

2.7 Wildfire

This section describes the existing wildfire risk in the Alpine Community Plan Area (CPA), the applicable regulations governing wildfire, and the potential for buildout of the Alpine Community Plan Update (CPU) to exacerbate wildfire risk and associated hazards.

This section incorporates information and analysis from the 2011 General Plan as it applies to the proposed project. Section 1.3, *Project Background*, of this SEIR provides a background for both the 2011 General Plan Environmental Impact Report (EIR) and the 2016 Forest Conservation Initiative (FCI) General Plan Amendment (GPA) EIR (referred throughout the rest of this section as “prior EIRs”). The 2011 General Plan EIR analyzed the entirety of the Alpine CPA while the FCI EIR provided an updated analysis of impacts of land use changes within the FCI lands. Only the 2011 General Plan EIR will be used for analysis of wildfire due to the outcome of litigation of the FCI GPA.

While wildfire was previously discussed in the 2011 General Plan EIR and FCI EIR, it was not included as a separate section in either EIR. For this Supplemental EIR (SEIR), wildfire is a standalone section that incorporates the new issue questions from the California Environmental Quality Act (CEQA) Appendix G, which were added in December 2018 as a part of a comprehensive update to the CEQA Guidelines. However, goals, policies, and mitigation measures from the 2011 General Plan and General Plan EIR are relevant to this section and will be referenced throughout.

This analysis does not wholly rely on the 2011 General Plan EIR or FCI EIR as a baseline. It should be noted that although the 2011 General Plan is not the baseline for this section, many of the regulations and existing land use designations and mobility elements described in the 2011 General Plan EIR are referenced in this section. The baseline for existing conditions for the issue topics not addressed in the prior EIRs is August 2018 which is when the Notice of Preparation (NOP) for the proposed project was issued. The August 2018 baseline, including relevant changes to the existing conditions analyzed in the 2011 General Plan EIR, is described in detail in Section 2.7.1 below. Table 2.7-1 summarizes the impact conclusions identified in this section.

Comments received in response to the NOP related to wildfire included concerns regarding evacuating people from remote development when wildland fires occur in the Cleveland National Forest (CNF), increased wildfire risk from increased density and number of homes; incorporation of buffers and setbacks between future development and wildfire-prone areas; increased Wildland/Urban Interface area; and secondary effects of wildfires on ecosystems, wildlife, waterways and water quality, air quality, geology and soils, and greenhouse gas emissions. These concerns are addressed and summarized in this section.

Specifically, Sections 2.7.3.1 and 2.7.4.1 address evacuation concerns in the case of wildland fires in the CNF and the entire Alpine CPA. Sections 2.7.3.1, 2.7.3.3, 2.7.4.1, and 2.7.4.3 assess the direct and cumulative impacts to wildfire risk, buffering requirements between future development and wildfire-prone areas, and increased Wildland/Urban Interface areas. Sections 2.7.3.2, 2.7.3.3, 2.7.3.4, 2.7.4.2, 2.7.4.3, and 2.7.4.4 analyze the secondary effects of wildfires on ecosystems, air quality, water quality, and soils, among other environmental resources. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A of this SEIR.

Table 2.7-1. Wildfire Summary of Impacts

Issue Number	Issue Topic	2011 General Plan EIR Conclusions*	Project Direct Impact(s)	Project Cumulative Impact(s)	Level of Significance After Mitigation
WILD-1	Adopted Emergency Response or Emergency Evacuation Plan	Less than Significant	Potentially Significant	Potentially Significant	Significant and Unavoidable
WILD-2	Expose Receptors to Pollutants from Wildfire	N/A	Potentially Significant	Potentially Significant	Significant and Unavoidable
WILD-3	Exacerbate Wildfire Risk from New Infrastructure	N/A	Potentially Significant	Potentially Significant	Significant and Unavoidable
WILD-4	Expose People or Structures to Significant Risks from Post-Wildfire Hazards	N/A	Potentially Significant	Potentially Significant	Significant and Unavoidable

N/A – not applicable

* Although wildfire hazards were discussed in the prior EIRs, the impact analysis and conclusions do not completely align with the current CEQA Appendix G issue questions.

2.7.1 Existing Conditions

This section discusses the existing wildfire risk of the Alpine CPA. The baseline for existing conditions for this issue area is October 2018, when the NOP for the proposed project was issued.

2.7.1.1 Regional and Local Wildfire Risk

Wildfire, as defined in California Public Resources Code (PRC) Sections 4103 and 4104, is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. In the last two decades, wildfires in California have shown an increase in number of fires ignited, number of acres burned, and number of structures destroyed (CAL FIRE 2018a). Since 2015, the average annual cost of fire suppression in California in areas under state jurisdiction has averaged over \$550 million per year (CAL FIRE 2018b), and in 2016 (the most recent year reported) over \$4 million of wildfire-related damage occurred in San Diego County alone (CAL FIRE 2016). Of the top 20 largest California wildfires, three have been in San Diego County, including the 2003 Cedar Fire, which burned 273,246 acres, destroyed 2,820 structures, and resulted in the loss of 15 lives (CAL FIRE 2018c). The 2018 West Fire burned approximately 500 acres in the Alpine community, destroying 56 structures. Most recently, the 2020 Valley Fire burned 76,067 acres and damaged or destroyed 75 structures (Cleveland National Forest 2020). The Valley Fire was located outside Alpine and to the southeast.

Several factors, including climate, wind patterns, native vegetation, topography, and development patterns make the unincorporated County susceptible to wildfires. A vast amount of the County's undeveloped lands support natural habitats such as grasslands, sage scrub, chaparral, and some coniferous forest. Extended droughts, characteristic of the region's Mediterranean climate, result in large

areas of dry vegetation that provide fuel for wildland fires. In addition, climate change has also contributed to soil dryness. This dry vegetation is especially vulnerable to wildfire in areas with high winds. Wildfire risk tends to be high in locations where dense vegetation occurs on steep slopes (CAL FIRE 2018d). As a result, high wildfire risk occurs in the hills and mountains of the eastern areas of the County where sparse development intermingles with fire-prone native vegetation. After wildfire burns the vegetation that anchors soil to the hillside, chances increase that a mudflow or landslide could occur in the event of heavy rains (CAL FIRE 2018e).

The Alpine CPA contains many of the characteristics described above, including varying topography, fire-prone vegetation, and predominant weather patterns that increase wildfire risk. Regarding topography, approximately 34,382 acres, or 50 percent, of the Alpine CPA contains areas with slopes greater than 25 percent. In Harbison Canyon, the base of the valley has an elevation of about 1,000 feet. The land then rises to the east reaching an average elevation of 3,000 feet in the Carve Acre neighborhood of Alpine. The highest point, the summit of Viejas Mountain, is over 4,000 feet. This steady rise from west to east is striated by deep canyons such as Harbison Canyon and Peutz Valley. Horsethief Canyon, Sweetwater Valley, and Japatul Valley are also in alignment with both prevailing and Santa Ana wind conditions, creating fire behavior challenges (Greater Alpine Fire Safe Council 2016). In addition, a vast majority of the Alpine community (approximately 78 percent) contains fire-prone vegetation such as chaparral, coastal sage scrub, and grasslands.

While onshore wind patterns prevail under most daytime conditions, Santa Ana winds that can occur between September and March blow from the northeast and reverse the prevailing wind patterns in the valleys. When these winds coincide with the dormant period for chaparral, extreme fire behavior is common. For example, Santa Ana winds rapidly pushed the 2003 Cedar Fire through Peutz Valley, Galloway Valley, Harbison Canyon, and Crest (Greater Alpine Fire Safe Council 2016). These characteristics, combined with the generally rural development pattern of the Alpine CPA, make the community particularly susceptible to wildfire.

Development patterns contribute to wildfire risk in California as well. When communities are in areas that burn frequently, wildfire embers, which can travel for miles, have a negative effect on human health (Black et al. 2017). In addition, more wildfires are started near developed areas and roadways (Syphard et al. 2007), and, as development expands into wildland areas, more wildfires are ignited (Radeloff 2018). An estimated 80 percent of wildfires are ignited by humans (Balch et al. 2017).

2.7.1.2 Wildland Fire History in San Diego County

San Diego County has a long history of wildland fires. As identified in the 2016 annual report produced by the California Department of Forestry and Fire Protection (CAL FIRE—*Wildfire Activity Statistics*) San Diego County is consistently listed among the top five counties in the state for both number of acres burned and dollar value of fire damage. In San Diego County, fire season is typically defined from May through November, depending on variations in weather conditions. However, the threat of a wildland fire is always present and is influenced by weather conditions throughout the year.

The 2007 San Diego County firestorms were the second largest in County history, superseded only by the devastating firestorms of October 2003. The firestorms started on October 21, 2007, near the United States/Mexico international border and burned throughout the County until the last fire was fully contained on November 9, 2007. At the height of the firestorms, there were seven separate fires burning in San Diego County. The fires resulted in seven civilian deaths, 23 civilian injuries, and 89 firefighter injuries. More than 6,200 fire personnel fought to control the wildland fires, but the fires consumed

approximately 369,000 acres, or about 13 percent of the County's total land mass. Additionally, the fires destroyed an estimated 1,600 homes, 800 outbuildings, 253 structures, 239 vehicles, and two commercial properties. The total projected damage costs of the 2007 San Diego County firestorms are estimated to exceed \$1.5 billion (EG&G 2007).

The West Fire burned 505 acres and destroyed 49 homes in Alpine in July of 2018. The West Fire ignited on July 6 and was exacerbated by windy conditions, high temperatures, and steep slopes in the region. Two firefighters were injured, and 91 individuals were displaced by the fires. Residents and businesses were without electrical and water service as a result of the fire.

Most recently, the 2020 Valley Fire burned 76,067 acres and damaged or destroyed 75 structures. The Valley Fire was located outside Alpine and to the southeast. It was ignited on September 5, 2020 (Cleveland National Forest 2020). This fire was intensified by dry vegetation, rugged terrain, and high temperatures and winds. Power outages were a result of the fire and three firefighters were injured. Historic fires are shown on Figures 2.7-3a and 2.7-3b.

2.7.1.3 Fire Hazard Designations

CAL FIRE has mapped areas of significant fire hazards in the County through its Fire and Resource Assessment Program. CAL FIRE defines and maps Fire Hazard Severity Zones (FHSZs) to identify the potential fire hazard severity expected in different areas within the state as required by PRC Sections 4201–4205. FHSZs are determined based on an area's vegetation, topography (slope), weather (including winds), crown fire potential, and ember production and movement potential. FHSZ includes the classifications Very High, High, or Moderate in areas where the state is responsible for fire protection (State Responsibility Areas [SRAs]) (CAL FIRE 2018f). The majority of San Diego County is included in an SRA for fire prevention and suppression. However, some areas such as National Forests are within Federal Responsibility Areas (FRAs), which are under the responsibility of the U.S. Forest Service (USFS) for wildfire protection. FHSZ also includes the classification Very High in areas where local agencies are responsible for fire protection (Local Responsibility Areas [LRAs]) (CBSC 2019). In San Diego County, local fire protection is provided by Fire Protection Districts and County Service Areas (CSAs) in unincorporated areas, and by city fire departments and joint powers agreements within city boundaries. Local fire protection is discussed in more detail in Section 2.11, *Public Services*.

The majority of the County is designated as a Very High and High FHSZ, except for the Desert and eastern Mountain Empire subregions, which are in the Moderate FHSZ. There are also areas of Moderate FHSZ and un-zoned areas in the more densely populated communities around the County. Table 2.7-2 identifies the acres of each FHSZ designation within the Alpine CPA. As shown, almost the entirety of the seven subareas within the Alpine CPA include areas that are designated as a Very High FHSZ. Section 4902.2 of the County Consolidated Fire Code and the respective ordinance state that all SRA lands within Alpine are classified as Very-High FHSZ (See Figures 2.7-1a and 1b).

Additionally, Table 2.7-3 identifies the acres of FHSZ designated areas within each of the seven subareas. As shown, approximately 15,198 acres of the total land within the subareas is designated as a Very High FHSZ.

Table 2.7-2. Wildfire Risk in the Subareas

Fire Hazard Severity Zone	Subarea Acres	Percent of Alpine CPA	Unincorporated Acres	Percentage of Unincorporated County
Very High	15,198	99%	1,452,231	64%
High	12	<1%	369,176	16%
Moderate	0	0%	412,079	18%
Non-Wildland/ Non-Urban Urban Unzoned	2	0%	16,632	<1%
	0	0%	33,403	2%
Total	15,212	100%	2,283,521	100%

Source: CAL FIRE 2017

Table only includes calculations for the seven subareas identified as the proposed project.

Table 2.7-3. Wildfire Risk by Subarea

Subarea	Acres			
	Very High	High	Moderate	No Hazard
1	58	0	0	0
2	143	0	0	0
3	114	0	0	0
4	652	0	0	0
5	2,081	0	0	0
6	105	0	0	0
7	12,045	12	0	2
Total	15,198	12	0	2

Source: CAL FIRE 2017

2.7.1.4 Wildland Urban Interface

The wildland urban interface (WUI) is an area where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (USDA and USDOJ 2001) and occur in areas designated by CAL FIRE as an FHSZ. A WUI is defined as a buffer around areas of residential density greater than 0.05 dwelling units per acre and is divided into a Defense Zone (the area up to 0.25 mile from the developed area) and a Threat Zone (from 0.25 to 1.5 miles from developed areas) (CAL FIRE 2018g).

The WUI creates an environment in which fire can move readily between structural and vegetation fuels. Once homes are built within (or adjacent to) natural habitat settings, fighting wildland fires becomes more complex because the goal of extinguishing the wildland fire is often superseded by protecting human life and private property.

The WUI is composed of communities that border wildlands or are intermixed with wildlands and where the minimum density exceeds one structure per 40 acres. WUI communities are created when the following conditions occur: (1) structures are built at densities greater than one unit per 40 acres, (2) the

percentage of native vegetation is less than 50 percent, (3) the area is more than 75 percent vegetated, and (4) the area is within 1.5 miles of an area greater than a census block (1,325 acres). The 1.5-mile buffer distance was adopted according to the 2001 California Fire Alliance definition of *vicinity*, which is roughly the distance that pieces of burning wood can be carried from wildland fire to the roof of a structure (University of Wisconsin 2008).

Approximately 60,072 acres of the Alpine CPA are within the WUI, which represents 88 percent of the community. To reduce potential wildfire risk and associated loss of life and property, existing, denser land use designations (e.g., Village Residential) are primarily concentrated in the more urbanized areas of the Alpine CPA, particularly within the Village area.

2.7.2 Regulatory Framework

Wildfire was not analyzed as a separate category in the 2011 General Plan EIR; as such, federal, state, and local regulations that are applicable to wildfire within the Alpine CPA are provided below.

Applicable international regulations include:

2.7.2.1 International Fire Code

The International Fire Code (IFC), created by the International Code Council, is a model document that was adopted and then amended by the California Building Standards Commission (CBSC) and serves as the primary international means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code (IBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is adopted and amended every 3 years.

Applicable state regulations include:

2.7.2.2 California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations (CCR). It is created by the CBSC and is based on the IFC created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is adopted and amended every three years.

The CFC includes requirements for building construction and vegetation management within areas designated as WUIs. In such areas, all new building must comply with the CBC, which defines wildfire protection building construction requirements intended to reduce wildfire exposure. In addition, buildings within the WUI must comply with California laws and regulations that require maintenance of a “defensible space” of 100 feet from structures (PRC Section 4291; CCR Title 14 Section 1299.03).

2.7.2.3 State Fire Regulations

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, and include regulations concerning building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

2.7.2.4 California Code of Regulations, Title 14, Division 1.5

CCR Title 14 Division 1.5 establishes the regulations for CAL FIRE and is applicable in all SRAs, which are areas where CAL FIRE is responsible for wildfire protection. Most of the unincorporated County is an SRA, and any development in SRAs must comply with these regulations. Among other things, CCR Title 14 Section 1270, et seq. establishes minimum standards for emergency access, fuel modification, setback to property line, signage, and water supply. San Diego County's most recent adoption of the County Consolidated Fire Code was in 2020 and the code requirements meet or exceed Title 14 Section 1270, et seq. With the recent adoption, the County Consolidated Fire Code supersedes Title 14 Section 1270, et seq., in the unincorporated areas of the County.

Applicable local regulations include:

2.7.2.5 County of San Diego Code of Regulatory Ordinances Sections 68.401–68.406, Defensible Space for Fire Protection Ordinance

This ordinance addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. The ordinance constitutes the presence of such weeds, rubbish, and other materials as a public nuisance, which must be abated in accordance with the provisions of these sections. This ordinance is enforced in all CSAs and in the unincorporated County outside of a fire protection district. All fire protection districts have a combustible vegetation abatement program, and many fire protection districts have adopted and enforce the County's ordinance. This ordinance was last updated in 2011.

2.7.2.6 County of San Diego Code of Regulatory Ordinances Sections 96.1.004 and 96.1.4907, Removal of Fire Hazards

The San Diego County Fire Authority and Fire Districts, in partnership with CAL FIRE, the Bureau of Land Management, and the USFS, is responsible for the enforcement of defensible space inspections. Inspectors from CAL FIRE are responsible for the inspection of properties to ensure an adequate defensible space has been created around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and provide a reasonable timeframe to complete the task. If the violations still exist upon re-inspection, the local fire inspector will forward a complaint to the County for further enforcement action. This is part of the County Consolidated Fire Code that was last updated in 2020.

2.7.2.7 County of San Diego Consolidated Fire Code

The County of San Diego, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The Consolidated Fire Code contains the County and fire protection districts amendments to the CFC. The purpose of consolidation of the County and local fire districts adoptive ordinances is to promote consistency in the interpretation and enforcement of the Consolidated Fire Code for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the Consolidated Fire Code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. The Consolidated Fire Code is amended and adopted every 3 years, with the most recent version approved by the Board of Supervisors on February 25, 2020.

2.7.2.8 County of San Diego Fire Prevention in Project Design Standards

Following the October 2003 wildfires, the County's Department of Planning and Land Use (now Planning & Development Services) incorporated a number of fire prevention strategies into the discretionary project review process for CEQA projects. One of the more significant changes is the requirement that the majority of discretionary permits (e.g., subdivision and use permits) in WUI areas prepare a Fire Protection Plan for review and approval. A Fire Protection Plan is a technical report that considers the topography, geology, combustible vegetation (fuel types), climatic conditions, and fire history of the proposed project location. The plan addresses the following (among others) in terms of compliance with applicable codes and regulations: water supply, primary and secondary access for emergency services and evacuation of residents, travel time to the nearest fire station, structure setback from property lines, ignition-resistant building features (e.g., ember vents), fire protection systems and equipment (e.g., sprinklers), impacts on existing emergency services, defensible space, and vegetation (fuel) management. The County's Guidelines for Determining Significance – Wildland Fire and Fire Protection was last updated in 2010.

2.7.2.9 County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The Federal Disaster Mitigation Act of 2000 requires all local governments to create a disaster plan in order to qualify for hazard mitigation funding. The Multi-Jurisdictional Hazard Mitigation Plan is a countywide plan that identifies risks and ways to minimize damage by natural and human-made disasters. The plan is a comprehensive resource document that serves many purposes such as enhancing public awareness, creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

Each of the 18 cities in the County participated in the planning process, as well as the Alpine Fire Protection District, Rancho Santa Fe Fire Protection District, and Padre Dam Municipal Water District. Based on its review of jurisdictional-level hazard maps, Alpine Fire Protection District identified

approximately 12,885 people, 4,814 residential structures, 1,355 commercial structures, and 142 critical facilities that are exposed to wildfire/structure fire hazards (Fire Regime classes II and IV).¹

The Multi-Jurisdictional Hazard Mitigation Plan addresses wildfire risk within the San Diego region by assessing the exposure to wildfire hazard of populations in the different jurisdictions within the region. The assessment includes exposure of population, residential buildings, and commercial buildings, as well as exposure of critical facilities and infrastructure such as airports, bridges, and electric power facilities. The plan then outlines goals, objectives, and actions for each jurisdiction within the San Diego region. Goals related to wildfire typically include reducing the possibility of damage and loss due to structural/wildfire. Objectives and actions related to wildfire typically include measures such as updating fire and evacuation plans, maintaining vegetation management policies, and maintaining adequate emergency response capability. This plan was last updated in 2018.

2.7.2.10 County of San Diego Operational Area Emergency Operations Plan

The Operational Area Emergency Operations Plan (Emergency Plan) (Unified San Diego County Emergency Services Organization and County of San Diego 2018) is an emergency management system for San Diego County and the incorporated cities in the San Diego region that provides for a planned response to emergencies associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. The plan was developed by the Unified Disaster Council, a governing body that includes representatives from the County of San Diego and each of the incorporated cities in the San Diego region. The previous version, published in 2014, was revised in 2017 and published in 2018.

The purpose of the Emergency Plan is to outline strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the San Diego Operational Area. Annex B of the Emergency Plan, *Fire Rescue and Mutual Operations*, includes information about shared firefighting resources that can respond to wildfires such as helicopters provided by the San Diego Sheriff's Department/CAL FIRE Program, San Diego City Fire-Rescue Department Air Operations Section, and the USFS.

Annex Q of the Emergency Plan, *Evacuation*, identifies wildfires as the most likely of six hazards that could affect the San Diego operational area and require evacuation of several communities (the other five are dam failure, earthquake, flooding, tsunami, and terrorism). This part of the Emergency Plan identifies agencies or organizations that are typically responsible for an evacuation effort and how regional resources will be requested and coordinated. Attachment 2 of the Evacuation Annex, *Evacuation Routes*, identifies primary evacuation routes in the San Diego region, which consist of the major interstates, highways, and prime arterials within the County. Annex Q identifies modes of transportation, transportation collection points, and elements of transportation coordination that would be required in the case of an evacuation. Specific locations would be designated by local law enforcement personnel.

2.7.2.11 Fire Safe Council of San Diego County

The Fire Safe Council (FSC) of San Diego County was formed in 1997 as a nonprofit corporation through a collaboration between the Resource Conservation District of Greater San Diego County and federal,

¹ The U.S. Geological Survey LANDFIRE model provides five different Fire Regime classes for purposes of determining wildfire risk. Fire Regime II is defined as 0- to 35-year frequency and high severity, and Fire Regime IV is defined as 35- to 100+-year frequency and high severity.

state, local, and tribal fire agency partners. The FSC acts as an umbrella organization for the 38 locally formed community fire safe councils within the County. These local councils are typically formed by citizens through the greater FSC of San Diego County and are considered part of the state-wide network of fire safe councils.

Approximately 150 communities throughout the state have created fire safe councils, 35 of which are within San Diego County. The Alpine community is home to two councils: The Greater Alpine Fire Safe Council and the Viejas Fire Safe Council. In 2004, a Public Safety Committee consisting of concerned citizens and first responders was formed and began to meet with representatives from the USFS, CAL FIRE, Alpine Fire Protection District, Viejas Fire Department, San Diego County Sheriff, and the Alpine Community Planning Group to develop a plan to reduce wildfire risk in Alpine. Following years of meetings, the Greater Alpine Fire Safe Council was formed in 2006 to carry out the objectives of the Alpine Public Safety Committee and consists of volunteers from the community.

2.7.2.12 Alpine Community Wildfire Protection Plan

The original Alpine Community Wildfire Protection Plan was developed by the Alpine Public Safety Committee, a subcommittee of Supervisor Dianne Jacob's Alpine Revitalization Committee with guidance and support from the USFS, CAL FIRE, California Department of Transportation, County Office of Emergency Services, County Department of Planning and Land Use (now Planning & Development Services), County Sheriff's Department, Alpine Fire Protection District, Viejas Fire Department, and Greater Alpine Fire Safe Council. The intent of the plan is to optimize the use of scarce resources (money, people, and equipment) to achieve the greatest overall benefit to the community. The primary goal is to prioritize projects as follows:

- Defensible Space around Structures
- Defensible Space along Evacuation Routes
- Hazardous Fuels Reduction

A key element of the planning strategy is to link together existing and future fuels reduction projects so they can provide contiguous corridors of protection along a perimeter surrounding the Alpine area. The areas being linked together include defensible space projects for community homes and evacuation routes, natural and/or human-made fuel breaks through agency efforts, and burned areas. Priority is then given to those areas that can achieve the greatest degree of protection with the limited resources available.

2.7.2.13 County of San Diego General Plan Policies

The General Plan includes goals and policies in the Land Use Element, Mobility Element, Conservation and Open Space Element, Housing Element, and Safety Element, which are applicable to wildfire within the Alpine CPA.

Land Use Element

Goal LU-6 advocates for a built environment in balance with the natural environment, scarce resources, natural hazards, and the unique character of individual communities. Policy LU-6.10 supports this by promoting that development be located and designed to protect property and residents from the risks of natural and man-induced hazards. Policy LU-6.11 supports this by assigning land uses and densities in a manner that minimizes development in extreme, very high, and high fire threat areas or other unmitigable hazardous areas.

Goal LU-10 advocates for designating semi-rural and rural lands that buffer communities, protect natural resources, foster agriculture, and accommodate unique rural communities. This is supported by Policy LU-10.2, which promotes that development in semi-rural and rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.

Goal LU-12 advocates adequate and sustainable infrastructure, public facilities, and essential facilities that meet community needs and are provided concurrent with growth and development. Policy LU-12.3 supports this by providing public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. In addition, it encourages the colocation of infrastructure facilities, where appropriate. Policy LU-12.4 supports this goal by planning site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and wherever feasible, locate any facilities and supporting infrastructure outside preserve areas. This policy promotes sensitive Mobility Element road design that is compatible with community character and minimizes visual and environmental impacts; for Mobility Roads identified in table M-4 (of the General Plan) an LOS D or better may not be achieved.

Mobility Element

Goals M-1 advocates a safe and efficient road network that balances regional travel needs with the travel requirements and preferences of local communities. Goal M-2 promotes a road network that provides adequate capacity to reasonably accommodate both planned land uses and regional traffic patterns, while supporting other General Plan goals such as providing environmental protections and enhancing community character. These goals are supported by Policies M-1.2, M-2.3, and M-2.5. Policy M-1.2 promotes the provision of an interconnected public road network with multiple connections that improve efficiency by incorporating shorter routes between trip origin and destination, disperse traffic, reduce traffic congestion in specific areas, and provide both primary and secondary access/egress routes that support emergency services during fire and other emergencies. Policy M-2.3 promotes the location and design of public and private roads to minimize impacts to significant biological and other environmental and visual resources. In addition, this policy promotes the avoidance of road alignments through flood plains to minimize impacts on floodplain habitats and limit the need for constructing flood control measures. Further, this policy supports designing new roads to maintain wildlife movement and retrofit existing roads for that purpose. Finally, this policy promotes the utilization of fencing to reduce roadkill and to direct animals to under crossings. Policy M-2.5 requires that road improvements be designed to accommodate stormwater in a manner that minimizes demands upon engineered stormwater systems and to maximize the use of natural detention and infiltration techniques to mitigate environmental impacts.

Goal M-3 advocates new or expanded transportation facilities that are phased with and equitably funded by development that necessitates their construction. This goal is supported by Policy M-3.3 that requires development to provide multiple ingress/egress routes in conformance with State law and local regulations.

Finally, Goal M-4 promotes that roads be designed to be safe for all users and compatible with their context. This goal is supported by Policy M-4.4 that promotes that public and private roads be designed to allow for necessary access for appropriately-sized fire apparatus and emergency vehicles while accommodating outgoing vehicles from evacuating residents.

Conservation and Open Space Element

Goal COS-5 advocates the protection and maintenance of local reservoirs, watersheds, aquifer-recharge areas, and natural drainage systems to maintain high-quality water resources. This goal is supported by Policy COS-5.3 that requires development to be appropriately sited and to incorporate measures to retain natural flow regimes, thereby protecting downslope areas from erosion, capturing runoff to adequately allow for filtration and/or infiltration, and protecting downstream biological resources which reduces the risk of flooding or landslides following wildfires.

Goal COS-12 advocates for the preservation of ridgelines and steep hillsides for their character and scenic value. Policy COS-12.1 promotes the protection of undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designation on these areas which serves a secondary purpose of minimizing development in steep environments that are more vulnerable to wildfire.

Housing Element

Goal H-5 of the Housing Element promotes governmental policies or regulations that do not unnecessarily constrain the development, improvement, or conservation of market rate or affordable housing. This goal is supported by Policy H-5.3 that promotes working with local fire agencies (see Figures 2.7-2a and 2.7-2b) to improve fire protection for multi-story construction.

Safety Element

Goal S-1 promotes enhanced public safety and the protection of public and private property. This goal is supported by policies S-1.3, S-1.4, and S-1.5. Policy S-1.3 advocates for support efforts and programs that reduce both the risk of natural and manmade hazards and that reduce the time for responding to these hazards. Policy S-1.4 promotes the review and update of the County's Multi-Jurisdictional Hazard Mitigation Plan be updated every five years. Policy S-1.5 promotes the participation in programs and procedures that emphasize coordination between appropriate public agencies and private entities to remove debris and promote the rapid reconstruction of the County following a disaster event and facilitate the upgrading of the built environment as expeditiously as possible.

Goal S-3 and Policies S-3.1 through S-3.6 require that fire hazards be minimized through responsible development, vegetation management, and maintenance of accessible road networks for emergency services.

Goals S-4, S-5, and S-6 relate to interagency and interjurisdictional coordination of fire prevention. Policy S-4.1 also recommends that the County develop fuel management programs based on comments from neighboring fire management jurisdictions. Policies S-5.1 and S-5.2 require regional coordination and agreements between fire protection services to maximize service levels. Policies S-6.4 and S-6.5 require that new development conform to travel time standards and that appropriate fire protection services be established before or concurrent to development.

Goal S-8 relates to the reduction of landslide and mudslide hazards, which may be more likely following wildfire events. Policy S-8.1 directs development away from areas with high landslide or mudslide potential, and S-8.2 prohibits development from causing or contributing to slope instability.

2.7.2.14 Alpine CPU Policies

The proposed project also includes goals and policies within the Safety Element that are applicable to wildfire within the Alpine CPA.

Safety Element

Goal S-1 promotes the establishment of emergency procedures and preventative measures to minimize damage from fire, geologic hazards, crime occurrence, and hazardous substances. This goal is supported by Policies S-1.1, S-1.2, S-1.3, S-1.4, and S-1.5. Policy S-1.1 promotes maintaining continued support of the Community Wildfire Protection Plan (CWPP) and the Greater Alpine Fire Safe Council. Policy S-1.2 encourages development with fire preventive development practices and fire-resistant plant types. Policy S-1.3 promotes the expansion of fire, police, and emergency health or other services, as needed. Policy S-1.4 supports the establishment of alternative means of ingress/egress to/from Palo Verde Ranch and other existing neighborhoods. Policy S-1.5 encourages the application of the Conservation Subdivision Program to new residential subdivisions for the improvement of fire protection in addition to preserving sensitive environmental resources.

2.7.3 Analysis of Project Effects and Determination as to Significance

The County of San Diego Guidelines for Determining Significance – Wildland Fire and Fire Protection (2010) provides guidance for evaluating adverse environmental effects associated with wildland fire. However, these guidelines have not been updated to reflect the current CEQA Appendix G questions related to wildfire. Therefore, the impact analysis that follows relies on Appendix G of the State CEQA Guidelines. Based on guidance provided in Appendix G of the State CEQA Guidelines, the Alpine CPU would result in a significant impact if it would lead to any of the following.

1. Be located in or near state responsibility areas or lands classified as Very High FHSZ and would substantially impair an adopted emergency response plan or emergency evacuation plan.
2. Be located in or near state responsibility areas or lands classified as Very High FHSZ and would exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire.
3. Be located in or near state responsibility areas or lands classified as Very High FHSZ and would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or result in temporary or ongoing impacts to the environment.
4. Be located in or near state responsibility areas or lands classified as Very High FHSZ and would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as result of runoff, post-fire slope instability, or drainage changes.

2.7.3.1 Issue 1: Adopted Emergency Response Plan or Emergency Evacuation Plan

Guidelines for the Determination of Significance Analysis

Based on Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact on the environment if it would be located in or near SRAs or lands classified as Very High FHSZ and would substantially impair an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

The 2011 General Plan EIR determined that the 2011 General Plan would result in future development in areas that may not have been accounted for in existing emergency response and evacuation plans, and therefore would have the potential to impair these plans, resulting in a significant impact. However, it was determined that the 2011 General Plan would not result in a cumulatively considerable impact on emergency response and evacuation plans. The discussion of impacts related to emergency response and evacuation plans from implementation of the 2011 General Plan can be found in Section 2.7, *Hazards and Hazardous Materials* and 2.15, *Transportation and Traffic* of the 2011 General Plan EIR, and is hereby incorporated by reference.

The 2011 General Plan EIR concluded that the implementation of the 2011 General Plan would have the potential to substantially impair an adopted emergency response plan or emergency evacuation plan or result in inadequate emergency access. In addition, implementation of the 2011 General Plan would have the potential to contribute to potentially significant cumulative impacts associated with emergency response or emergency evacuation plans. Impacts were determined to be less than significant with implementation of mitigation measures and General Plan policies. Specifically, General Plan policies M-1.2, M-3.3, M-4.4, H-5.3, S-1.3, S-1.5, S-3.1 through S-3.6, S-5.1, S-5.2, S-6.4, and S-6.5 reduce these potential impacts by supporting coordinated and responsible fire hazard and general hazard planning (see Appendix C). Furthermore, emergency response and evacuation plans are bolstered by the County Consolidated Fire Code, CCR Title 14 Division 1.5, and State Fire Regulations.

The proposed project would allow for increased dwelling units in Subareas 2, 4, and 6, amounting to a potential increase of 2,013 dwelling units. Additionally, proposed mobility network changes associated with the proposed project would allow roadway re-classifications and re-configurations within the seven subareas and a new roadway in Subarea 5. Both the increase in dwelling units and mobility network changes would have the potential to adversely impact adopted emergency response or emergency evacuation plans. The General Plan densities have not yet been fully built out, so the analysis below focuses on what the change to the environment would be when comparing the 4,065 dwelling units currently allowed by the General Plan in the seven subareas to the 6,078 units proposed in the Alpine CPU.

Approximately 60,072 acres of the Alpine CPA are within the WUI, which represents 88 percent of the community, and all seven subareas are entirely within the WUI. In addition, all seven subareas are within a Very High FHSZ, while Subarea 6 also contains areas designated as a High FHSZ (approximately 41 percent of the subarea). Compared to the 2011 General Plan, 2,013 additional housing units could be developed at buildout throughout the seven subareas under the proposed project.

According to the pamphlet entitled "Alpine Emergency Evacuation Routes" distributed by the Alpine Fire Safe Council, Subareas 1, 4, and 5 are not directly connected to main evacuation roads (Alpine Fire Safe Council n.d.). Subarea 4 would have additional dwelling units under the Alpine CPU, and with the increase

in population density, emergency response times or access could be limited, which could substantially impact an emergency response or evacuation plan. Because Subarea 5 is impacted by the proposed changes to the mobility network, it is possible that the adopted evacuation and emergency response plans could be substantially impaired by roadway expansions or construction. However, the proposed mobility network expansion within Subarea 5 has been designed to connect to the main evacuation road. Once constructed, it would provide better access to evacuation routes and will align with existing evacuation and emergency response plans. Additionally, the mobility element would re-align a roadway in Subarea 1 to provide better fire access. Construction activities associated with future development implemented under the Alpine CPU would have the potential to interfere with emergency response plans and procedures for general natural disasters if authorities are not properly notified, or if multiple projects are constructed during the same time and multiple roadways used for emergency routes are concurrently blocked. Both the mobility network changes and population density and land use intensity changes could impact the entire CPA, even though the proposed project only changes land use designations and mobility in certain subareas. However, the mobility element changes will also provide better emergency response and evacuation access once constructed.

Future development projects within the Alpine CPA implemented under the proposed project could adversely impact emergency response and evacuation plans if the level of emergency service is not adequate enough to support the increased population or if changes to the mobility network impact the emergency response or evacuation plans. Future discretionary projects would be subject to an environmental review process and federal, state, and local regulations that support emergency response and evacuation plans and would be required to mitigate for fire-related impacts. Future projects would also be expected to conform with the goals and policies of the General Plan. However, the increase in development and changes to the mobility network could still adversely impact emergency response and evacuation plans to a degree greater than can be reasonably expected under the existing conditions and beyond that analyzed by the 2011 General Plan EIR. As such, this impact is **potentially significant**.

Federal, State, and Local Regulations and Existing Regulatory Processes

As identified in Section 2.7.2, *Regulatory Framework*, there are numerous federal, state, and local regulations in place to support emergency response and evacuation plans in the County that are also applicable to the proposed project. Subsequent projects proposed after the implementation of the Alpine CPU would be required to comply with all applicable regulations pertaining to wildfire, emergency response plans, and emergency evacuation plans.

CCR Title 14 Division 1.5 provides minimum standards for emergency access. Future projects implemented under the Alpine CPU will be required to comply with these regulations, which will ensure that no adopted emergency access or evacuation plan is substantially impaired as a result of the proposed project. The County Consolidated Fire Code includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management, and also helps prevent the release of hazardous substances during and following fire hazards.

The Multi-Jurisdictional Hazard Mitigation Plan requires that fire evacuation plans be updated regularly to reflect current wildfire risk and available emergency services, and also that jurisdictions maintain emergency response capabilities over time. The County of San Diego Operational Area Emergency Operations Plan, which establishes protocols for emergency response to multiple hazards including wildfire, also supports existing emergency response and evacuation plans. Similarly, the Alpine

Community Wildfire Protection Plan is designed to support emergency response and evacuation plans by reducing hazardous fuel storage and requiring defensible space along evacuation routes.

Furthermore, the County of San Diego Guidelines for Determining Significance – Wildland Fire and Fire Protection (2010) requires a comprehensive analysis of wildfire risk for discretionary projects and may require a technical report that analyzes emergency response time, emergency services availability, and other factors to ensure that discretionary projects do not substantially impact emergency response and evacuation plans.

General Plan Policies M-1.2, M-3.3, M-4.4, H-5.3, S-1.3, S-1.5, S-3.1 through S-3.6, S-5.1, S-5.2, S-6.4, and S-6.5 prevent projects from impairing adopted emergency response and evacuation plans. The 2011 General Plan EIR also identified several mitigation measures addressing impacts related to emergency response and evacuation plans that would be applicable to the proposed project, including MM-Haz-3.1 through MM-Haz-3.3, MM-Haz-4.4, MM-Pub-1.5, and MM-Tra-4.1 through MM-Tra-4.3, which are provided in Section 2.7.6, below. Project-specific mitigation measure MM-WILD-1 would reduce the proposed project's impacts on emergency response and evacuation plans related to wildfire.

Summary

The proposed project increases the permitted densities within the CPA and proposes changes to mobility networks that may impact adopted emergency response and evacuation plans, particularly in subareas not directly connected to major evacuation routes. For the Alpine CPA, the Alpine Area Evacuation Map identifies main evacuation routes for Alpine (see Figure 2.7-4). Future development projects implemented under the proposed project may also impact emergency response and evacuation plans within the Alpine CPA. Future projects would be required to comply with the numerous regulations related to emergency response and evacuation plans, and discretionary permits would be evaluated according to the County's Guidelines for Determining Significance – Wildland Fire and Fire Protection. Despite these regulations and policies, impacts to emergency response and evacuation plans would be **potentially significant**, and mitigation would be required (**Impact WILD-1**).

2.7.3.2 Issue 2: Expose Receptors to Pollutants from Wildfire

Guidelines for the Determination of Significance Analysis

Based on Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact if it would be located in or near SRAs or lands classified as Very High FHSZ and would exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire.

Impact Analysis

The 2011 General Plan EIR determined that the 2011 General Plan would result in future development in areas that could exacerbate wildfire risk and expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire, resulting in a significant impact. Impacts related to wildfire risk and pollutant exposure from implementation of the 2011 General Plan were not addressed explicitly in the 2011 General Plan EIR because Wildfire was not analyzed as a separate section at the time it was adopted. However, Sections 2.7, *Hazards and Hazardous Materials*; 2.8, *Hydrology and Water Quality*; 2.13, *Public Services*; 2.15, *Transportation and Traffic*; and 2.17, *Global Climate Change* of the 2011 General Plan EIR address wildfire risk and exposure to pollutants and are hereby incorporated by reference.

Implementation of the 2011 General Plan would have the potential to contribute to potentially significant direct and cumulative impacts associated with exacerbated wildfire risk and exposure to pollutants. However, 2011 General Plan policies LU-6.10, LU-6.11, COS-5.3, COS-12.1, H-5.3, S-1.3, S-3.1, and S-3.6 reduce these potential impacts by limiting development in high fire hazard areas and minimizing exposure to pollutants as a result of wildfire. Furthermore, wildfire risk and risk of pollutant exposure are minimized by adherence to the IFC and CFC, CCR Title 14 Division 1.5, the County Consolidated Fire Code, and other regulations.

Development within or adjacent to areas designated as Very High FHSZ and/or WUI areas has the potential to exacerbate wildfire risk, particularly if it occurs in areas with steep topography and/or prevailing winds as these conditions contribute to the spread of wildfires and make it more difficult to contain wildfires. As shown in Figures 2.7-1a and 2.7-1b, a majority of the Alpine CPA is within a WUI area and Very High FHSZ under either state or federal responsibility. Within the Alpine CPA, all seven subareas are within a Very High FHSZ, while Subarea 6 also contains areas designated as a High FHSZ (approximately 41 percent of the subarea). All seven subareas are entirely within the WUI. One of the primary threats to human health associated with wildfire smoke is from airborne particulate matter (PM_{2.5} and PM₁₀). Because of its small size, particulate matter can enter a person's eyes and respiratory system, which could cause short-term health effects such as burning eyes, sinus issues, and bronchitis. In addition, fine particulates can also exacerbate existing health conditions such as chronic heart and lung diseases (EPA 2018a). Other receptors particularly susceptible to airborne particulate matter from wildfires include people with asthma, older adults, children, and pregnant women (EPA 2018b). Development in fire hazardous areas could result in increased pollutant exposure.

The proposed project would increase density by 2,013 dwelling units within three of the subareas, including in areas designated as a Very High FHSZ and/or WUI. Approximately 50 percent of the Alpine CPA contains areas with slopes greater than 25 percent, as shown in Figures 2.7-5a and 2.7-5b, which are more susceptible to wildfire spreading. Subareas 4 and 5 in particular are situated in areas with substantial topographical changes, with the Sweetwater River valley bordering Subarea 5 to the south, and contain large swaths of fire-prone vegetation such as chaparral and coastal sage scrub. Most wildfires are started near developed areas and roadways (Syphard et al. 2007), and as development expands into wildland areas, more wildfires are ignited (Radeloff 2018). An estimated 80 percent of wildfires are ignited by humans (Balch et al. 2017). At buildout, the proposed project would introduce approximately 2,013 potential new housing units to Subareas 2, 4, and 6. As such, future development within these subareas would have the potential to exacerbate wildfire risk by introducing a substantial number of new residents, who in turn could be exposed to pollutant concentrations such as particulate matter in the event of a wildfire.

Future development projects within the Alpine CPA implemented under the proposed project could adversely impact wildfire risk and pollutant exposure. Any future development would be subject to an environmental review process and federal, state, and local regulations that minimize wildfire risk and pollutant exposure. Future projects would also be expected to conform with the goals and policies of the General Plan. However, the increase in development could still adversely impact wildfire risk and pollutant exposure. As such, this impact is **potentially significant**.

Federal, State, and Local Regulations and Existing Regulatory Processes

As identified in Section 2.7.2, *Regulatory Framework*, there are numerous federal, state, and local regulations in place to minimize wildfire risk and pollutant exposure in the County that are also applicable

to the proposed project. All projects proposed after the implementation of the Alpine CPU would be required to comply with all applicable regulations pertaining to wildfire.

The IFC, CFC, and County Consolidated Fire Code regulate the handling and storage of hazards that may be flammable or result in exposure to pollutants and designate protective measures to prevent the ignition or release of such materials. CCR Title 14 Division 1.5, in conjunction with the Defensible Space Fire Protection Ordinance and the Removal of Fire Hazards Ordinance, mandates the maintenance of adequate defensible space around buildings, roads, and emergency access networks. Similarly, the Alpine Community Wildfire Protection Plan is designed to support emergency response and evacuation plans by reducing hazardous fuel storage and requiring defensible space along evacuation routes.

The County Consolidated Fire Code includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management, and also helps prevent the release of hazardous substances during and following fire hazards.

Furthermore, the County of San Diego Guidelines for Determining Significance – Wildland Fire and Fire Protection (2010) requires a comprehensive analysis of wildfire risk for discretionary projects and may require the preparation of a technical report that analyzes factors such as topography, geology, combustible vegetation (fuel types), and climatic conditions and determines the appropriate fire protection measures, including building design features, defensible space, and vegetation management.

General Plan Policies LU-6.10, LU-6.11, LU-10.2, COS-5.3, COS-12.1, H-5.3, S-1.3, and S-3.1 through S-3.6 reduce the risk of wildfire spreading and pollutant exposure, and 2011 General Plan EIR mitigation measures MM-Haz-4.1, MM-Haz-4.3, MM-Haz-4.4, MM-Hyd-3.2, MM-Pub-1.4, MM-Pub-1.7, MM-Tra-4.3, and MM-CC-1.12 would also be applicable to wildfire risk and pollutant exposure.

Summary

The proposed project would increase the permitted densities within three subareas, which may exacerbate wildfire risk and exposure to pollutants, particularly in subareas where land use designation changes allow a higher density of dwelling units. However, fire risks are reduced in the village center of Alpine compared to the residences located within the more rural WUI for numerous reasons, including shorter emergency response and travel times, better road access and water availability, and fewer unmaintained private yards, which could contain dry brush and other flammable materials. Increased density is proposed within the village boundary (Subareas 2 and 6), which is located away from areas with elevated risk for fire outbreak and spread such as steep canyons. In addition, increased density is also proposed in an area adjacent to the freeway that serves as an evacuation route for the Alpine CPA (Subarea 4). Future development projects would reduce fuel load and provide better access; however, subsequent projects implemented under the proposed project may also impact wildfire risk and pollutant exposure within the Alpine CPA. Future projects would be required to comply with the numerous regulations related to wildfire risk and pollutant exposure, and discretionary permits would be evaluated according to the County's Guidelines for Determining Significance – Wildland Fire and Fire Protection. Despite these regulations and policies, impacts to wildfire risk and pollutant exposure would be **potentially significant**, and mitigation would be required (**Impact WILD-2**).

2.7.3.3 Issue 3: Exacerbate Wildfire Risk from New Infrastructure

Guidelines for the Determination of Significance Analysis

Based on Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact if it would be located in or near SRAs or lands classified as Very High FHSZ and would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or result in temporary or ongoing impacts on the environment.

Impact Analysis

The 2011 General Plan EIR determined that the 2011 General Plan would result in future development in areas that could require the installation or maintenance of infrastructure that may exacerbate fire risk or impact the environment, resulting in a significant impact. Impacts related to wildfire risk and pollutant exposure from implementation of the General Plan were not addressed explicitly in the 2011 General Plan EIR because wildfire was not analyzed as a separate section at the time it was adopted. However, Sections 2.7, *Hazards and Hazardous Materials*; 2.9, *Land Use*; 2.13, *Public Services*; and 2.15, *Transportation and Traffic* of the 2011 General Plan EIR address wildfire risk and exposure to pollutants and are hereby incorporated by reference.

Implementation of the 2011 General Plan would have the potential to contribute to potentially significant direct and cumulative impacts associated with expanded or altered emergency services infrastructure. However, several General Plan policies, including LU-6.10, LU-6.11, LU-10.2, LU-12.3, LU-12.4, M-2.3, M-2.5, S-1.3, S-6.4, and S-6.5, reduce the potential impacts by ensuring that adequate emergency infrastructure is implemented in tandem with development and protecting environmental resources from the impacts of this development. Furthermore, emergency infrastructure maintenance and its potential environmental impacts are minimized by adherence to State Fire Regulations, the County Fire Code, and other regulations.

The proposed project would allow for increased population density and land use intensity (commercial development) in Subareas 2, 4, and 6, amounting to a potential increase of 2,013 dwelling units in the Alpine CPA. Additionally, proposed mobility network changes associated with the proposed project would allow roadway re-classifications and re-configurations within the seven subareas and a new roadway in Subarea 5. Both the increase in dwelling units and mobility network changes could require the maintenance or expansion of emergency services infrastructure within the Alpine CPA because of the population increase and mobility changes, and this could result in a negative effect on the environment. The General Plan densities have not yet been fully built out, so the analysis below focuses on what the change to the environment would be when comparing the 4,065 dwelling units currently allowed in the seven subareas by the General Plan to the 6,078 units proposed in the Alpine CPU.

As discussed under Issue 2, a majority of the Alpine CPA is within a WUI area and Very High FHSZ under either state or federal responsibility. Within the Alpine CPU area, all seven subareas are within a Very High FHSZ, while Subarea 6 also contains areas designated as a High FHSZ (approximately 41 percent of the subarea). All seven subareas are entirely within the WUI. To accommodate the growth associated with buildout of the Alpine CPU, it is anticipated that new or expanded infrastructure would be required, such as the extension of roads and utility services.

While most of the subareas are within parts of the Alpine CPA that are currently served by existing infrastructure, Subareas 4 and 5 contain numerous dirt roads and large areas of undeveloped land. Future

development within these subareas would likely require paving of new roads or paving over existing dirt roads and the extension of utilities such as electrical power lines. The construction of new roads and extension of utilities into previously undeveloped areas of the Alpine CPA would increase wildfire risk because most wildfires are started near developed areas and roadways. Clustered development, adoption of Firewise Adapted Community strategies, appropriate project siting, and implementation of CBC 7a building construction techniques would reduce fire risk associated with new development. Additionally, extended road networks would provide better access for emergency services and better connection to evacuation routes. However, future development and associated emergency services infrastructure within these subareas would have the potential to adversely impact the environment.

Future development projects within the Alpine CPA implemented under the proposed project could result in the construction or maintenance of existing emergency services infrastructure. Future discretionary projects would be subject to an environmental review process and federal, state, and local regulations, as applicable, which would minimize adverse environmental impacts such as those that could occur during the expansion of emergency services infrastructure. Future projects would also be expected to conform with the goals and policies of the General Plan. However, the increase in development and associated infrastructure changes could still adversely impact the environment. As such, this impact is **potentially significant**.

Federal, State, and Local Regulations and Existing Regulatory Processes

As identified in Section 2.7.2, *Regulatory Framework*, there are numerous federal, state, and local regulations in place to minimize wildfire risk and pollutant exposure in the County that are also applicable to the proposed project. All projects proposed after the implementation of the Alpine CPU would be required to comply with all applicable regulations pertaining to wildfire.

State Fire Regulations regulate building standards (as also set forth in the CBC), fire protection, and notification systems. Additionally, the County Consolidated Fire Code includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management, and also helps prevent the release of hazardous substances during and following fire hazards.

General Plan Policies LU-6.10, LU-6.11, LU-10.2, LU-12.3, LU-12.4, M-2.3, M-2.5, S-1.3, S-6.4, and S-6.5 ensure adequate emergency service levels and minimize adverse impacts to the environment that may occur as a result of the expansion of these services. The 2011 General Plan EIR mitigation measures MM-Haz-4.1, MM-Haz-4.3, MM-Haz-4.4, MM-Lan-1.2, MM-Pub-1.3 through MM-Pub-1.6, MM-Pub-1.8, MM-Tra-1.4, and MM-Tra-4.3 would also be applicable to emergency services infrastructure expansion and its potential environmental impacts.

Summary

The proposed project increases the permitted densities and land use intensities in addition to expanding and refining the mobility network within the CPA, which may result in the expansion of emergency services infrastructure. Future development projects implemented under the proposed project may also require expanded emergency services infrastructure, which could adversely affect the environment within the Alpine CPA. Future projects would be required to comply with the numerous regulations related to emergency services expansion and the environmental impacts associated with such development, and discretionary permits would be evaluated according to the County's Guidelines for

Determining Significance – Wildland Fire and Fire Protection. Despite these regulations and policies, impacts would be **potentially significant**, and mitigation would be required (**Impact WILD-3**).

2.7.3.4 Issue 4: Expose People or Structures to Significant Risks from Post-Wildfire Hazards

Guidelines for the Determination of Significance Analysis

Based on Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact if it would be located in or near SRAs or lands classified as Very High FHSZ and would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impact Analysis

The 2011 General Plan EIR determined that the 2011 General Plan would result in future development in areas that could expose people or structures to significant risks from post-wildfire hazards, resulting in a significant impact. Impacts related to post-wildfire risks from implementation of the General Plan were not addressed explicitly in the 2011 General Plan because wildfire was not analyzed as a separate section at the time it was adopted. However, Sections 2.7, *Hazards and Hazardous Materials*; 2.8, *Hydrology and Water Quality*; 2.15, *Transportation and Traffic*; and 2.17, *Global Climate Change* of the 2011 General Plan EIR address post-wildfire hazard risk and are hereby incorporated by reference.

Implementation of the 2011 General Plan would have the potential to contribute to potentially significant direct and cumulative impacts associated with expanded or altered emergency services infrastructure. However, several General Plan policies, including LU-6.10, LU-6.11, LU-10.2, M-2.5, COS-5.3, COS-12.1, S-1.3, S-1.4, S-1.5, S-8.1, and S-8.2 reduce the potential impacts by limiting development in areas with steep slopes and limiting development that might result in unstable slopes, landslides, or mudslides. Furthermore, post-wildfire hazard risk is also mitigated by adherence to the County of San Diego Operational Area Emergency Operation Plan, the County Consolidated Fire Code, and other regulations.

According to the U.S. Geological Survey (USGS), fast-moving and highly destructive debris flows triggered by intense rainfall are considered one of the most dangerous post-wildfire hazards. The risk of flooding and debris flows increases substantially after a wildfire due to the loss of vegetation, which leaves previously covered soil exposed during a rainstorm. While several factors contribute to post-fire debris flow, it is generally triggered by one of the following two processes: surface erosion caused by rainfall runoff and landslides caused by rainfall seeping into the ground. These hazards pose a risk to life and property due to their sudden occurrence; extreme force; and ability to strip vegetation, block drainages, and damage infrastructure. The USGS further notes that post-wildfire flooding and runoff may continue for several years in burn areas; however, the greatest risk of debris flow happens during the first post-fire storm season (USGS 2019).

As discussed under Issue 2, approximately 50 percent of the Alpine CPA contains areas with slopes greater than 25 percent. Subareas 4 and 5 are situated in areas with substantial topographical changes, with the Sweetwater River valley bordering Subarea 5 to the south, and contain large swaths of fire-prone vegetation such as chaparral and coastal sage scrub, making them particularly susceptible to post-wildfire hazards such as debris flows, landslides, and slope instability. Additionally, the western portion of Subarea 5 is within the burn area of the West Fire, which burned approximately 505 acres and destroyed 56 structures in 2018. By increasing density in these subareas, the proposed project would both potentially

exacerbate wildfire risk and increase risks to life and property by allowing for new housing units and residents in an area prone to wildfire and susceptible to the aforementioned post-wildfire hazards. Consequently, the proposed project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as result of runoff, post-wildfire slope instability, or drainage changes. It is important to note that, although Subarea 5 increases density within a portion of the subarea, overall density would be decreased.

The proposed project would allow for increased dwelling units in Subareas 2, 4, and 6, amounting to a potential increase of 2,013 dwelling units in the Alpine CPA. Additionally, proposed mobility network changes associated with the proposed project would allow roadway re-classifications and re-configurations within the seven subareas and a new roadway in Subarea 5. Both the increase in dwelling units and mobility network changes could change drainage regimes or contribute to slope instability, inadvertently altering post-wildfire hazard risk within the Alpine CPA, which would be considered a significant impact.

Future development projects within the Alpine CPA implemented under the proposed project could increase post-wildfire hazard risk. Any future development would be subject to an environmental review process and federal, state, and local regulations that minimize post-wildfire hazard risks. Future projects would also be expected to conform with the goals and policies of the General Plan. However, the increase in development and associated infrastructure changes could still adversely impact the environment by increasing post-wildfire hazard risk. As such, this impact is **potentially significant**.

Federal, State, and Local Regulations and Existing Regulatory Processes

As identified in Section 2.7.2, *Regulatory Framework*, there are numerous federal, state, and local regulations in place to minimize post-wildfire hazard risk in the County that are also applicable to the proposed project. All projects proposed after the implementation of the Alpine CPU would be required to comply with all applicable regulations pertaining to wildfire.

The County Consolidated Fire Code provides the minimum requirements for water supply, construction design, and vegetation management, which can reduce the potential for post-wildfire hazards such as landslides and mudslides to occur. Additionally, the Consolidated Fire Code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. The County of San Diego Operational Area Emergency Operation Plan also established protocols for emergency response to multiple hazards, including those which may occur following wildfires.

Furthermore, the County of San Diego Guidelines for Determining Significance – Wildland Fire and Fire Protection (2010) requires a comprehensive analysis of wildfire risk for discretionary projects and may require the preparation of a technical report that analyzes factors such as topography, geology, combustible vegetation (fuel types), and climatic conditions and determines the appropriate fire protection measures including building design features, defensible space, and vegetation management.

General Plan Policies LU-6.10, LU-6.11, LU-10.2, M-2.5, COS-5.3, COS-12.1, S-1.3, S-1.4, S-1.5, S-8.1, and S-8.2 limit new development in areas with unstable soil, which may be particularly susceptible to post-wildfire hazard, and otherwise reduce risk of post-wildfire hazards. The 2011 General Plan EIR mitigation measures MM-Haz-4.4, MM-Hyd-3.1, MM-Hyd-3.2, MM-Hyd-3.3, MM-Hyd-6.1, MM-Tra-4.3, and MM-CC-1.12 would also be applicable to post-wildfire hazard risk.

Summary

The proposed project increases the permitted densities and expands the mobility network within the CPA, which may result in the increase of post-wildfire hazard risk. Future development projects implemented under the proposed project may also impact post-wildfire hazard risk. Future projects would be required to comply with the numerous regulations related to post-wildfire hazard risk, and discretionary permits would be evaluated according to the County's Guidelines for Determining Significance – Wildland Fire and Fire Protection. Despite these regulations and policies, impacts would be **potentially significant**, and mitigation would be required (**Impact WILD-4**).

2.7.4 Cumulative Impacts Analysis

Because of the transitory nature of wildfires, which can burn across multiple landscapes if suitable fuel is present, the geographic scope of the cumulative impact analysis for wildfire risk includes the Alpine CPA and the communities that surround Alpine, including Crest/Dehesa, Lakeside, Cuyamaca, Descanso, Pine Valley, and Jamul/Dulzura. It would also include the Viejas Reservation, which is within the Alpine CPA but is not within the jurisdiction of the County. Portions of these surrounding communities are also located in Very High FHSZs and may also be affected by the land use designation changes.

2.7.4.1 *Issue 1: Adopted Emergency Response Plan or Emergency Evacuation Plan*

A cumulative impact would occur on adopted emergency response or evacuation plans if future development associated with the cumulative projected growth would substantially impair an adopted emergency response or evacuation plan for wildfire or other natural disasters. Future population growth and changes to the mobility network could result in any of the following: (1) an increase in population that is induced from future development projects that are unaccounted for in existing emergency plans, (2) an increase in population that emergency response teams are unable to service adequately in the event of a disaster, or (3) evacuation route impairment if multiple development projects concurrently block multiple evacuation or access roads.

It would be considered a cumulative impact if future development in the neighboring communities and tribal lands were to similarly impair adopted emergency response or evacuation plans within the Alpine CPA. For example, if a wildfire were to spread from one of these communities into the Alpine CPA, this could strain Alpine's emergency response resources and personnel. Alternatively, if neighboring communities' emergency services and evacuation routes were to become overwhelmed by a wildfire or other hazard within those communities, Alpine's emergency resources and personnel could be impacted by hazards or evacuees that may not have been accounted for in the adopted emergency response and evacuation plans. Emergency response and evacuation would be particularly affected if cumulative growth and development would increase density in areas designated as a Very High FHSZ and/or WUI, as large, multi-jurisdictional wildfires would hinder the ability of fire and emergency personnel to respond and residents to evacuate.

Due to the substantial amount of growth and development that could occur at buildout of the Alpine CPU, there may not be sufficient infrastructure to provide adequate emergency response during wildfires. Although the Alpine CPU includes a new roadway in Subarea 5 that would help provide additional points of ingress and egress that could be used for emergency response and evacuation during a wildfire, given the unpredictable and transitory nature of wildfires, it cannot be guaranteed that adequate emergency response and evacuation would be available during a wildfire. The Alpine Fire Safe Council institutes a

Greater Alpine Community Wildfire Protection Plan and shares educational resources about fuelbreaks and defensible space programs on their website, which could reduce the likelihood that new development will impair an emergency response or evacuation plan; however, the increase in development could still pose a risk to such plans. Therefore, future development associated with the Alpine CPU, when combined with the cumulative growth and development in adjacent and surrounding communities, including tribal, state, and federal lands, would have the potential to substantially impair an adopted emergency response plan or emergency evacuation plan related to wildfire.

As described in Section 2.7.3.1, the proposed project would increase density beyond what was anticipated in the 2011 General Plan and make changes to the mobility network, potentially resulting in growth and a mobility network that were not previously anticipated in existing emergency response and evacuation plans. Although the cumulative projected growth and development must comply with existing regulations and policies, emergency response and evacuation plans within the Alpine CPA could still be substantially impaired, which would be considered a significant impact. Therefore, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a **potentially significant cumulative impact** of the proposed project (**Impact-C-WILD-1**).

2.7.4.2 Issue 2: Expose Receptors to Pollutants from Wildfire

A cumulative impact would occur if future development associated with cumulative projected growth within the Alpine CPA would increase wildfire risk and pollutant exposure within the Alpine CPA and neighboring communities. Increased population densities in areas of Very High FHSZ and/or WUI, which are prevalent in the Alpine CPA, could increase wildfire risk. The steep topography in portions of the Alpine CPA and neighboring communities exacerbates this risk and could lead to the rapid spread of wildfire beyond the boundaries of the Alpine CPA. Furthermore, particulate matter from the smoke associated with such wildfires can spread prolifically and have harmful consequences for short-term and long-term health of individuals nearby and in neighboring communities.

Conversely, communities adjacent to and surrounding the Alpine CPA would have the potential to exacerbate wildfire risk within the Alpine CPA by increasing the number of future residents in areas prone to wildfire. The risk would be potentially increased if this growth and development occurs in areas with steep topography and/or prevailing winds as these conditions contribute to the spread of wildfires and make it more difficult to contain wildfires. If increased development in neighboring communities resulted in a wildfire that spread to the Alpine CPA or the dissemination of airborne particulate matter and other pollutants into the Alpine CPA, this would also be considered a cumulative impact.

As described in Section 2.7.3.2, the proposed project would result in land use changes that would facilitate future, higher-density development in areas designated as a Very High FHSZ and/or WUI, including areas with steep topography and/or prevailing, down-canyon winds. Future development within these areas associated with the Alpine CPU would have the potential to exacerbate wildfire risk which, when combined with the cumulative growth and development in adjacent and surrounding communities, including tribal, state, and federal lands, could expose future residents to pollutant concentrations from wildfire or the uncontrolled spread of wildfire. Although the cumulative projected growth and development must comply with existing regulations and policies, wildfire risk and exposure to pollutants within the Alpine CPA could still be substantial, which would be considered a significant impact. Therefore, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a **potentially significant cumulative impact** of the proposed project (**Impact-C-WILD-2**).

2.7.4.3 Issue 3: Exacerbate Wildfire Risk from Infrastructure

Cumulative growth and development in the communities adjacent to and surrounding the Alpine CPA, including tribal, state, and federal lands, within areas designated as a Very High FHSZ and/or WUI would have the potential to exacerbate wildfire risk by increasing the number of future residents in areas prone to wildfire. Due to the generally rural nature of these communities, it is anticipated that new or expanded infrastructure would be required to accommodate new growth. Infrastructure improvements would likely include the paving of new roads and the extension of utility services such as electrical power lines. Electrical power lines are required to be undergrounded; however, Board of Supervisor's Policy I-92 provides criteria to waive the requirement within the unincorporated County (County of San Diego 2019). This policy allows the complete or partial undergrounding of utilities to be waived when undergrounding of utilities would be impossible or impractical. These improvements would likely increase the chance of wildfires within neighboring communities and the Alpine CPA. Providing new and/or improved roads would allow greater access to previously inaccessible, less developed areas, while providing new electrical services would increase the possibility of downed power lines during Santa Ana weather events.

A cumulative impact would occur if future development associated with cumulative projected growth within the Alpine CPA would result in the expansion or development of emergency services infrastructure, which could adversely impact the environment. The proposed project would result in land use changes that would facilitate future high-density development in areas designated as a Very High FHSZ and/or WUI, which would require new or expanded infrastructure in the less developed subareas (i.e., Subareas 4 and 5). Future development and the installation of associated infrastructure within these subareas, when combined with the cumulative growth and development in adjacent and surrounding communities, including tribal, state, and federal lands, would exacerbate wildfire risk and could result in adverse environmental impacts within the Alpine CPA and neighboring communities.

As described in Section 2.7.3.3, the proposed project would result in land use and mobility network changes, which could require the expansion or development of emergency services infrastructure. This could result in adverse environmental impacts. Although the cumulative projected growth and development must comply with existing regulations and policies, wildfire risk and the environment could potentially be adversely impacted by expanded emergency services infrastructure. Therefore, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a **potentially significant cumulative impact** of the proposed project (**Impact-C-WILD-3**).

2.7.4.4 Issue 4: Expose People or Structures to Significant Risks from Post-Wildfire Hazards

A cumulative impact would occur if future development associated with cumulative projected growth within the Alpine CPA would expose people or structures to significant risks from post-wildfire hazards within the Alpine CPA or neighboring communities. A majority of the Alpine CPA (approximately 50 percent) contains areas with slopes greater than 25 percent, including areas with proposed land use changes, and contains fire-prone vegetation. Subareas 4 and 5 are situated in areas with substantial topographical changes, with the Sweetwater River valley bordering Subarea 5 to the south, and they contain large swaths of fire-prone vegetation such as chaparral and coastal sage scrub, making them particularly susceptible to post-fire hazards such as debris flows, landslides, and slope instability. Additionally, the western portion of Subarea 5 is within the burn area of the West Fire, which burned approximately 504 acres and destroyed 56 structures in 2018. By increasing density in these subareas, the proposed project would both potentially exacerbate wildfire risk and increase risks to life and

property by placing a substantial number of new housing units and residents in an area prone to wildfire and susceptible to post-fire hazards. Future development within these areas, when combined with the cumulative growth and development in adjacent and surrounding communities, including tribal, state, and federal lands, would exacerbate wildfire risk and associated post-fire hazards within the Alpine CPA and neighboring communities.

The most common and destructive post-wildfire hazards include downslope or downstream flooding, landslides, and debris flows, which typically result from runoff, post-fire slope instability, and/or drainage changes. These hazards pose a risk to life and property due to their sudden occurrence; extreme force; and ability to strip vegetation, block drainages, and damage infrastructure. Future growth and development in the communities adjacent to and surrounding the Alpine CPA within areas designated as a Very High FHSZ and/or WUI would have the potential to exacerbate wildfire risk by increasing the number of future residents in areas prone to wildfire and post-wildfire hazards. In the event of a large wildfire that burns over areas of steep slopes, downslope residents would be particularly susceptible to post-wildfire hazards. Because cumulative growth and development within the communities adjacent to and surrounding the Alpine CPA, including tribal, state, and federal lands, would have the potential to exacerbate wildfire risk within the Alpine CPA, cumulative impacts associated with exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as result of runoff, post-fire slope instability, or drainage changes would be significant.

As described in Section 2.7.3.4, the land use designation and mobility network changes within the proposed project would have the potential to expose people or structures to significant risks of post-wildfire hazards. Although the cumulative projected growth and development must comply with existing regulations and policies, post-wildfire hazard risk could potentially be adversely impacted. Therefore, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a **potentially significant cumulative impact** of the proposed project (**Impact-C-WILD-4**).

2.7.5 Significance of Impacts Prior to Mitigation

The proposed project and the cumulative effects of the proposed project in conjunction with subsequent projects would result in potentially significant direct and cumulative impacts to wildfire risk.

Impact-WILD-1: Substantially Impair an Adopted Emergency Response or Evacuation Plans. There is the potential that emergency response and evacuation would be insufficient during wildfires due to the substantial potential growth that could occur under the Alpine CPU. Consequently, this growth could substantially impair existing emergency response and evacuation plans, potentially increasing the risk to loss of life and property in the event of a wildfire. This would be considered a significant impact.

Impact-WILD-2: Expose Receptors to Pollutants from Wildfire. Future development associated with the Alpine CPU would have the potential to exacerbate wildfire risk by introducing a substantial number of new residents to less developed areas of the community, who in turn could be exposed to pollutant concentrations in the event of a wildfire. This would be considered a significant impact.

Impact-WILD-3: Exacerbate Wildfire Risk from New Infrastructure. Future development associated with the Alpine CPU within the less developed subareas would likely require paving of new roads to improve emergency services and evacuation access or paving over existing dirt roads and the extension of utilities such as electrical power lines. Areas of increased density and land use intensity are located within the village boundary (Subareas 2 and 6), directly south of a new fire station, and an area adjacent to the current primary evacuation route (Subarea 4). However, most wildfires are started near developed

areas and roads, so future development and associated infrastructure within these areas would have the potential to exacerbate wildfire risk, which would be a potentially significant impact.

Impact-WILD-4: Expose People or Structures to Significant Risks from Post-Wildfire Hazards. The proposed project would both potentially exacerbate wildfire risk and increase risks to life and property by placing a substantial number of new housing units and residents in an area prone to wildfire and susceptible to post-fire hazards. Consequently, the proposed project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as result of runoff, post-fire slope instability, or drainage changes. This would be considered a significant impact.

Impact-C-WILD-1: Result in a Cumulatively Considerable Contribution to the Impairment of an Adopted Emergency Response or Evacuation Plans. The proposed project would cause a greater impact related to the impairment of Adopted Emergency Response or Evacuation Plans compared to existing conditions and the impact identified in the 2011 General Plan EIR. Therefore, the proposed project's contribution to this impact would be cumulatively considerable.

Impact-C-WILD-2: Result in a Cumulatively Considerable Contribution to the Exposure of Receptors to Pollutants from Wildfire. The proposed project would cause a greater impact related to the exposure of receptors to pollutants from wildfire compared to existing conditions and the impacts identified in the 2011 General Plan EIR. Therefore, the proposed project's contribution to this impact would be cumulatively considerable.

Impact-C-WILD-3: Result in a Cumulatively Considerable Contribution the Exacerbation of Wildfire Risk from New Infrastructure. The proposed project would cause a greater impact related to the exacerbation of wildfire risk from new infrastructure compared to existing conditions and the impacts identified in the 2011 General Plan EIR. Therefore, the proposed project's contribution to this impact would be cumulatively considerable.

Impact-C-WILD-4: Result in a Cumulatively Considerable Contribution to On- or Off-site Flooding. The proposed project would cause a greater impact related to the exposure of receptors to pollutants from wildfire compared to existing conditions and the impacts identified in the 2011 General Plan EIR. Therefore, the proposed project's contribution to this impact would be cumulatively considerable.

2.7.6 Mitigation

2.7.6.1 Issue 1: Adopted Emergency Response Plan or Emergency Evacuation Plan

The following 2011 General Plan EIR and Alpine CPU specific mitigation measures would reduce **Impact-WILD-1** and **Impact-C-WILD-1**, impair adopted emergency response plan or evacuation plan, but not to below a significant level. Therefore, these impacts would be **significant and unavoidable**.

2011 General Plan EIR Mitigation Measures

The following 2011 General Plan EIR mitigation measures are being carried forward and shall apply to the proposed project: MM-Haz-3.1 through MM-Haz-3.3, MM-Haz-4.4, MM-Pub-1.5, and MM-Tra-4.1 through MM-Tra-4.3 (see Appendix B, General Plan EIR Mitigation Measures). Implementation of these mitigation measures would reduce the proposed project's impacts on emergency response and evacuation plans.

Alpine Community Plan Update Mitigation Measures

MM-WILD-1: As a part of the discretionary review of subsequent projects proposed under the Alpine CPU, County staff shall review proposed projects to determine if subsequent projects are located within a High or Very High FHSZ. Subsequent projects within these zones would be required to prepare an Fire Protection Plan that is subject to the review and approval of the Alpine Fire Protection District and the San Diego County Fire Authority. Prior to preparation of an FPP, subsequent projects shall coordinate with appropriate fire agencies to ensure that modeling of the FPP and design of the project is appropriate to meet the Fire Adapted Communities Strategy. The FPP shall assess a project's compliance with current regulatory codes and ensure that impacts resulting from wildland fire hazards have been adequately mitigated. The FPP shall identify evacuation routes within the vicinity of the project site and those routes shall not impair the ability of surrounding development to evacuate. Prepared FPPs for projects within 1 mile of the CNF, shall be provided to CNF for review.

MM-WILD-2: As a part of the discretionary review of subsequent projects that have an occupancy of 200 or more people, proposed under the Alpine CPU, an Evacuation Plan would be required. The Evacuation Plan shall be consistent with the community-wide evacuation plans that are part of the Alpine Community Wildfire Protection Plan that has been prepared by the Alpine Fire Safe Council. Evacuation Plans shall include analysis regarding the evacuation capabilities, improving on- and off-site roadways, and any improvements necessary to handle the egress and ingress during an evacuation.

MM-WILD-3: As a part of the discretionary review of subsequent projects proposed under the Alpine CPU, identify the adequacy of the access and evacuation routes relative to the degree of development or use (including but not limited to road width, road type, length of dead-end roads, and turnouts). If the routes are determined to be inadequate as part of this review, the Fire Authority Having Jurisdiction (FAHJ) will identify the required improvements to be made.

No other feasible mitigation measures are available.

2.7.6.2 Issue 2: Expose Receptors to Pollutants from Wildfire

The following 2011 General Plan EIR and Alpine CPU specific mitigation measures would reduce **Impact-WILD-2** and **Impact-C-WILD-2**, exposure to pollutants from wildfire, but not below a level of significance. Therefore, these impacts would be **significant and unavoidable**.

Infeasible Mitigation Measures

- The following measures were considered in attempting to reduce impacts associated with exposing receptors to pollutants from wildfire to below a level of significance. However, the County has determined that these measures would be infeasible and therefore these mitigation measures would not be implemented.
- Require development guidelines to be prepared and incorporated into the Alpine Community Plan that would limit the amount of future development in order to reduce hazards associated with wildland fires.

Explanation: This measure would be infeasible because restrictions on the type or amount of development within the Alpine community would conflict with areas identified for increased growth under the Alpine CPU. In addition, the measure would also conflict with goals of the

General Plan Housing Element to provide sufficient housing stock and accommodate a reasonable share of regional growth.

- Substantially reduce planned densities in areas of concern.

Explanation: This measure would be infeasible because the majority of Alpine CPU is located in areas of concern for wildland fires. Implementation of this mitigation measure would result in significant growth restrictions in areas identified for increased growth for the proposed project. In addition, this measure would conflict with goals of the General Plan Housing Element to provide sufficient housing stock and accommodate a reasonable share of regional growth.

- Approve only development that is located in SRAs that are considered to have a moderate fire hazard.

Explanation: This measure would be infeasible because the Alpine CPU is classified as having a higher than moderate risk for wildland fires under SRAs. Implementation of this mitigation measure would result in significant growth restrictions in areas identified for increased growth in the Alpine CPU. In addition, this measure would conflict with goals of the General Plan Housing Element to provide sufficient housing stock and accommodate a reasonable share of regional growth.

- Require extensive fuel modification around existing and future development in wildland areas.

Explanation: This measure would be infeasible because it would substantially impact the environment by damaging biological resources, altering drainage patterns, causing erosion, and modifying the visual landscape. This would conflict with the objective to encourage development in a manner that sustains the natural setting and qualities that distinguish Alpine while allowing for growth.

2011 General Plan EIR Mitigation Measures

The following 2011 General Plan EIR mitigation measures are being carried forward and shall apply to the proposed project: MM-Haz-4.1, MM-Haz-4.3, MM-Haz-4.4, MM-Hyd-3.2, MM-Pub-1.4, MM-Pub-1.7, MM-Tra-4.3, and MM-CC-1.12 (see Appendix B, General Plan EIR Mitigation Measures). Implementation of these mitigation measures would reduce the proposed project's potential to expose receptors to pollutants from wildfire.

Alpine Community Plan Update Mitigation Measures

Alpine-specific mitigation measures MM-WILD-1, MM-WILD-2, and MM-WILD-3 described above in Section 2.7.6.1, would further reduce the proposed project's potential to expose receptors to pollutants from wildfire.

No other feasible mitigation measures are available.

2.7.6.3 Issue 3: Exacerbate Wildfire Risk from Infrastructure

The following 2011 General Plan EIR and Alpine CPU specific mitigation measures would reduce **Impact-WILD-3** and **Impact-C-WILD-3**, exacerbate wildfire risk from infrastructure, but not below a level of significance. Therefore, these impacts would be **significant and unavoidable**.

Infeasible Mitigation Measures

- The infeasible mitigation measures identified above under Section 2.7.6.2 would apply. They were considered in attempting to reduce impacts associated to exacerbating wildfire risk from infrastructure to below a level of significance. However, the County has determined that these measures would be infeasible and therefore these mitigation measures would not be implemented.

2011 General Plan EIR Mitigation Measures

The following 2011 General Plan EIR mitigation measures are being carried forward and shall apply to the proposed project: MM-Haz-4.1, MM-Haz-4.3, MM-Haz-4.4, MM-Lan-1.2, MM-Pub-1.3 through MM-Pub-1.6, MM-Pub-1.8, MM-Tra-1.4, and MM-Tra-4.3 (see Appendix B, General Plan EIR Mitigation Measures). Implementation of these mitigation measures would reduce the proposed project's potential to exacerbate wildfire risk from infrastructure.

Alpine Community Plan Update Mitigation Measures

Alpine-specific mitigation measures MM-WILD-1, MM-WILD-2, and MM-WILD-3, described above in Section 2.7.6.1, would further reduce the proposed project's potential to exacerbate wildfire risk from expanded infrastructure.

No other feasible mitigation measures are available.

2.7.6.4 Issue 4: Expose People or Structures to Significant Risks from Post-Wildfire Hazards

The following 2011 General Plan EIR and Alpine CPU specific mitigation measures would reduce **Impact-WILD-4** and **Impact-C-WILD-4**, exposure to post-wildfire hazards, but not below a level of significance. Therefore, these impacts would be **significant and unavoidable**.

Infeasible Mitigation Measures

- The infeasible mitigation measures identified above under Section 2.7.6.2 would apply. They were considered in attempting to reduce impacts associated with exposing people or structures to significant risks from post-wildfire hazards to below a level of significance. However, the County has determined that these measures would be infeasible and therefore these mitigation measures would not be implemented.

2011 General Plan EIR Mitigation Measures

The following 2011 General Plan EIR mitigation measures are being carried forward and shall apply to the proposed project: MM-Haz-4.4, MM-Hyd-3.1, MM-Hyd-3.2, MM-Hyd-3.3, MM-Hyd-6.1, MM-Tra-4.3, and MM-CC-1.12 (see Appendix B, General Plan EIR Mitigation Measures). Implementation of these mitigation measures would reduce the proposed project's potential to expose people or structures to significant risk of post-wildfire hazards.

Alpine Community Plan Update Mitigation Measures

Alpine-specific mitigation measures MM-WILD-1, MM-WILD-2, and MM-WILD-3, described above in Section 2.7.6.1, would further reduce the proposed project's potential to expose people or structures to significant risk of post-wildfire hazards.

No other feasible mitigation measures are available.

2.7.7 Conclusion

2.7.7.1 Issue 1: Adopted Emergency Response Plan or Emergency Evacuation Plan

The proposed project would re-designate existing land uses within four of seven subareas in the Alpine CPA, potentially resulting in an increase in density and associated housing units at buildout. Because the proposed project consists of an update to the existing Alpine Community Plan, the growth associated with the Alpine CPU is not accounted for in current emergency response planning documents. Given the unpredictable and transitory nature of wildfires, which can burn across multiple landscapes if suitable fuel is present, it cannot be guaranteed that adequate emergency response and evacuation would be available during a wildfire. As a result, there is a potential that emergency response and evacuation would be insufficient during wildfires due to the substantial potential growth that could occur in these areas. Therefore, implementation of the proposed project could substantially impair existing emergency response and evacuation plans, potentially increasing the risk to loss of life and property in the event of a wildfire. This would be considered a significant impact (**Impact-WILD-1**). The proposed project in conjunction with subsequent projects could also result in a potentially significant cumulative impact (**Impact-C-WILD-1**). Implementation of the adopted General Plan policies identified in Section 2.7.2.1; 2011 General Plan EIR mitigation measures identified in Section 2.7.6.2; and Alpine CPU mitigation measures **MM-WILD-1, MM-WILD-2, and MM-WILD-3** identified in Section 2.7.6.1 would reduce **Impact-WILD-1** and **Impact-C-WILD-1**, but not below a level of significance for the reasons described in those sections. Therefore, these impacts would be **significant and unavoidable** and **cumulatively considerable**.

2.7.7.2 Issue 2: Expose Receptors to Pollutants from Wildfire

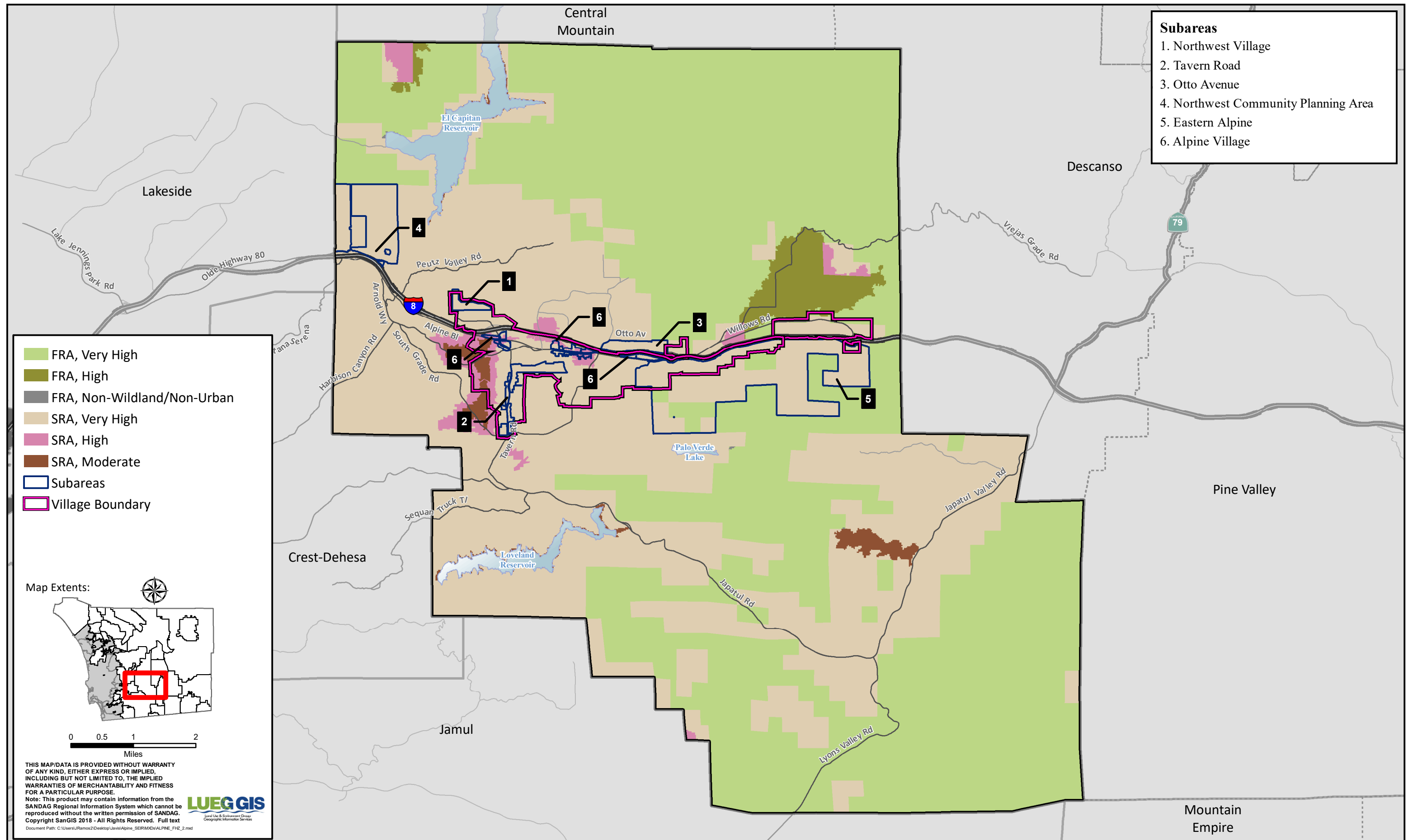
The proposed project would change density within four of seven subareas, including areas designated as a Very High FHSZ and/or WUI. The majority of the Alpine CPA (approximately 50 percent) contains areas with slopes greater than 25 percent. As such, future development within these areas would have the potential to exacerbate wildfire risk by introducing a substantial number of new residents, who in turn could be exposed to pollutant concentrations such as particulate matter in the event of a wildfire. This would be considered a potentially significant impact (**Impact-WILD-2**). When combined with the cumulative growth and development in adjacent and surrounding communities, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a potentially significant cumulative impact (**Impact-C-WILD-2**). Implementation of the adopted General Plan policies identified in Section 2.7.2.1, 2011 General Plan EIR mitigation measures identified in Section 2.7.6.2, and Alpine CPU mitigation measures **MM-WILD-1, MM-WILD-2, and MM-WILD-3** would reduce **Impact-WILD-2** and **Impact-C-WILD-2**, but not below a level of significance for the reasons described in those sections. Therefore, these impacts would be **significant and unavoidable** and **cumulatively considerable**.

2.7.7.3 Issue 3: Exacerbate Wildfire Risk from New Infrastructure

To accommodate the growth associated with buildout of the Alpine CPU, it is anticipated that new or expanded infrastructure would be required, such as the extension of roads and utility services. The construction of new roads and extension of utilities into previously undeveloped areas would increase wildfire risk because most wildfires are started near developed areas and roadways. As such, future development and associated infrastructure within these subareas would have the potential to exacerbate wildfire risk, which would be considered a potentially significant impact (**Impact-WILD-3**). When combined with cumulative growth and development in adjacent and surrounding communities, the proposed project's contribution to this impact would be cumulatively considerable and would be considered a potentially significant cumulative impact (**Impact-C-WILD-3**). Implementation of the adopted General Plan policies identified in Section 2.7.2.1, 2011; General Plan EIR mitigation measures identified in Section 2.7.6.3; and Alpine CPU mitigation measures **MM-WILD-1, MM-WILD-2, and MM-WILD-3** would reduce **Impact-WILD-3** and **Impact-C-WILD-3**, but not below a level of significance for the reasons described in those sections. Therefore, these impacts would be **significant and unavoidable** and **cumulatively considerable**.

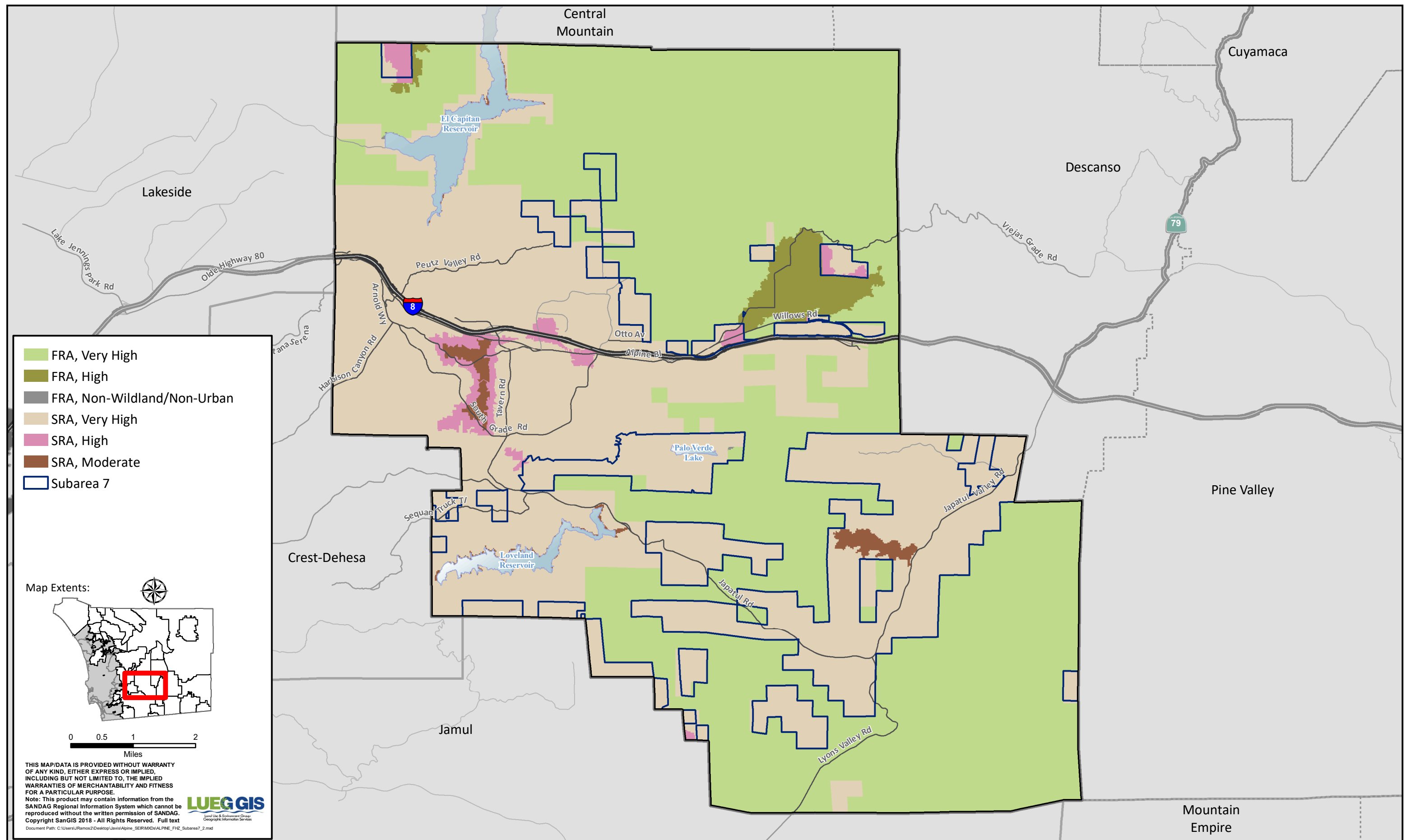
2.7.7.4 Issue 4: Expose People or Structures to Significant Risks from Post-Wildfire Risks

A majority of the Alpine CPA (approximately 50 percent) contains areas with slopes greater than 25 percent, including areas with proposed land use changes, and contains fire-prone vegetation such as chaparral and coastal sage scrub. By increasing density in these areas, the proposed project would both potentially exacerbate wildfire risk and increase risks to life and property by placing a substantial number of new housing units and residents in an area prone to wildfire and susceptible to post-fire hazards. This would be considered a potentially significant impact (**Impact-WILD-4**). When combined with the cumulative growth and development in adjacent and surrounding communities, the proposed project's contribution to this impact would be cumulatively considerable and would result in a potentially significant cumulative impact (**Impact-C-WILD-4**). Implementation of the adopted General Plan policies identified in Section 2.7.2.1; 2011 General Plan EIR mitigation measures identified in Section 2.7.6.4; and Alpine CPU mitigation measures **MM-WILD-1, MM-WILD-2, and MM-WILD-3** would reduce **Impact-WILD-4** and **Impact-C-WILD-4**, but not below a level of significance for the reasons described in those sections. Therefore, these impacts would be **significant and unavoidable** and **cumulatively considerable**.



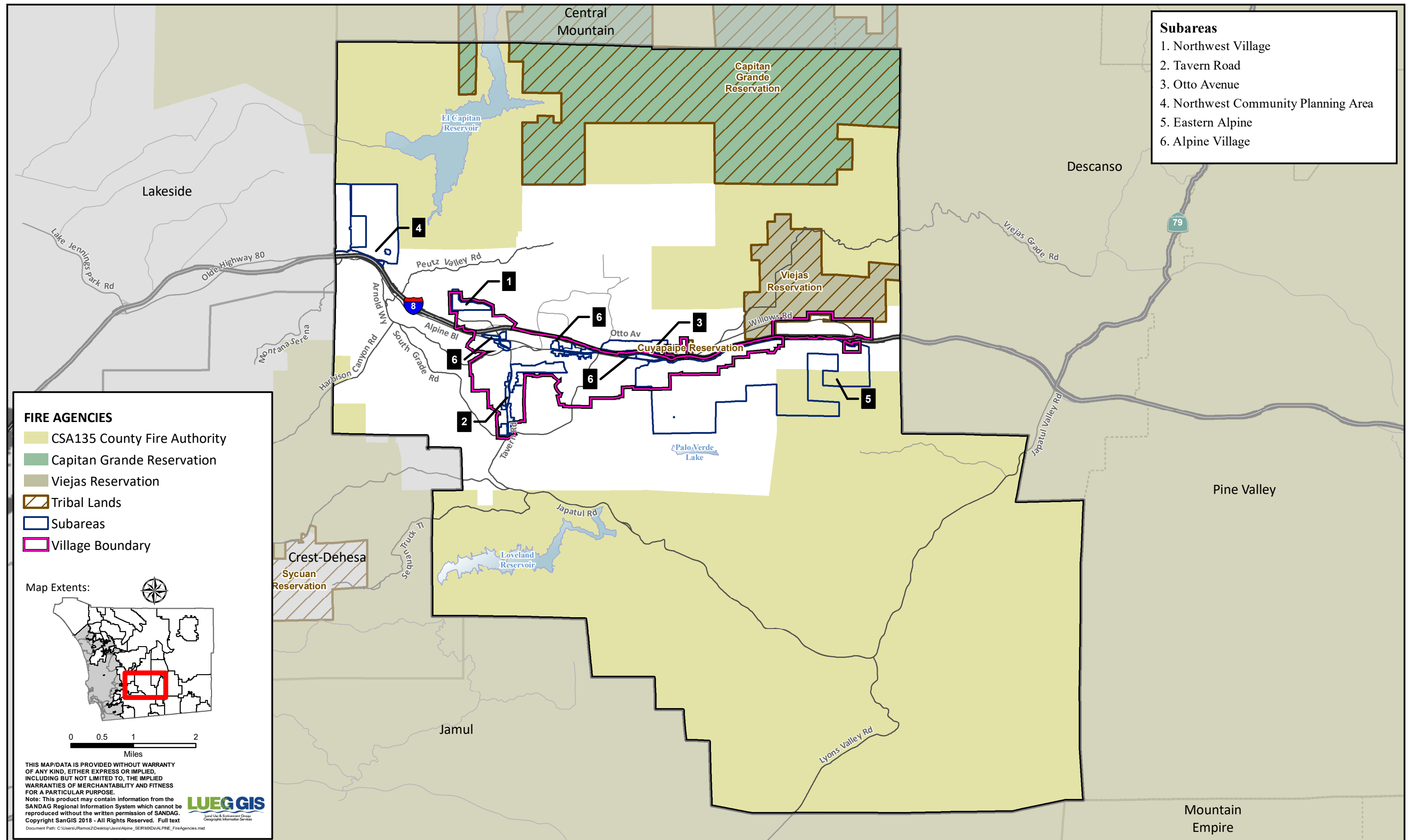
Source: SanGIS, County of San Diego, 2019

Figure 2.7-1a
Alpine Community Plan Area
Fire Hazard Severity Zones
Subareas 1-6



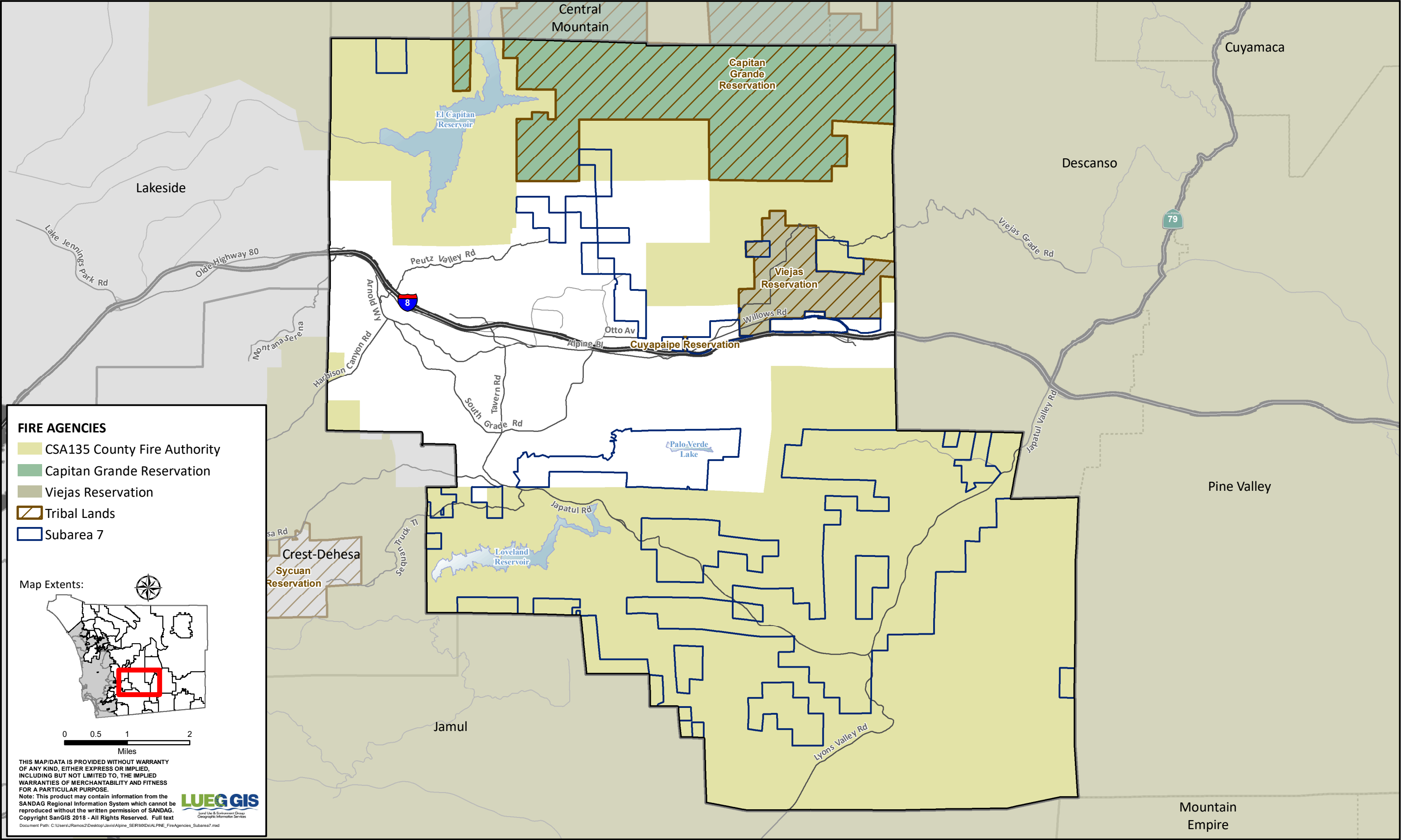
Source: SanGIS, County of San Diego, 2019

Figure 2.7-1b
Alpine Community Plan Area
Fire Hazard Severity Zones
Subarea 7



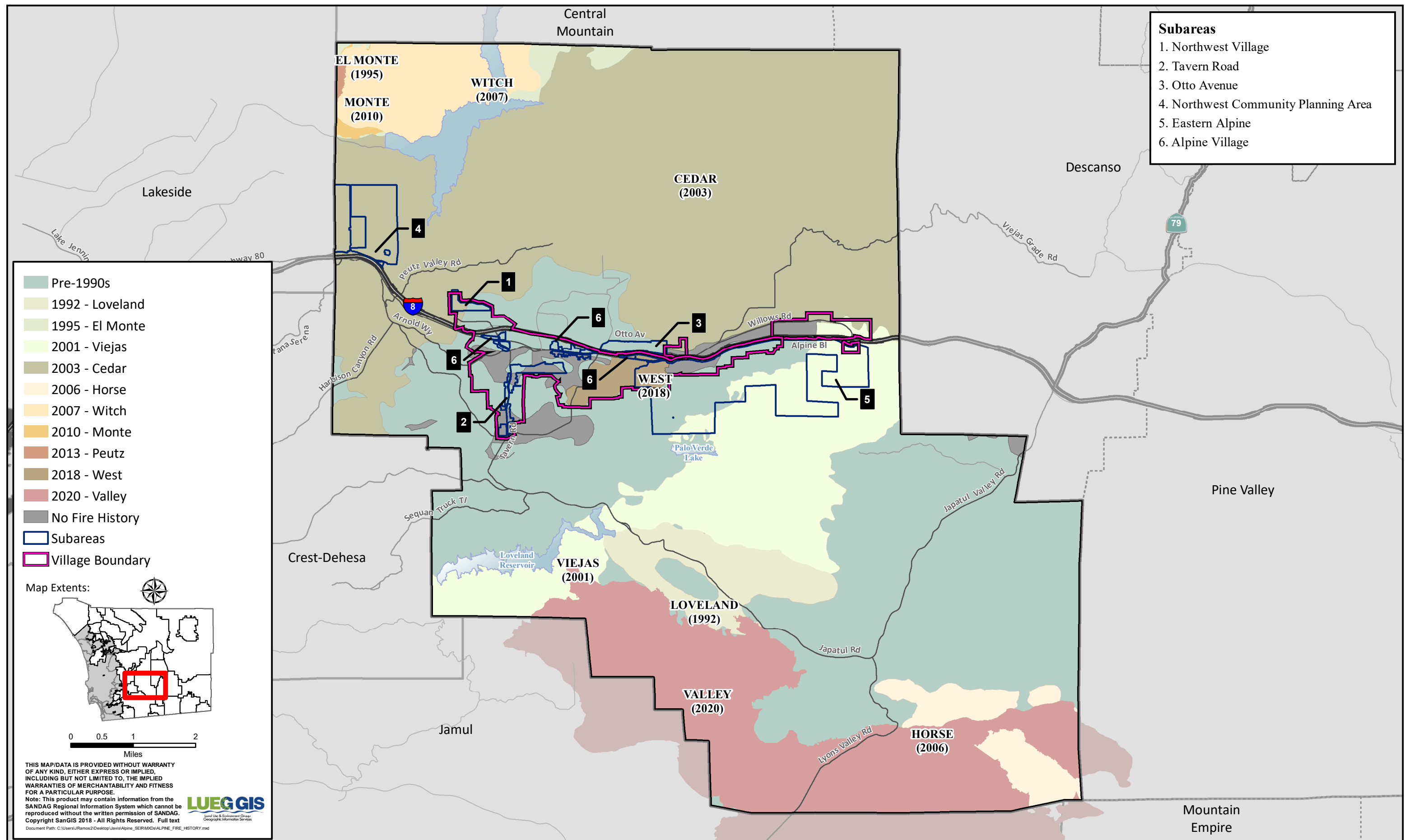
Source: SanGIS, County of San Diego, 2020

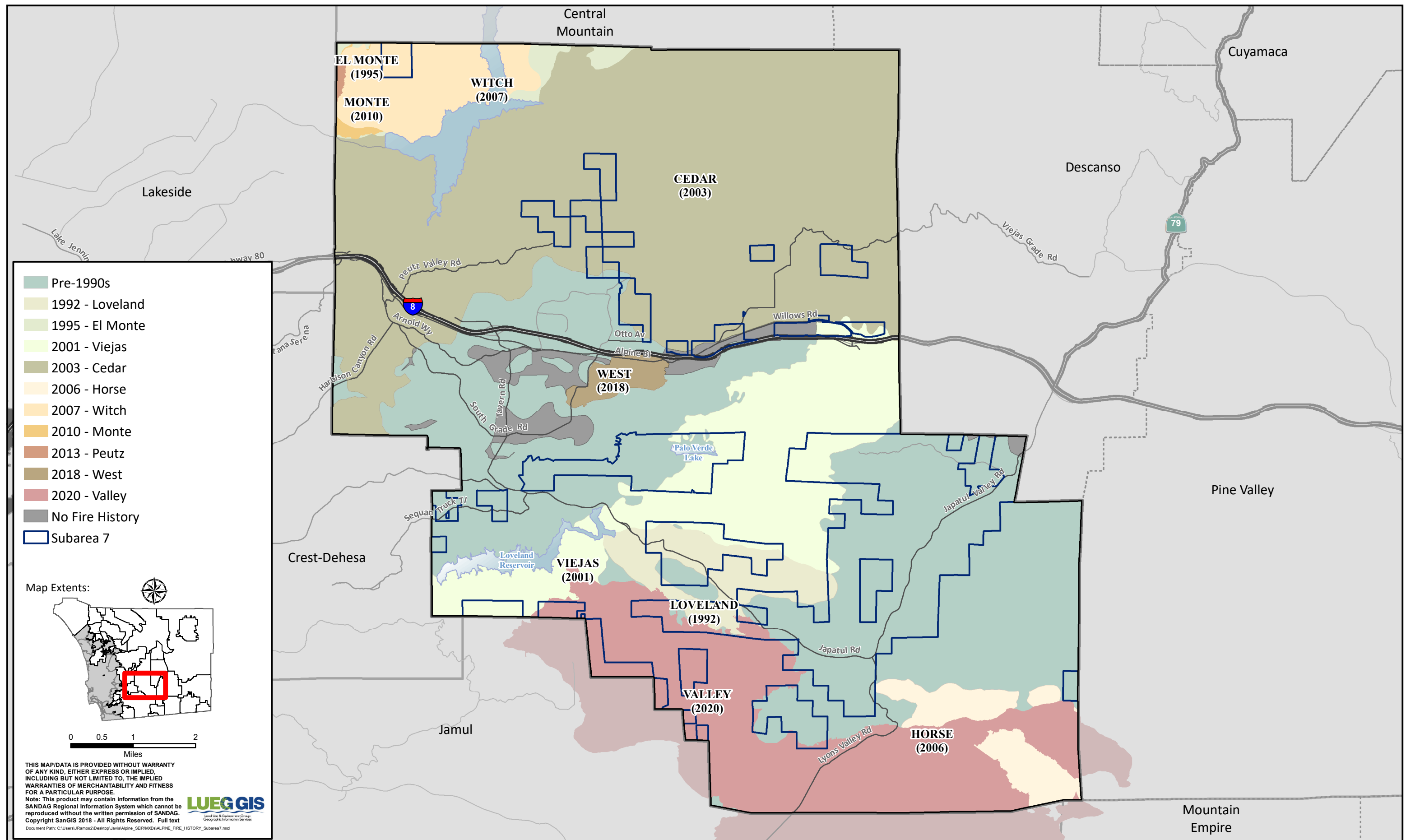
Figure 2.7-2a
Alpine Community Plan
Fire Agency Jurisdictions
Subareas 1-6



Source: SanGIS, County of San Diego, 2020

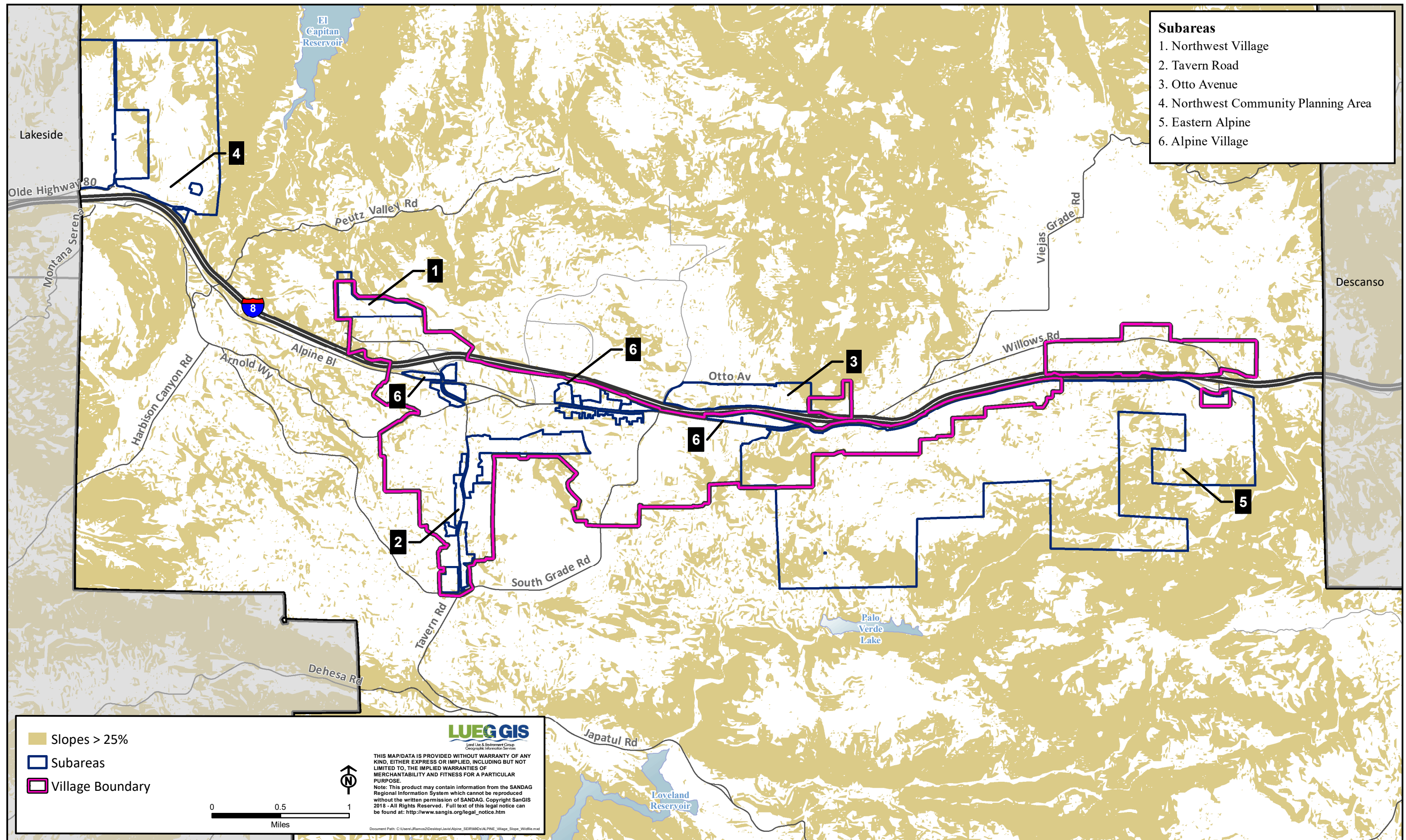
Figure 2.7-2b
Alpine Community Plan
Fire Agency Jurisdictions
Subarea 7





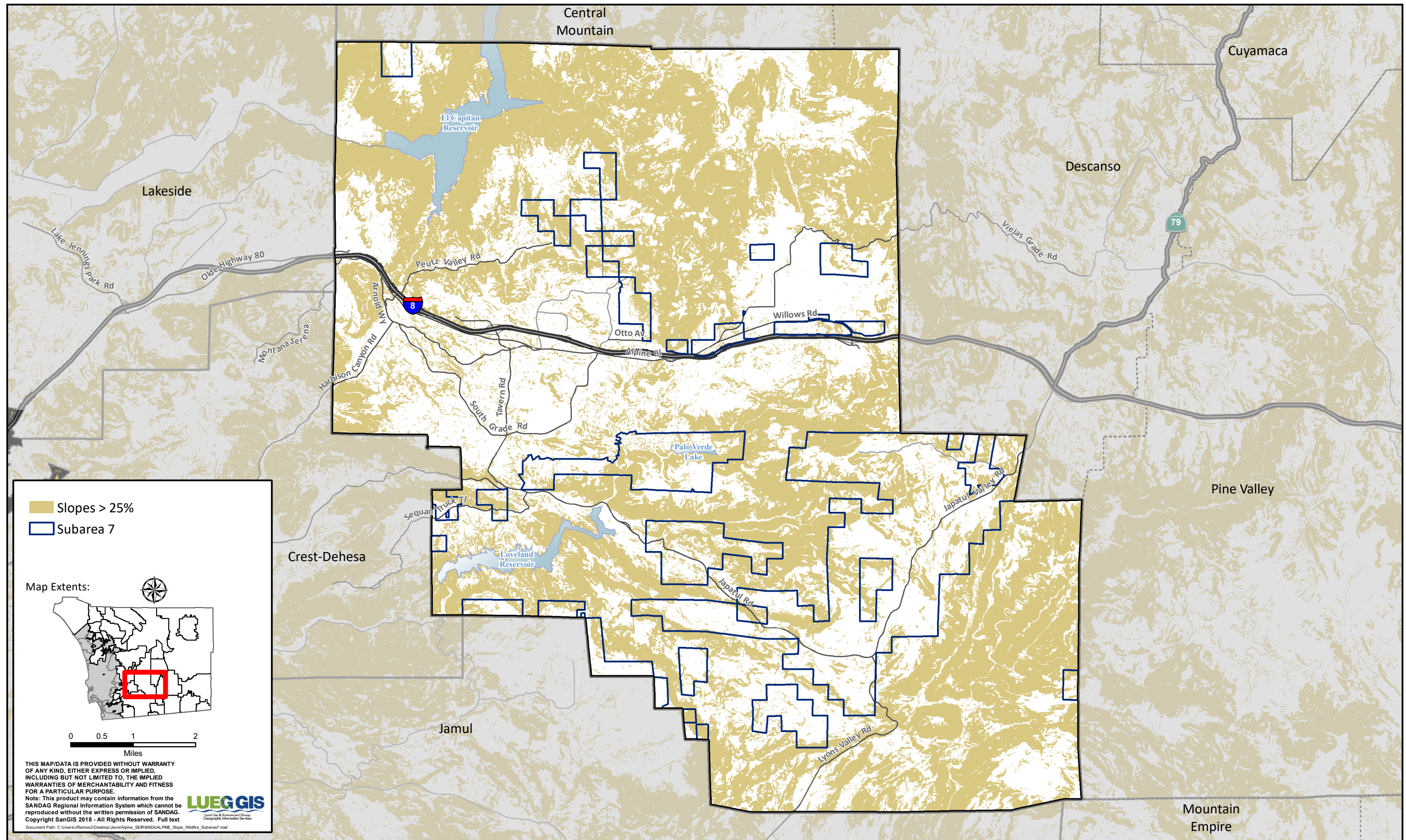
Source: SanGIS, County of San Diego, 2020

Figure 2.7-3b
Historic Fires
Subarea 7



Source: SanGIS, County of San Diego, 2020

Figure 2.7-5a
Slopes Greater Than 25%
Subareas 1-6



Source: SanGIS, County of San Diego, 2020

Figure 2.7-5b
Slopes Greater Than 25%
Subarea 7

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