developed areas typically include buildings, rubbish, automobiles, and grass fires on vacant lots. Those in undeveloped areas often include large brush and grass fires. Alameda County is subject to the threat from urban fires, and especially wildland fires, due to its hilly terrain, weather conditions, and the nature of its plant coverage. Due to the intensity of development, the number of the potentially affected populations, and the difficulties of containment, the County must also devote major resources to controlling potential fire hazards in its urban areas. In order to quantify this potential risk, California Department of Forestry and Fire Protection (CalFire) has developed a Fire Hazard Severity Scale which utilizes three criteria in order to evaluate and designate potential fire hazards in wildland areas. The criteria are fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). A map based upon this data has been included as Figure S-5.

Government Code Section 65302 requires the County to identify the general location and distribution of existing and planned uses of land in very high fire hazard severity zones and in state responsibility areas, including structures, roads, utilities, and essential public facilities. Figures S-5a and S-5b display the required data within the unincorporated communities and the eastern portion of the County.

#### 3.2 Provision of Fire Services

The Alameda County Fire Department (ACFD)<sup>23</sup>, a dependent Special District which the Board of Supervisors serving at is Board of Directors, is responsible for providing emergency fire and medical response, as well as fire prevention services, to all residents of the unincorporated areas of Alameda

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<sup>23</sup> ~~This information was obtained from the ACFD 2008 Annual Report~~  
<http://www.acgov.org/fire/documents/annual-report-2008.pdf>

County, exclusive of the Fairview area. In addition, fire and emergency services are provided under contractual agreements with the cities of Dublin, Emeryville, Newark, and San Leandro and Union City, and the ~~U.C.~~ Lawrence Berkeley National Laboratory and Lawrence Livermore National Laboratory. The Department's total service area encompasses approximately ~~475-508~~ square miles and has a daytime population of ~~266,000-394,000~~. The area contains a number of major roadways, highways, and interstates that carry thousands of private and commercial vehicles on a daily basis; large suburban and commercial centers; agricultural and wildland areas; and lakes and marinas. The geography and demography of the unincorporated area excluding Fairview is served by nine stations, encompasses 431 square miles with a population of 126,397 and poses significant operational challenges. The eastern and southern areas include large portions of wildland, grazing land, and rural farmlands. The majority of the population is centered in the western area which is heavily urbanized with a mix of residential, commercial, and light industrial. The Department staffs one station at Lawrence Berkeley National Laboratory (Site 100) and two stations that serve the two sites (Sites 200 & 300) of the Lawrence Livermore National Laboratory. ~~In the East County, the Department has a contract with the federal Veteran's Administration to provide service to its medical facility.~~ First responder paramedic services are available on a 24-hour per day, 365 day per year basis throughout the entire ACFD service area. The Department also has contractual agreements with a number of other agencies including the cities of Pleasanton and Hayward to optimize service delivery to unincorporated island areas of the County.

The Department is responsible for the administration and operation of the Alameda County Regional Emergency Communications Center (ACRECC)<sup>24</sup>, which dispatches over ~~62,000~~ 180,000 EMS and fire calls annually and retains historical data on fires and emergency medical services within the County. The dispatch center provides fire, medical and rescue dispatch and communication center services for the Cities of Alameda, Dublin, Emeryville, Fremont, Livermore, Newark, Pleasanton, San Leandro, and Union City; the unincorporated communities of Castro Valley, Ashland, Cherryland, San Lorenzo, and Sunol; the Lawrence Livermore, Lawrence Berkeley, and Sandia National Laboratories, Camp Parks Combat Support Training Center, all of unincorporated Alameda County; and is the Dispatch/System Status Management Center for Paramedics Plus ambulance service; and Medical Priority Dispatch System (MPDS) for all of Alameda County except the City of Oakland. ~~for the Alameda County Fire Department, the Alameda County Emergency Medical Services Agency, US Army Camp Parks, and the cities of Alameda, Fremont and Union City.~~ The goal of the ACRECC is to enhance the regional dispatch and communication system through the consolidation of fire and medical dispatch.

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<sup>24</sup> The information was obtained from the ACRECC.  
<https://www.acgov.org/fire/about/stationf.htm>

Fairview Fire Protection District (FFPD)<sup>25</sup> provides fire and emergency medical services to the Fairview community of Alameda County. The FFPD is an independent Special District as defined under the Fire Protection District Law of 1987, Health and Safety Code, Section 13800, of the State of California. The District also provides emergency medical services at the Advanced Life Support (Paramedic) level. Within the boundaries of the District are expansive rural wildland areas, single-family homes, multi-family residential complexes, agricultural, and equestrian areas. The District's service area encompasses 4.2 square miles and serves a population that exceeded 14,000 in 2014. The FFPD has contracted with the City of Hayward since 1993 to provide fire protection and emergency medical services within the boundaries of the District.

The California Department of Forestry and Fire Protection (CalFire) is responsible for fire prevention and suppression in their "state responsibility areas" (SRA). Cal Fire also provides protection against structural and wildland fire hazards is also provided to unincorporated parts of the CountySunol through a by "Schedule A" contract with the Alameda County Fire Department. These contract aAreas that are not SRA are commonly referred to as "local responsibility areas" (LRA). In Alameda County, LRA fire protection is provided by city fire departments or the ACFD.

The ACFD has established several mutual aid agreements with a variety of agencies to ensure a high level of fire and medical services throughout the unincorporated areas in the event of a local or regional disaster. Currently, automatic aid agreements exist with the U.C.City of Berkeley Lawrence National Laboratory, the City of Oakland, the San Ramon Valley Fire Protection District and the Livermore-Pleasanton Fire Department. The ACFD agreement with the City of Berkley and City of Oakland includes a mutual aid response to cover the southern Berkeley-Oakland Hills area, and a shared automatic agreement for Interstates 80, 580, and 880, and 680. All fire departments within Alameda County share a countywide mutual aid agreement and are a part of the State Master Mutual Aid Plan.<sup>26</sup>

### **3.3 Development Standards to Mitigate Fire Hazards**

#### The Alameda County Ordinance Code

The Uniform Fire Code (Section 6.04 of the County Ordinance Code) and the Building Code (Title 15) form the basis of the County's fire prevention standards. These codes call for the installation, maintenance, and ongoing inspection of fire protection systems under the direction of the local fire chief. In addition, the Fire Code authorizes the Fire Chief to specify water supply and road design standards

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<sup>25</sup> The information was obtained from the FFPD.  
<http://fairviewfiredistrict.org>

<sup>26</sup> Excerpted from the Eden Area General Plan, page 5-12

(such as the number of roads required for access to the site, the road width, and weight capacity). Under Section 16.20.020(G) of the Subdivision Ordinance (Title 16), the ~~subdivider~~ landowner or developer must install water mains, fire hydrants, and fire appurtenances to supply water for fire suppression in conformance with district standards.

#### The California Environmental Quality Act (CEQA)

Under the California Environmental Quality Act (CEQA), a project sponsor must declare if the project would, “Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.” Projects that would result in increased wildland fire risk should develop appropriate alternatives and mitigations that would prevent or reduce threats from wildland fires.

### **3.4 Goals, Policies and Implementing Actions**

Goal 2. <b>To reduce the risk of urban and wildland fire hazards.</b>
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#### **Policies**

- P1. Urban and rural development and intensive recreational facilities should be discouraged in hill open space areas lacking an adequate water supply or nearby available fire protection facilities. (Source: Seismic Safety and Safety Element, pg. 7)
- P2. Hill area development, and particularly that adjoining heavily vegetated open space area, should incorporate careful site design, use of fire retardant building materials and landscaping, development and maintenance of fuel breaks and vegetation management programs, and provisions to limit public access to open space areas in order to minimize wildland fire hazards. (Source: Seismic Safety and Safety Element, pg. 7)
- P3. Development should generally be discouraged in areas of high wildland fire hazard where vegetation management programs, including the creation and maintenance of fuel breaks to separate urban uses would result in unacceptable impacts on open space, scenic and ecological conditions. (Source: Seismic Safety and Safety Element, pg. 7)
- P4. All urban and rural development, existing and proposed, should be provided with adequate water supply and fire protection facilities and services. Facilities serving hill area development should be adequate to provide both structural and wildland fire protection. The primary responsibility falls upon the owner and the developer. (Source: Seismic Safety and Safety Element, pg. 8)

- P5. Structures, features of structures, or uses which present an unacceptable risk of fire should be brought into conformance with applicable fire safety standards. (Source: Seismic Safety and Safety Element, pg. 8)
- P6. Plan new public and private buildings to minimize the risk of fires and identify measures to reduce fire hazards to persons and property in all existing development. (Source: Castro Valley Plan, pg. 9-13)
- P7. The County shall adhere to the provisions of the *Alameda County Fire Protection Master Plan* and *Fire Hazard Mitigation Plan*. (Source: ECAP, pg. 76)
- P8. The County shall limit residential development to very low densities in high fire hazard zones identified in Figure 56. (Source: ECAP, pg. 76)
- P9. The County shall require all new homes in rural residential areas that are located in “high” and “very high” fire hazard areas to be sited and designed to minimize risks to life and property. (Source: ECAP, pg. 76)
- P10. The County shall require the design of adequate infrastructure if a new development is located in a state responsibility area or in a very high fire hazard severity zone, including safe access for emergency response vehicles, visible street signs, and water supplies for structural fire suppression. (Source: Government Code Section 65302 (g)(3)(C))
- P11. The County shall require the use of fire resistant building materials, fire resistant landscaping and, and adequate clearance around structures in “high” and “very high” fire hazard areas. (Source: ECAP, pg. 76)
- P12. The County shall require that open space within developed areas be designed and maintained to minimize fire hazards and ensure compatibility between development and any significant biological resources. (Source: ECAP, pg. 19)
- P13. The County shall work cooperatively with public agencies with responsibility for fire protection and refer development applications to the Alameda County Fire Department, or the local Fire District for review and recommendation. (Source: Government Code Section 65302 (g)(3)(C) and ECAP, pg. 76)
- P14. The County shall support fire service agencies in maintaining and improving existing Insurance Safety Organization (ISO) ratings. (Source: ECAP, pg. 76)

- P15. The County shall protect the community from the unreasonable risk of wildfires. (Source: Government Code Section 65302(g)(3)(B))
- P16. The County shall enforce the Subdivision Map Act for development located within a state responsibility area (SRA) or a very high fire hazard severity zone. (Source: Government Code Section 66474.02)
- P17. The County shall avoid or minimize the wildfire hazards associated with new uses of land. (Source: Government Code Section 65302 (g)(3)(C))
- P18. The County shall locate, when feasible, new essential public facilities, including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities, outside of high fire risk areas, or identify construction methods or other methods to minimize damage if these facilities are located in a state responsibility area or very high fire hazard severity zone. (Source: Government Code Section 65302 (g)(3)(C))

### **Actions**

- A1. Limit or prohibit development and activities in areas lacking adequate water and firefighting facilities. (Source: Seismic Safety and Safety Element, pg. 7)
- A2. Enforce design standards and guidelines through the site development, planned development, and subdivision review process. (Source: Seismic Safety and Safety Element, pg. 7)
- A3. Require environmental impact assessment for development proposals in areas of severe fire hazard. (Source: Seismic Safety and Safety Element, pg. 8)
- A4. Enforce, and as required, revise development standards. (Source: Seismic Safety and Safety Element, pg. 8)
- A5. Enforce applicable provisions of the Alameda County Subdivision and Building Ordinances.
- A6. Encourage fire safety public education and information programs. (Source: Seismic Safety and Safety Element, pg. 8)
- A7. The County shall maintain a current map of areas subject to wildland fires.

- A8. Establish clearly in County zoning and other ordinances that the Fire Department has the authority to recommend denial or modification to proposed development projects, particularly for projects proposed within “high” or “very high” fire zone areas as identified in Figure 5, Fire Hazards, to reduce the risk of bodily harm, loss of life, or severe property damage and environmental degradation. (Source: Castro Valley Plan, pg. 10-7)
- A9. Establish clearly in County zoning and other ordinances that the Fire Department may require the use of appropriate fire resistant building materials, installation of fire sprinklers, and/or vegetation management, and that such requirements shall be based on a property’s access, slope, water pressure, and proximity to wildland areas. Such requirements shall apply particularly to projects proposed within Very High Fire Zone Areas as identified in Figure 5, Fire Hazards, but may also apply to other properties where access for emergency vehicles does not fully comply with adopted standards. (Source: Castro Valley Plan, pg. 10-7)
- A10. Establish an interdepartmental review process for proposed projects where Fire, Public Works, Planning, and other County Departments consult and establish reasonable and consistent requirements for streets, driveways, and emergency access prior to zoning approval. (Source: Castro Valley Plan, pg. 10-7)
- A11. Revise the review process for any project that proposes an increase in density so that any inadequacy of water pressure for fire hydrants and fire flows for fire suppression purposes is identified early in the development review process. Also identify if the roadway serving the project is deficient in terms of access for emergency vehicles. Identify any access improvements that may be required, for example roadway widening along property frontage, or additional off-street parking. (Source: Castro Valley Plan, pg. 10-8)
- A12. Upgrade and standardize fire hydrants to accept equipment from neighboring fire districts so that the County can accept assistance through a mutual aid request during an emergency. (Source: Castro Valley Plan, pg. 10-8)
- A13. Enforce the requirement that Home Owners’ Associations in Planned Unit Development areas are responsible for vegetation management by establishing a regular review schedule for areas subject to this requirement. (Source: Castro Valley Plan, pg. 10-8)
- A14. Revise the County’s Integrated Vegetation Management Program to require private property owners to maintain the vegetation on their property in a condition that will not

contribute to the spread of a fire. Requirements for private property owners could include, but need not be limited to, the following:

- Maintain a 30-foot defensible space around all buildings and structures;
- Remove all portions of trees within 10 feet of chimneys and stovepipe outlets;
- Remove materials or plants that may act as a fuel or a conveyance of fire (such as dead/dying wood on trees adjacent to/overhanging structures, leaves, pine needles, etc. on rooftops or elsewhere on the property); and
- Install spark arrester in chimney and or stovepipe outlets. (Source: Castro Valley Plan, pg. 10-9)

A15. Consider establishing and funding an enforcement district for fire hazard areas and wildland, intermix and interface areas; and establish an inspection period to be conducted annually for properties located in these areas. Mail notices to the residents in these areas notifying them of the inspection period, listing the standards for vegetation management on their properties, and suggesting tips for compliance. Additional funding would be required, such as the formation of an assessment district or other means. (Source: Castro Valley Plan, pg. 10-9)

A16. In hillside areas where street widths are substantially below the minimum 20-foot width standard required for emergency access, one or more of the following requirements should be imposed to ensure adequate emergency access:

- Sprinklers;
- Turnouts along the paved roadway;
- Additional on-site parking;
- Increased roadway width along the front of the property; or
- Parking Restrictions. (Source: Castro Valley Plan, pg. 10-10)

A17. Establish consistent standards for private streets depending on the number of units that the street will serve the number of required parking spaces per unit, and reasonable access requirements and operational needs of emergency access vehicles and garbage trucks. Standards should include:

- Minimum paved roadway width requirements (i.e., 20 feet for roads serving five or more units or when part of required fire apparatus access, and 12 feet for roads serving between two and five units that is not part of required fire apparatus access);



- Turnarounds;
- Landscaping;
- Red curbs and signage for no parking zones;
- Sidewalks; and
- Parking standards. (Source: Castro Valley Plan, pg. 10-10)

- A18. The County shall prepare a comprehensive wildland fire prevention program including fuelbreaks, brush management, controlled burning, and access for fire suppression equipment. (Source: ECAP, pg. 77)
- A19. The County shall prepare a disaster response plan for buildings exceeding 3 stories (or 30 feet, whichever is less), public assembly facilities, and facilities housing dependent populations. (Source: ECAP, pg. 77)
- A20. The County shall develop wildland fire regulations including site criteria building setbacks, construction standards, minimum road widths, maximum road grades, and evacuation routes. (Source: ECAP, pg. 76)
- A21. The County shall adopt by ordinance the "Wildland Fire Safety Requirements" contained in the Alameda County Fire Protection Master Plan. (Source: ECAP, pg. 76)
- A22. The County shall work with the California Department of Forestry and Fire Protection to designate "very high fire hazard severity zones" in conformance with AB 337 (1992) (Government Code Section 51178). The County shall ensure that all zones designated as such meet the standards and requirements contained in this legislation. (Source: ECAP, pg. 77)
- A23. The County shall make the necessary findings required by the Subdivision Map Act for development located within a state responsibility area (SRA) or a very high fire hazard severity zone. (Source: Government Code Section 66474.02)

## CHAPTER 3: EMERGENCY PREPAREDNESS

### 1.2 Goals, Policies and Implementing Actions

Goal 6. **Prepare and keep current County emergency procedures in the event of potential natural or man-made disaster.**

#### Policies

- P1. The County shall coordinate its efforts with other local jurisdictions for hazard and disaster response planning and to minimize risks associated with man-made and environmental hazards. (Source: Eden Area Plan, pg. 8-26)
- P2. Adequate emergency water flow, emergency vehicle access and evacuation routes shall be incorporated into any new development prior to project approval. (Source: Eden Area Plan, pg. 8-26)

#### Actions

- A1. Complete regularly scheduled reviews and updates of its emergency preparedness plans. (Source: Eden Area Plan, pg. 8-26)
- A2. Conduct periodic mock exercises using emergency response systems to test the effectiveness of County procedures included in the emergency management plan. (Source: Eden Area Plan, pg. 8-27)
- A3. Develop public education programs on first-aid training and disaster preparedness that encourage residents and businesses to stockpile emergency food, water and medical supplies, and provide information on emergency access routes. Other topics should be included as necessary. (Source: Eden Area Plan, pg. 8-27)
- A4. Work with Caltrans, and the local and Countywide fire and police departments to identify appropriate emergency access routes through the unincorporated areas. (Source: Eden Area Plan, pg. 8-27)

- A5. Coordinate with the school districts, hospitals, and other major public and private agencies and organizations, including agencies that serve seniors, persons with disabilities, non-English speakers and others who may need special support during an emergency, to develop and implement an effective disaster plans. (Source: Castro Valley Plan, pg. 9-13)
- A6. Adopt and amend as needed the Alameda County ~~Annex to the Multi-jurisdictional~~ Local Hazard Mitigation Plan as required under the federal Disaster Mitigation Act of 2000.
- A7. The Alameda County ~~Annex to Multi-jurisdictional~~ Local Hazard Mitigation Plan (LHMP) adopted by the Board of Supervisors ~~and approved by the Association of Bay Area Governments (ABAG)~~ shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County and is incorporated by reference to this Element as the Implementation Appendix, Appendix A.
- A8. The County will ensure that the LHMP is updated regularly to keep pace with the needs of its residents.