# 2025 CAL FIRE Santa Clara Unit Fire Plan









Marcus Hernandez, Unit Chief



# **PLAN AMENDMENTS**

Section Updated	Description	Ву
2024 Ignition Statistics	2024 Ignition Data	J. Reynolds
Resource Management	Updated Information	E. Orre
Battalion 1	Updated Information	R. Burgard
Battalion 2	Updated Information	J. Cox
Battalion 3	Updated Information	J. Cox
Battalion 4	Updated Information	J. Nichols
Battalion 5	Updated Information	J. Novak
Battalion 6	Updated Information	B. Goff
Battalion 7	Updated Information	T. Main
Emergency Command Center	Updated Information	E. Alldrin
Fire Prevention Bureau	Updated Information	Z. Rutherford
Hand Crew Program	Updated Information	J. Ortegel
Safety Program	Updated Information	N. Giampaoli
Training Bureau	Updated Information	N. Giampaoli
EMS Bureau	Updated Information	D. Riley
Appendix A	Pre-Fire Projects	J. Reynolds
Appendix C	Updated Maps	J. Reynolds

Table i – Plan Amendments



# **TABLE OF CONTENTS**

PLAN AMENDMENTS	1
TABLE OF CONTENTS	2
SIGNATURES	4
EXECUTIVE SUMMARY	5
SECTION I: UNIT OVERVIEW	6
LOCATION	6
POPULATION	6
SANTA CLARA UNIT OUTLINE / CHARACTERISTICS	7
STATE RESPONSIBILITY AREA	8
UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES	9
FIRE ENVIRONMENT	10
SECTION II: UNIT FIRE PLAN COLLABORATION	11
COMMUNITY / AGENCIES / FIRESAFE COUNCILS	11
FIRESAFE COUNCILS	12
SECTION III: VALUES AT RISK	21
FIRE RISK vs. FIRE HAZARD	21
VALUES	21
COMMUNITIES	23
SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES	27
FIRE PREVENTION	27
CalMAPPER (Management Activity Project Planning and Event Reporter)	27
2024 IGNITION STATISTICS	28
ENGINEERING & STRUCTURE IGNITABILITY	33
INFORMATION AND EDUCATION	35
DEFENSIBLE SPACE INSPECTION PROGRAM (LE-100)	35
STATE MINIMUM REQUIREMENTS (Statutes & Regulations)	36
DEFENSIBLE SPACE FUEL TREATMENT TACTICS	37
RESOURCE MANAGEMENT	40



SECTION V: PRE-FIRE MANAGEMENT TACTICS	50
DIVISION / BATTALION / PROGRAM DESCRIPTION & PLANS	50
BATTALION 1	50
BATTALION 2	54
BATTALION 3	56
BATTALION 4	60
BATTALION 5	66
BATTALION 6	69
BATTALION 7 (Cooperative Fire Protection)	74
BATTALION 9 (Emergency Command Center)	79
BATTALION 20 (Fire Prevention / Law Enforcement Bureau)	82
SANTA CLARA UNIT HAND CREWS	84
SAFETY PROGRAM	87
TRAINING BUREAU	89
EMS BUREAU	94
SECTION VI: REFERENCES	100
SECTION VII: APPENDICES	101
APPENDIX A: PRE-FIRE PROJECTS	101
APPENDIX B: UNIT GOALS AND OBJECTIVES	107
APPENDIX D. FIRE STATIONS AND APPARATUS	116



# **SIGNATURES**

The Santa Clara Unit Fire Plan is:

Recommended By:

- Collaboratively developed by local stakeholders and cooperating agencies from the State, County, and City levels of government. All of which have been consulted and are listed in this plan.
- Used to identify and prioritize pre-fire and post-fire management strategies and tactics intended to reduce the loss of values at risk within the State Responsibility Area (SRA) and Mutual Threat Zones (MTZ) throughout the Santa Clara Unit (SCU).
- Intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met, as necessary.
- A plan that recommends measures to reduce the vulnerability of structural ignitability and improve wildfire resiliency in the communities.

John Reynolds	Date:	5/8/2025
John Reynolds? # Captain		
Pre-Fire Engineer		
DocuSigned by: Engrav Ove	Date:	5/8/2025
Edgar Orre, Division Chief – Unit Forester	<b>D</b> ato	
Registered Professional Forester (RPF) #2	292	
Approved By:		
Docusigned by:  Marcus Hernandes	Date:	5/8/2025
Marcus Hernande 2400 thit Chief		



## **EXECUTIVE SUMMARY**

The California Department of Forestry and Fire Protection's (CAL FIRE) Santa Clara Unit prepares an annual Strategic Fire Management Plan for the coming fire season. The Fire Plan documents an assessment of the fire situation in the unit, includes stakeholder contributions and priorities, and identifies strategic targets for pre-fire solutions within the five counties (Santa Clara, Alameda, Contra Costa, San Joaquin, and Stanislaus) of the CAL FIRE Santa Clara Unit.

Pre-Fire Engineering and Fire Protection Planning is the responsibility of the Santa Clara Unit Pre-Fire Engineer (PFE). The main job of the PFE is to coordinate the creation of the Unit Fire Plan and assist with its implementation. Under the direction and authority of the Santa Clara Unit Chief, the PFE collaborates with the Unit Operations Team (Division Chiefs, Battalion Chiefs, Foresters, Environmental Scientist), and stakeholders to develop the Unit's Fire Plan which is designed to achieve the goals and objectives of the CAL FIRE Strategic Fire Plan for California. The PFE and unit staff collaborate with many stakeholders/cooperators (state and local government entities, FireSafe Councils, individual citizens, and many other organizations) to assist with developing and implementing the Fire Plan. Each CAL FIRE Unit has a funded position for a PFE, which is the rank of Fire Captain.

Pre-Fire Engineering includes geographic information system (GIS) mapping of values at risk, wildland fuel belts, and the maintenance of various other GIS data layers to assess the existing levels of wildland protection services, identifies high-risk and high value areas that are potential locations for costly and damaging wildfires, rank these areas in terms of priority needs, and prescribe what can be done to reduce future costs and losses. The PFE is also responsible for the CAL FIRE Management Activity Project Planning and Event Reporter (CalMAPPER) program. CalMAPPER is a tracking database that CAL FIRE uses to record fuel reduction efforts within the unit. CalMAPPER records funding information (source, amount, grant ID's, etc.), treatment activity information (start/end dates, executing agency, and costs), along with a spatial representation of the fuel treatments.

This Fire Plan provides planning information on a unit wide scale and recognizes the variation in fuels, weather, topography, and community/agency priorities present in each county. It is intended to be a dynamic planning tool for promoting wildfire protection efforts in the unit. Additionally, this Fire Plan is not intended to satisfy the California Environmental Quality Act (CEQA) or regulatory permitting requirements. Any recommended projects or actions contained herein shall be subject to the appropriate permitting and environmental review for the jurisdiction in which they are proposed.

\*Note: All text in **BLUE** is hyperlinked to external websites.



#### **SECTION I: UNIT OVERVIEW**

This Fire Plan covers the CAL FIRE Santa Clara Administrative Unit. It shares jurisdictional boundaries with 35 city fire departments and fire protection districts, two State Parks, numerous county and special district parks, several open space districts, multiple water purveyors, and watershed.

#### LOCATION

The Santa Clara Unit is unique to CAL FIRE. The unit is located between the San Francisco Bay and the San Joaquin River, encompassing the Counties of Contra Costa, Alameda, Santa Clara, and Western portions of Stanislaus and San Joaquin. There are 1.34 million acres of SRA area within the unit with a combined population of 5.5 million people.



#### **POPULATION**

The Santa Clara Unit is characterized by large urban population centers which are adjacent to the wildland areas creating some of the largest wildland urban interface (WUI) areas in California. No other CAL FIRE Northern Region Unit has a greater population within its borders. Major population centers within SCU include the cities of San Jose (and the surrounding "Silicon Valley"), Oakland, Berkley, Livermore, Pleasanton, Fremont, Walnut Creek, Concord, Martinez, and Richmond. Numerous major highways run through the unit and daily traffic congestion is common. Technology, manufacturing, heavy industry, seaports, and airports all drive a substantial portion of California's economy. The large population concentrations have created a continual interest in outdoor recreational use and open space preservation issues. Air quality control within is managed by the San Joaquin Valley Air Pollution Control District and the Bay Area Air Quality Management District. The Santa Clara Unit Management Team works closely with these agencies when planning prescribed burns through our Vegetation Management Program to ensure smoke impacts are reduced upon the local population and resources.



#### SANTA CLARA UNIT OUTLINE / CHARACTERISTICS

Vegetation types in SCU are predominantly annual grasses, chaparral, and oak woodlands. The Santa Cruz Mountains along the west side of Santa Clara County also support coastal redwood and mixed conifer stands. Fire history in the SCU includes the Lexington Fire in 1985 (13,128 acres), the Tunnel Fire in 1991 (1,624 acres, 25 deaths and 3,500 structures destroyed), the Croy Fire in 2002 (3,007 acres and 300 structures destroyed), the Santa Clara Complex in 2003 (32,000 acres), the Lick Fire in 2007 (47,183 acres), the Summit Fire in 2008 (4,270 acres), the Corral Fire in 2009 (12,500 acres), the Morgan Fire in 2013 (3,111 acres), the Tesla Fire in 2015 (2,850 acres), the Loma Fire in 2016 (4,476 acres), the Crews Fire in 2020 (5,513 acres), the SCU Lightning Complex in 2020 (396,624 acres) with 26 structures damaged and 229 structures destroyed), and the Corral Fire in 2024 (14,168 acres). With the current population levels in SCU and the continuing spread of urban development into the wildlands, SCU is taking every opportunity to be proactive with wildland fuels management. Unit staff is heavily involved in fire protection planning programs with local cooperators to address existing problems and identify areas where changes can be implemented early in the planning stages. SCU is also located in an active earthquake hazard area, dominated by the San Andreas and Hayward Faults. SCU and many other CAL FIRE Units were heavily involved in the emergency response to the 1989 Loma Prieta Earthquake.

Priorities for the SCU include working with local landowners, non-governmental organizations, and governmental agencies for the implementation of fire management plan objectives. SCU will continue to support the development of, and updates to, Community Wildfire Protection Plans (CWPPs) adopted within the unit and assist with grant funding for Community Wildfire Protection projects. CAL FIRE also helps partnering organizations with grant funding from the California Climate Investments program. These grant programs include Wildfire Prevention (managed within SCU), Forest Health, Workforce Development and Biomass Utilization, California Forest Improvement Program, Urban and Community Forestry, and Forest Legacy. Continuance of the Vegetation Management Program (VMP) is a priority for healthy fuels management. Additionally, using this Unit Fire Plan, SCU works closely with local landowners to reduce unplanned ignitions within the unit and limit damage caused by uncontrolled fires through the use of education, pre-fire mitigation projects, patrol, and law enforcement to meet the mission statement of the department, which is:

The California Department of Forestry and Fire Protection (CAL FIRE) serves and safeguards the people and protects the property and resources of California.



#### STATE RESPONSIBILITY AREA

BATTALION	ACREAGE
1	188,233 ACRES
2	175,003 ACRES
3	97,689 ACRES
4	251,899 ACRES
5	296,767 ACRES
6	257,726 ACRES
7	73,599 ACRES
Santa Clara Unit Total:	1,340,916 ACRES

Table 1 - State Responsibility Area Acreage 2025



**SCU State Responsibility Area by Battalion** 



#### **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

Initial attack forces are essential to keeping unwanted fires to a minimum. SCU maintains a strong force of personnel and equipment that is always ready to respond to any fire that threatens the wildland. SCU has twelve state-funded fire stations, one helitack base (Alma Helitack), and an Emergency Command Center under its jurisdiction. These stations and the helitack base are fully staffed during the declared fire season, with five of the stations staffed year-round (three state funded and two under Cooperative Fire Protection Agreements). These stations combined provide for the staffing of sixteen state-owned fire engines, one state-owned helicopter, three state-owned transports/bulldozers, two Firefighter Hand Crews, and two California National Guard Hand Crews.

Fifteen Battalion Chiefs are available in the unit and are strategically positioned to maintain quick response times for overhead personnel. There are three Law Enforcement/Prevention personnel; one Battalion Chief and two Fire Captain Specialists, along with one Fire Prevention Specialist and one Training Captain who are available within the unit and will frequently assist with initial attack operations.

A Forester II (Division Chief), Forestry Assistant II, Environmental Scientist, and a Pre-Fire Engineer (Fire Captain) support State Responsibility Area (SRA) fire prevention projects, Vegetation Management Program (VMP) projects, and manage Wildfire Prevention Program grants to support partnering organizations with similar goals. These positions also assist with unit and incident overhead needs. Three Defensible Space Inspectors (Forestry Aides) are utilized to conduct defensible space inspections in the SRA pursuant to Public Resources Code 4291.

The Unit's Morgan Hill Emergency Command Center (ECC) provides dispatch as well as Command and Control through local government cooperative agreements with the City of Morgan Hill Fire Department, the South Santa Clara County Fire District, and the Alameda County Fire Department (Sunol Fire Station only). The ECC also provides dispatch services under two Amador Contracts: the Pacheco Fire Station and the Sunshine Fire Station.



#### FIRE ENVIRONMENT

The fire environment is defined as the "surrounding conditions, influences, and modifying forces that determine fire behavior." The four components that affect fire behavior are fuels, weather, topography, and human behavior. Understanding the relationship between these factors and their influence on fire behavior must be considered to plan the most effective strategies for reducing the threat of unwanted fire.

Of the factors listed above, fuels (vegetation, buildings, etc.) are the component that is targeted most often since this factor is the most easily affected. For example, vegetation can be removed or manipulated in ways that will dramatically reduce the fire risk. Homes can be "hardened", i.e., built with non-combustible or fire-resistant materials and maintained with adequate defensible space.

While the weather cannot be controlled, it is important to understand what types of weather can increase hazardous fire conditions and what options there are for reducing this hazard. An example of this is limiting certain activities, including open burning, welding, or mowing when weather conditions are hot and dry.

As with the weather, topography, the terrain, or lay of the land, cannot be significantly altered to reduce the fire hazard. Terrain, however, has a strong influence within the fire environment and should be carefully assessed when designing fire hazard reduction treatments.

Aspect has a strong bearing on the type of vegetation present and the temperature and moisture regime of the soil and vegetation. Slope steepness (gradient) is important since fire behavior usually increases with steepness. Slope position (ridge, valley, saddle, draw, etc.) should be considered when planning fire prevention measures. For example, additional defensible space may be necessary and required where slopes are steep and if positioned on a warm southerly aspect and/or within a "chimney" (draw, saddle).

"Full alignment" is a term used to describe the fire environment when all the conditions are conducive for increased fire activity. This occurs when fires burn in heavy fuels, during hot, dry weather with high winds blowing up steep slopes and draws. The highest priority for fire prevention measures should be focused on areas where these types of conditions are known to occur or are considered likely.



# **SECTION II: UNIT FIRE PLAN COLLABORATION**

#### **COMMUNITY / AGENCIES / FIRESAFE COUNCILS**

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

#### Plan Development Team:

Organization	Title
Diablo FireSafe Council	Executive Director
Santa Clara FireSafe Council	Executive Director
Hills Emergency Forum	Staff Liaison
CAL FIRE / Santa Clara Unit	Unit Chief
CAL FIRE / Santa Clara Unit	Unit Forester
CAL FIRE / Santa Clara Unit	Pre-Fire Engineer
CAL FIRE / Santa Clara Unit	Battalion Chiefs

Table 2 – Plan Development Team





#### FIRESAFE COUNCILS

The Santa Clara FireSafe Council, Diablo FireSafe Council, South Skyline FireSafe Council, Oakland FireSafe Council, and Hills Emergency Forum all play key roles in assisting the SCU. Additionally, other organizations focused on fire safety and planning in the five-county area include the Guadalupe-Coyote Resource Conservation District, Loma Prieta Resource Conservation District, and Claremont Canyon Conservancy. These organizations are integral to fire safety efforts, as they have access to various grant programs and funding sources that public agencies are not eligible for.

With input from these groups and other stakeholders, the unit's managers work together to set goals and develop projects within the Unit's Fire Plan. This plan is the framework for addressing fuel reduction initiatives, detailing ongoing, upcoming, and completed projects, as well as providing opportunities for public review and feedback. The Unit Fire Plan enables a responsive approach to public concerns, while identifying projects eligible for funding through cooperative grants and donations.

For more information on the California FireSafe Council, visit: <a href="https://cafiresafecouncil.org/">https://cafiresafecouncil.org/</a>



#### SANTA CLARA COUNTY FIRESAFE COUNCIL

Founded in 2002, the Santa Clara County FireSafe Council (SCCFSC) is a 501(c)(3) nonprofit organization dedicated to wildfire prevention and mitigation. Funded through grants, local contributions from the county, cities, fire agencies, and donations from community partners, SCCFSC protects thousands of residents and homes. By bringing together individuals, public and private agencies, and companies with a shared commitment to reducing wildfire risks, SCCFSC strengthens community resilience and safety.

The SCCFSC works toward creating a "FireSafe" Santa Clara County by focusing on three primary areas: Communications, Outreach and Education, and Hazardous Fuel Reduction. While serving the entire county, SCCFSC prioritizes wildfire prevention in the fourteen communities most at risk: Stanford, Palo Alto, Los Altos Hills, Cupertino, Saratoga, Monte Sereno, Los Gatos, Lexington Hills, San Jose, Morgan Hill, San Martin, Gilroy, East Foothills, and Milpitas. These areas are home to residential neighborhoods, schools, businesses, and critical county infrastructure such as power transmission lines, communication facilities, creeks, and reservoirs.



In 2020, SCCFSC operated with an annual budget of \$4.5 million and gained the support of numerous agency stakeholders and community leaders. This collaboration fosters partnerships across jurisdictions, enabling large-scale landscape projects that leverage shared expertise, economies of scale, and matching funding opportunities.

SCCFSC's priority outreach programs include the Firewise support program, which helps communities achieve Firewise USA recognition, as well as educational initiatives such as the Wildfire Evacuation Workshop, defensible space workshops, and home hardening presentations. The council also engages residents through community events, distributing educational materials via mail, articles, and online content. Additionally, SCCFSC provides one-on-one assistance with Home Ignition Zone Assessments to help homeowners enhance their wildfire preparedness.

The SCCFSC leads a variety of fire risk mitigation programs, including Hazardous Fuel Reduction (HFR) projects, community chipping services, subsidized defensible space clearing for low-income or disabled residents, neighborhood fuel reduction efforts, roadside evacuation route clearing, dead/hazard tree abatement, and the development and maintenance of fuel breaks. These efforts are aligned with the local Community Wildfire Protection Plans (CWPPs) and the Unit Fire Plan.

The SCCFSC actively participates in the development and updating of CWPPs, project planning before grant applications, and detailed project planning after funding is secured. The council also assists with biotic studies, forest and vegetation analysis, and the preparation of California Environmental Quality Act (CEQA) documents. CAL FIRE staff play an integral role in supporting all program areas.



#### DIABLO FIRESAFE COUNCIL

The Diablo FireSafe Council (DFSC) collaborates closely with the SCU to unite residents, agencies, and funding sources to minimize the impact of wildland fires. Serving 2.5 million residents across 37 federally recognized at-risk communities in Alameda and Contra Costa Counties, DFSC covers 1,500 square miles. The region encompasses more than 200 miles of wildland-urban interface and has a history of devastating fires that occur at long intervals (every 20+ years).



Homes throughout these counties are situated among dense vegetation, including highly flammable eucalyptus, pine, and acacia, making hazardous fuel reduction efforts particularly challenging. For example, the East Bay Hills, with established neighborhoods adjacent to protected parklands, form a 45-mile-long wildland-urban interface. These areas feature abundant vegetation, flammable building materials, and difficult access, heightening the risk of wildfire.

Founded in 1999 as a public-private coalition, DFSC earned nonprofit 501(c)(3) status by 2002. Since then, the organization has formed a Board of Directors, established a website, held regular meetings, and received its first federal grant. The current 9-member Board includes representatives from local fire agencies, resource conservation districts, regional park districts, and homeowners. DFSC collaborates with a wide range of stakeholders, including individual property owners, homeowner associations, public utilities, special interest groups, land trusts, and city departments. As an umbrella organization, DFSC provides leadership and resources to community members and other nonprofits dedicated to wildfire prevention.

Over the past five years, DFSC has secured more than \$1.7 million in state and private funding, including grants from CAL FIRE's fire prevention programs. Partners in wildfire prevention have contributed matching funds and in-kind services valued at over \$1.4 million, supporting more than 200 projects. Key programs include a \$5,000 cost-share funding initiative for defensible space projects, supporting groups of neighbors working together to mitigate wildfire hazards. DFSC also offers presentations and training on wildfire behavior, local defensible space requirements, ignition prevention, home hardening, and evacuation strategies for residents, landscape designers, garden clubs, students, and others.

The county-wide Community Wildfire Protection Plans (CWPPs) for Alameda and Contra Costa Counties have catalyzed local planning efforts in areas such as Clayton-Morgan Territory, El Cerrito/Kensington, the City of Richmond, and Sunol. CAL FIRE's Fire Prevention Grant "Good to Go!" helped expand DFSC's community fire prevention program, adding wildfire evacuation resources and developing a website, GoodToGoWildfire.com, with customized information.





#### HILLS EMERGENCY FORUM

The Santa Clara Unit is a proactive member of the Hills Emergency Forum (HEF), which was established in 1992 following the devastating 1991 Tunnel Fire. HEF provides a collaborative leadership structure to unite nine local governing organizations in fire prevention, mitigation, suppression, and emergency planning efforts for the wildland-urban interface (WUI) area of the Oakland-Berkeley Hills.

HEF's membership includes the City Managers of Berkeley, Oakland, and El Cerrito; the General Managers of East Bay Municipal Utility District (EBMUD) and East Bay Regional Park District (EBRPD); the Fire Chief of the Moraga-Orinda Fire District; the Director of CAL FIRE; the Director of Lawrence Berkeley National Laboratory; and the Vice Chancellor of the University of California, Berkeley.

The Forum's administrative arm, the Staff Liaison Committee (SLC), is composed of representatives from all member agencies. The SLC is tasked with developing and overseeing the annual work plan, analyzing policy issues for agency executives, identifying potential legislative support, and coordinating the HEF's annual meeting. During their monthly working sessions, the SLC focuses on key activities, including: coordinating hazardous fuel reduction projects, regulatory reviews, permitting, and implementation; fostering strategic partnerships for public information campaigns, evacuation preparedness, home hardening, project planning, ignition detection, and biomass utilization; providing field tours for special interest groups to share best practices and lessons learned; and collaborating with local jurisdictions on land use planning to ensure compliance with SB1241 and SB379, as well as updating Local Hazard Mitigation Plans.



#### OAKLAND FIRESAFE COUNCIL

The Oakland FireSafe Council (OFSC) is grassroots, community-based organization dedicated to mobilizing Oakland and Alameda County residents to reduce wildfire risks to people and property through outreach, education, and proactive programs and projects.

Members of the OFSC include Oakland Hills residents, survivors of the 1991 Tunnel Fire, open space and park stewards, and others committed to minimizing wildfire risks in the East Bay hills. As an affiliate of the Diablo FireSafe Council, OFSC serves both Alameda and Contra Costa counties.



OFSC focuses on education and outreach, particularly through the Oakland Community Preparedness & Response Program (OCP&R), while also advocating for wildfire prevention at the local, regional, state, and national levels. Although wildfire prevention is receiving increasing attention at all these levels, OFSC brings valuable knowledge, experience, and urgency to the unique challenges faced by residents living in the wildland-urban interface.



#### SOUTH SKYLINE FIRESAFE COUNCIL

The South Skyline FireSafe Council (SSFSC) is a nonprofit organization committed to the public good, with a mission to provide fire prevention and preparedness education and outreach to all residents within the South Skyline area. The Council works to prevent loss of life and minimize damage to personal, public property, and natural resources from wildfires.



#### NORTH SANTA CLARA RESOURCE CONSERVATION DISTRICT

The North Santa Clara Resource Conservation District (RCD) was established in 1995 through the merger of the Black Mountain and Evergreen Soils Conservation Districts. The Black Mountain Soil Conservation District was founded in 1943 to serve approximately 5,500 acres in the Calabazas Watershed on the west side of Santa Clara Valley, while the Evergreen Soils Conservation District, established in 1944, originally covered about 10,000 acres on the east side of the valley.

Today, the North Santa Clara RCD spans over 362,000 acres in northern Santa Clara County, encompassing much of the hilly and mountainous land surrounding the Santa Clara Valley north of Morgan Hill. The district also collaborates with other public agencies and community organizations in incorporated areas to coordinate efforts that benefit district watersheds.



The long-term goal of the North Santa Clara RCD is to identify opportunities and address needs for the conservation and development of natural resources within the district. The RCD supports sustainable rangeland management to preserve species diversity and promote proper watershed management for wetlands and riparian corridors to protect wildlife, aquatic resources, and water quality.

As a resource conservation district, the North Santa Clara RCD works closely with the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS). Together, these non-regulatory organizations provide specialized staff, educational programs, technical assistance, grant funds, and resources to help manage and protect land and water resources.



#### LOMA PRIETA RESOURCE CONSERVATION DISTRICT

The mission of the Loma Prieta Resource Conservation District (LPRCD) is to support community members and partners in conserving and improving local resources. LPRCD provides technical support and education to landowners, farmers, and ranchers, helping them develop strategies to protect and restore watershed, air, and soil quality, benefiting families, the community, and future generations.

Founded in 1942 as a non-regulatory agency, LPRCD was established to develop and administer programs for soil, water, and related resource conservation in Southern Santa Clara County. Since its inception, the district has expanded to cover more than 220.000 acres.





#### CLAREMONT CANYON CONSERVANCY

The Conservancy is a nonprofit, community-based organization with several hundred members from the Oakland/Berkeley Hills. It serves as a catalyst for the long-term protection and restoration of the canyon's natural environment while advocating for comprehensive fire safety across its wildland-urban interface.

The Conservancy collaborates closely with both public and private property owners, as well as various government agencies, to ensure effective stewardship of the canyon and reduce wildfire risks. In addition to hosting bird walks, educational programs, and regular stewardship workdays focused on maintaining trails and removing fire-prone or invasive species, the Conservancy is working alongside other community organizations and public officials to establish a Joint Powers Agency. This agency will coordinate and manage vegetation across the East Bay hills wildfire risk zone, as designated by CAL FIRE.



#### CONTRA COSTA RESOURCE CONSERVATION DISTRICT

Contra Costa Resource Conservation District was first incorporated in 1941 as a non-regulatory agency tasked with conserving the air, water, and soil of Contra Costa County. Over the next 80 years, Contra Costa RCD has grown to serve all parts of Contra Costa County with programming in natural resource conservation, watershed stewardship and protection, and conservation on range lands and row crop farming systems. The mission of the Contra Costa Resource Conservation District is to facilitate the conservation and stewardship of the natural resources in Contra Costa County.





#### BERKELEY FIRESAFE COUNCIL

The Berkeley FireSafe Council (BFSC) is a nonprofit 501(c)(3) organization dedicated to preventing catastrophic wildfires in Berkeley. Our mission includes supporting public officials, advocating for necessary actions, informing residents and decision-makers, and promoting preparedness and training. We also collaborate with other fire safety organizations to strengthen fire prevention efforts across the community. As a member of the California Fire Safe Councils, a statewide network of nonprofits focused on fire safety, we work closely with local and regional partners to enhance our collective impact. The California Fire Safe Council, founded in 1993 by CAL FIRE, serves as an essential resource for these efforts.

BFSC is also part of the Hillside Association of Berkeley (HAB), an organization formed over 30 years ago to preserve the unique character and interests of our community. Previously known as the Hillside Fire Safety Group (HFSG), BFSC remains committed to its goal of reducing fire risk through education, advocacy, and action.

Our motto, "Before It's Too Late," underscores the urgency of our mission. Despite the efforts of public landowners, the risk of a devastating fire in Berkeley has not been fully addressed. Comprehensive mitigation will require the removal of hazardous fuels in the Berkeley and Oakland Hills, as well as Tilden Park, with a focus on eucalyptus trees, which contribute significantly to the fire hazard. This critical task involves clearing the understory of eucalyptus groves in these areas and replacing the hazardous trees with safer, non-flammable species. While this work may seem daunting, it can be done more efficiently and affordably than many people realize. The time to act is now—before a wildfire threatens the homes and lives of residents across Berkeley, Oakland, and surrounding areas.





#### **WEST CONTRA COSTA FIRESAFE COUNCIL**

The West Contra Costa Fire Safe Council (WCCFSC) was established in 2022 with the goal of promoting wildfire prevention, fire safety, and community education across Contra Costa County.

WCCFSC is proud to have the Richmond Fire Chief as the Agency Liaison, working to foster collaboration with key partners such as CAL FIRE, the California Fire Safe Council, East Bay Regional Parks District (EBRPD), East Bay Municipal Utility District (EBMUD), Pacific Gas and Electric (PG&E), Caltrans, and other stakeholders to enhance wildfire safety throughout the county.

In addition to building these partnerships, WCCFSC is focused on raising public awareness and educating residents about how to become Firewise. This includes providing guidance on home hardening techniques and creating defensible space around homes. The Council is also working to ensure that safe evacuation routes are in place throughout the Very High Fire Hazard Severity Zone (VHFHSZ) area. Measure X funding, managed by the Contra Costa County Fire Protection District (CCCFPD), supports vital Wildland Mitigation and Fuel Reduction projects across the county.





### **SECTION III: VALUES AT RISK**

#### FIRE RISK vs. FIRE HAZARD

The concept of risk vs. hazard can be confusing, and these terms are often used interchangeably. The purpose of this Plan is to assist fire agencies with the development of collaborative methods of reducing the fire 'risk' within their jurisdictions by using strategies and tactics that will reduce or eliminate one or more fire 'hazards'. Examples of fire hazards include dense stands of decadent brush, faulty wiring, broken vehicle exhaust systems, and homes that are not constructed in accordance with applicable fire code requirements. The fire risk (vulnerability) of a given area constantly rises and falls depending on conditions within the fire environment. Successful implementation of this Plan will result in the meaningful reduction of the fire risk in strategic portions of the county through the identification and abatement of important fire hazards.

#### **VALUES**

The primary goal of wildland fire protection in SCU is to safeguard the wide range of values found within the unit from the effects of wildfire. The values at risk are the public and private assets that the wildland fire protection system is created and funded to protect. The following have been identified as values at risk from wildfires and delineate their economic and non-economic values: people, structures, timber, watershed, wildlife, unique scenic and recreation areas, range, wildlife, and air quality. The table below provides a description of the values evaluated.

Values at Risk	Public Issue Category	Location and ranking methodology
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or conditions for future problems, ranked based on the affected downstream population.
Soil erosion	Environment	Watersheds are ranked based on erosion potential.
Water storage	Public welfare	Watershed area up to 20 miles upstream from a water storage facility, ranked based on water value and dead storage capacity of the facility.
Water supply	Public health	Watershed area up to 20 miles upstream from the water supply facility.
Scenic	Public welfare	Four-mile view shed around Scenic Highways, and 1/4-mile view shed around Wild and Scenic Rivers, ranked based on potential impacts to vegetation types (tree versus non-tree types).



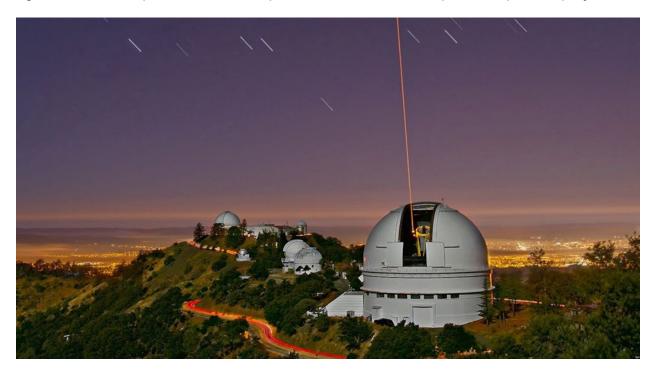
Values at Risk	Public Issue Category	Location and ranking methodology
Timber	Public welfare	Timberlands are ranked based on value/susceptibility to damage.
Range	Public welfare	Rangeland is ranked based on potential replacement feed cost by region/owner/vegetation type
Air quality	Public health Environment Public welfare	Potential damage to health, materials, vegetation, and visibility. Ranked based on vegetation type and air basin.
Recreation	Public welfare	Unique recreation areas or areas with potential damage to facilities, ranked based on fire susceptibility.
Structures	Public safety Public welfare	Ranked based on housing density and fire susceptibility.
Non-game wildlife	Environment Public welfare	Critical habitats and species locations are based on input from the California Department of Fish and Wildlife and other stakeholders.
Game wildlife	Public welfare Environment	Critical habitats and species locations are based on input from the California Department of Fish and Wildlife and other stakeholders.
Infrastructure	Public safety Public welfare	Infrastructure for delivery of emergency and other critical services (e.g., repeater sites, transmission lines).
Ecosystem Health	Environment	Ranking based on vegetation type/fuel characteristics.

Table 3 – Values at Risk

An example of a value at risk within SCU is the Lick Observatory on Mt. Hamilton, owned and managed by the University of California, Santa Cruz (UCSC). This Observatory dates to the late 1800s when an observatory was built at the top of Mount Hamilton, located east of San Jose. This facility would grow throughout the years and now has nine research grade telescopes located in the area. Many structures, including residences and other support facilities exist at the observatory. Nearby Copernicus Peak is the site of numerous radio and microwave towers as well as the Copernicus Fire Lookout. The current lookout, built in the 1930s, is owned by CAL FIRE on land leased from UCSC. It is staffed during fire season and weekends when there is a high fire danger, by Volunteers In Prevention (VIPs) and or unit staff.



Many factors are involved in target area and value at risk identification, including political considerations of the region and suppression cost reductions. By looking at the 'big picture' and identifying the values at risk, SCU staff, along with input from other agencies and the public, can better protect these areas and prioritize pre-fire projects.



Lick Observatory located in Battalion 2 on Mount Hamilton in San Jose, CA

#### **COMMUNITIES**

In recent years, wildfires have burned millions of acres throughout the United States. These fires dramatically illustrated the threat to human lives and development. Under Executive Order, the National Fire Plan was created as a cooperative, long-term effort of the U.S. Forest Service, Department of the Interior, and the National Association of State Foresters to protect communities and restore ecological health on Federal lands.

A major component of the National Fire Plan was funding for projects designed to reduce fire risks to people and property. A fundamental step in supporting this goal was the identification of areas that are at high risk of damage from wildfire. Federal fire managers authorized State Foresters to determine which communities were under significant risk from wildland fire on Federal lands. CAL FIRE undertook the task of generating the state's list of communities at risk. With California's extensive wildland urban interface situation, the list of communities extends beyond just those on Federal lands. These high-risk communities identified within the wildland urban interface, the area where homes and wildland intermix, were published in the Federal Register in 2001.



At the request of Congress, the Federal Register notice only listed those communities neighboring Federal lands. The list represents the collaborative work of the 50 States and five Federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire. Within SCU, there are no federally designated Communities at Risk because of the absence of federally managed land. With California's extensive wildland urban interface (WUI) situation, the list of communities extends beyond just those adjacent to Federal lands. There are 1,329 communities currently on the California Communities at Risk List and 54 of them are in SCU. The CAL FIRE Director has assigned the role of managing the list to the California Fire Alliance.

Three main factors were used to determine the wildland fire threat to wildland-urban interface areas of California.

**Ranking Fuel Hazards:** Ranking vegetation types by their potential fire behavior during a wildfire.

Assessing the Probability of Fire: The annual likelihood that a large, damaging wildfire would occur in a particular vegetation type.

Defining Areas of Suitable Housing Density That Would Create Wildland Urban Interface Fire Protection Strategy Situations: Areas of intermingled wildland fuels and urban environments that are in the vicinity of fire threats.

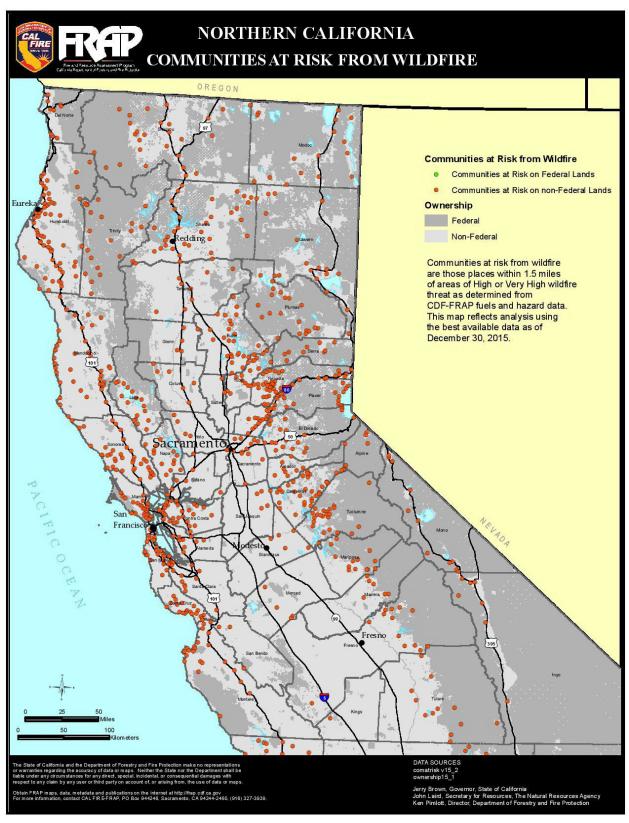


#### Communities at Risk (CAR) within the Santa Clara Unit:

Alamo	Antioch	Bellota
Berkeley	Blackhawk	Brentwood
Canyon	Castro Valley	Clayton
Clements	Concord	Crockett
Cupertino	Danville	Dublin
East Foothills	East Richmond Heights	El Cerrito
El Sobrante	Fairview	Fremont
Gilroy	Hayward	Hercules
Kensington	Lafayette	Lexington Hills
Livermore	Los Altos Hills	Los Gatos
Martinez	Milpitas	Monte Sereno
Moraga	Morgan Hill	Oakdale
Oakland	Orinda	Palo Alto
Pinole	Pittsburg	Pleasant Hill
Pleasanton	Richmond	Rodeo
San Jose	San Leandro	San Martin
San Ramon	Saratoga	Stanford
Union City	Walnut Creek	West Pittsburg

Table 4 – California Communities at Risk





**Northern California Communities at Risk** 



# SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

Pre-fire management as used in this plan is a collective term that refers to all activities undertaken by county land managers, property owners, agencies, and fire departments intended to reduce the risk of wildfire and resulting suppression costs and to minimize the resulting damage to lives, property, and the environment. This section details the objectives of pre-fire management in two main categories: Fire Prevention and Vegetation Management.

#### FIRE PREVENTION

To prevent unwanted fires from occurring, it is important to understand what is causing these fires. The SCU Fire Prevention Bureau works diligently to determine the cause of all fires with the assistance of Engine Company Officers. By understanding what the causes are, it allows the Bureau to focus on education, enforcement, and patrol activities in a more efficient way.

#### **CalMAPPER**

# (Management Activity Project Planning and Event Reporter)

An ongoing effort has been underway to bring the department's records from several different resource management and fire prevention programs into a common database framework with a spatial (GIS) component that facilitates mapping and monitoring of current fuels reduction projects, assists in planning future program activities, and is used primarily by resource management staff. CalMAPPER is currently on its third version and is the designated GIS database and application for collecting activity and fiscal data on forest improvement and fuels reduction projects executed by CAL FIRE.

CalMAPPER is an existing web-based mapping application with supporting tools and business processes that serve the following functions:

- Sets a statewide standard for spatially capturing forest and fuels management projects and associated activities across programs within CAL FIRE.
- Provides for GIS and tabular data entry and reporting of project activities in a web browser-based environment.
- Provides access to spatial data and tools that are useable by non-GIS personnel for data entry, visualization, and reporting.



#### **2024 IGNITION STATISTICS**

Wildland fire ignition statistics were tracked for the entire year of 2024 in the SCU. The unit responded to 192 wildland fire incidents where an ignition occurred and were within the unit's Direct Protection Area (DPA). There were 145 State Responsibility Area (SRA) ignitions and 47 Local Responsibility Area (LRA) ignitions (Morgan Hill Fire Department and South Santa Clara County Fire District). The 192 ignitions totaled approximately 17,057.081 acres. Of the 192 ignitions, 23 fires were over ten acres in size, or approximately 11.98%. The fires over ten acres accounted for 16,892.07 acres or 99.03% of the unit total.

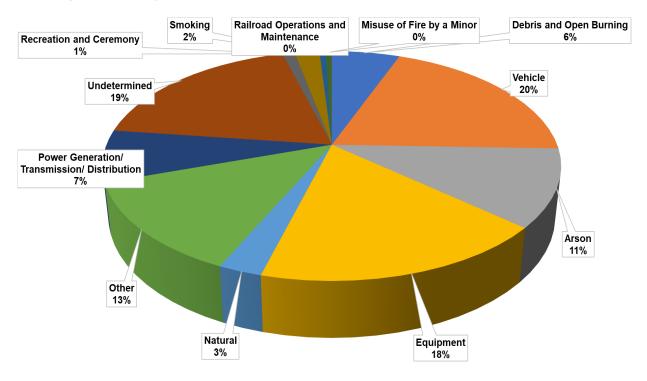
MONTH	IGNITIONS *	TOTAL ACRES	# OVER 10 ACRES	% OVER 10 ACRES	STRUCTURES DESTROYED
JAN	2	0	0	0.00%	0
FEB	0	0	0	0.00%	0
MAR	1	0.09	0	0.00%	0
APR	0	0	0	0.00%	0
MAY	13	7.15	0	0.00%	0
JUN	46	14,761.43	9	19.57%	0
JUL	50	2,040.469	6	12.00%	0
AUG	33	163.20	6	18.18%	0
SEP	22	47.175	1	4.55%	0
OCT	17	30.99	1	5.88%	0
NOV	7	6.48	0	0.00%	0
DEC	1	0.10	0	0.00%	0
Totals:	192	17,057.081	23	11.98%	0

Table 5 – Unit Ignitions by Month

<sup>\*</sup> IGNITIONS INCLUDE CONTRACT LRA AND STATE SRA



# 2024 Ignitions by Fire Cause

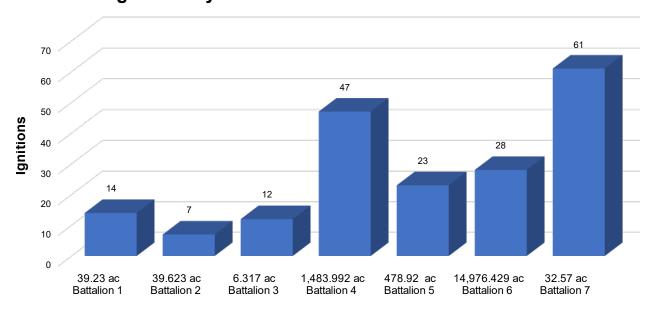


WILDLAND CAUSE	IGNITIONS	PERCENTAGE
Undetermined	36	18.75%
Vehicle	38	19.79%
Arson	21	10.94%
Other	25	13.02%
Equipment	34	17.71%
Debris and Open Burning	11	5.73%
Power Generation	14	7.29%
Smoking	4	2.08%
Recreation and Ceremony	2	1.04%
Natural	5	2.60%
Railroad Ops. and Maintenance	1	0.52%
Misuse of Fire by a Minor	1	0.52%

Table 6 – Ignitions by Fire Cause



# 2024 Total Ignitions by Battalion



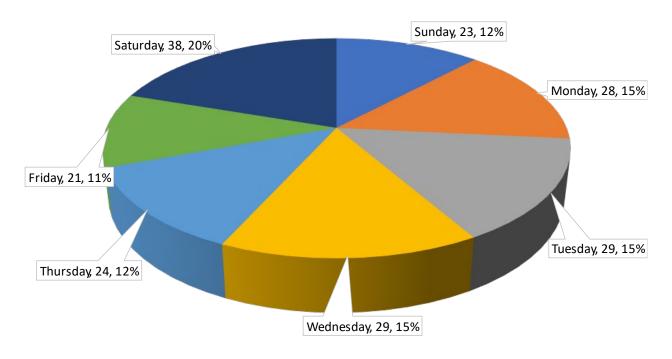
BATTALION	IGNITIONS *	TOTAL ACRES	# OVER 10 ACRES	% OVER 10 ACRES
1	14	39.230	1	7.14%
2	7	39.623	1	14.29%
3	12	6.317	0	0
4	47	1483.992	10	21.28%
5	23	478.92	5	21.74%
6	28	14976.429	6	26.09%
7	61	32.57	0	21.43%
Total:	192	17,057.081	23	11.98%

Table 7 – Ignitions by SCU Battalion

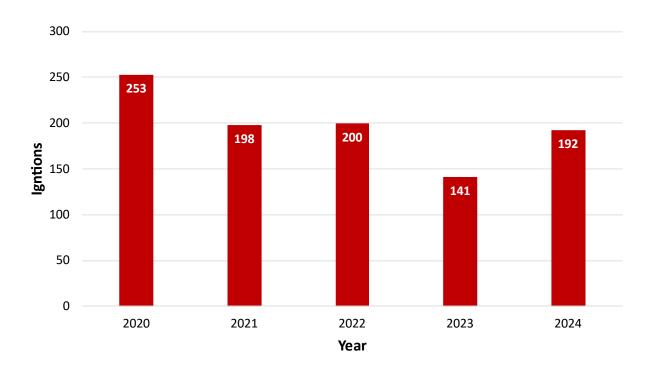
<sup>\*</sup> Morgan Hill Fire Department had 14 ignitions and South Santa Clara Fire District had 33 ignitions in 2024.



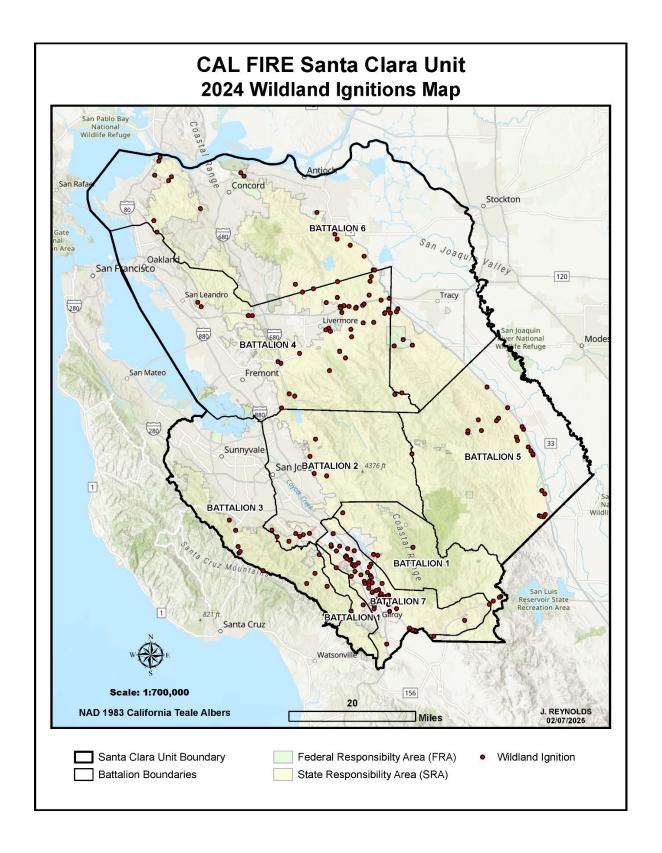
# 2024 Ignitions by Day of the Week



# **SCU Ignitions - Last Five Years**









#### **ENGINEERING & STRUCTURE IGNITABILITY**

The Santa Clara Unit has long recognized the threat of wildfires, but recent changes in weather patterns have significantly amplified this risk. Warmer and drier summers, coupled with precipitation levels well below normal, have created conditions that significantly impact fire-prone fuels such as dry dead vegetation, grasses, and brush. These changes in climate, combined with increasing human activity in wildland areas, have raised the likelihood not only of fires starting but also of larger, more destructive fires developing. The threat has evolved into a more immediate danger, increasing the chances for "Mega Fires" - fires that burn over 100,000 acres and have lasting, catastrophic impacts on both the population and the environment. These fires have long-term effects that prevent ecosystems from fully recovering.

In the event of a large wildfire, the sheer scale may strip available emergency responders and equipment, leaving some structures unprotected. To survive, structures must be able to withstand a wildfire ignition threat, which depends on multiple factors, including fire intensity, spread rate, weather conditions, building materials, and surrounding vegetation. To address this, state and local fire agencies within the SCU continually provide wildfire prevention education to residents in high-risk areas, offering guidance on reducing the likelihood of structure ignition.

The <u>Materials and Construction Methods for Exterior Wildfire Exposure</u> regulations were established to set minimum standards for materials and design, offering a reasonable level of protection for buildings in Wildland Urban Interface (WUI) areas. Using ignition-resistant materials and design techniques to resist flames or embers from wildfires is one of the most effective strategies California has implemented to mitigate losses from recurring wildland urban interface fire disasters. To learn all about <a href="https://example.com/home-hardening">home-hardening</a> and more, visit: ReadyForWildfire.org

In California, CAL FIRE is required by law to identify areas based on fire hazard severity, which is determined by factors such as, fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area. There are three levels severity fire hazard severity zones: moderate, high, and very high. These zones serve multiple purposes, including the enforcement of exterior wildfire exposure protection building codes for new construction, as well as contributing to real estate hazard disclosure defensible space inspections.

The creation of Fire Hazard Severity Zone (FHSZ) maps was prompted by the destructive impact of major fires, which led to the recognition of high-hazard areas and the development of strategies to reduce wildfire risks. Legislative action led to the mandated mapping of these zones across California under the California Public Resources Code sections 4201-4204, covering all State Responsibility Areas (SRA). You can learn more about FHSZs and search by address to find which zone and responsibility area you are in, at: <a href="mailto:osfm.fire.ca.gov/FHSZ">osfm.fire.ca.gov/FHSZ</a>.



Fire Hazard Severity Zones in the Local Responsibility Area (LRA) were prompted in response to the very destructive Tunnel Fire (Oakland Hills Fire) of 1991. Assembly Bill 337 (Bates 1992) mandates the Office of the State Fire Marshal to evaluate fire hazard severity in the local responsibility area, and to make a recommendation to the local jurisdiction where Very High FHSZs exist. This is further supported by the California Government Code section 51175. New legislation, Senate Bill 63 (Stern 2021), now requires the adoption of all three FHSZ classes in the LRA. Previously only Very High FHSZs were required for adoption in LRA. Local government considers fire hazard severity in the safety element of their general plan and are the local authority over planning and development. SCU continues to provide guidance and assistance to local authorities by conducting a fire review of minimum fire safe regulation (PRC 4290) plans checks, the interpretation of specific state statutes and regulations, responsibility areas boundaries, and fire hazard severity zone designations and the requirements within them.

Alameda County	Contra Costa County	Santa Clara County
Berkeley	Danville	Cupertino
Oakland	El Cerrito	Los Gatos
Piedmont	Lafayette	Monte Sereno
Pleasanton	Martinez	Morgan Hill
San Leandro	Moraga	San Jose
Berkeley	Orinda	Saratoga
N/A	Pinole	Cupertino
N/A	Richmond	N/A

Table 8 – Cities in the Santa Clara Unit for which CAL FIRE has made recommendations on Very High Fire Hazard Severity Zones (VHFHSZ)



#### INFORMATION AND EDUCATION

CAL FIRE's <u>Fire Safety Education Programs</u> are spread throughout the SCU and come in the form of fair exhibits, school presentations, station tours, posters, flyers, thousands of other printed materials, radio and television spots, community meetings, one-on-one contacts with homeowners, and social media.

SCU ensures that residents within the unit are informed as to the dangers of wildfire. SCU has prioritized conducting Defensible Space (LE-100) inspections. These <u>LE-100</u> inspections are conducted for the property owner/lessee to become educated on <u>Section 4291 of the Public Resources Code (PRC)</u>. This section states, in part, that all structures located within State Responsibility Areas shall always maintain a clearance of 100 feet around them. By conducting LE-100 inspections, SCU staff have one-on-one contact with the public, providing fire safety education and enforcing the PRC.

#### **DEFENSIBLE SPACE INSPECTION PROGRAM (LE-100)**

The LE-100 inspection program is managed by the unit's Fire Prevention / Law Enforcement Bureau. Inspection priorities are coordinated between the Bureau and the Unit Battalion Chiefs. Defensible Space Inspectors (DSI) and engine companies are responsible for performing inspections within the unit, their response areas, and typically perform these inspections during the spring and summer months. DSIs and engine companies are directed to leave an inspection notice at all properties to inform the property owners/lessees that an inspection has been conducted. DSIs and engine companies are also instructed to leave notices at residences where access is blocked.

During the inspections, the DSI's and engine company personnel review and educate the property owner/lessee on fire prevention requirements. After the inspection, a notice is issued, and the property owner/lessee is informed of the result. If there were violations noted during the inspection, the property owner/lessee is instructed to mitigate the violations, and there will be a re-inspection. The DSIs or the engine company will schedule a re-inspection for a later date. If, during the re-inspection, the violation(s) have not been corrected, the notice will be turned over to the Fire Prevention/Law Enforcement Bureau, and further education/enforcement will occur, or a legal citation may be issued to the property owner/lessee.



## **STATE MINIMUM REQUIREMENTS (Statutes & Regulations)**

#### **State Minimum Fire Safe Regulations**

Public Resources Code (PRC) § 4290

California Code of Regulations (CCR): <u>Title 14 CCR § 1270.00</u>

#### **Defensible Space**

Public Resources Code § 4291

California Code of Regulations (CCR): Title 14 CCR § 1299.03

Assembly Bill 38 Real Estate Hazard Disclosure: California Civil Code (CVC) § 1102.19

#### California Fire Code

California Code of Regulations (CCR) Title 24, Part 9 (CFC):

Chapter 5 – Section 505.1 Address Identification

Chapter 49 Requirements for Wildland Urban-Interface (WUI) Fire Areas

#### **California Building Code**

California Code of Regulations (CCR) Title 24, Part 2 (CBC):

Chapter 7A [SFM] - Materials And Construction Methods For Exterior Wildfire Exposure

Chapter 21 - Section 2113.9.2 Spark Attestors [SFM]

#### **California Residential Code**

California Code of Regulations (CCR) Title 24, Part 2.5 (CRC):

<u>Chapter 3 - Section R337 Materials And Construction Methods For Exterior Wildfire Exposure</u>



#### **DEFENSIBLE SPACE FUEL TREATMENT TACTICS**

CAL FIRE has outlined two distinct Defensible Space Zones:

- Zone 0 Ember-Resistant Zone. It extends 5 feet from buildings, structures, decks, etc.
- Zone 1 Lean, Clean, and Green Zone. From the structure outward to 30 feet.
- Zone 2 Reduced Fuel Zone. From 30 to 100 feet from structures or to the property line.
- Zone 1 and 2 "Outbuildings" and Liquid Propane Gas (LPG) storage tanks shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior.

The following descriptions of vegetation treatment/hazard reduction operations are provided to promote the education of and compliance with PRC 4291. These requirements, published by CAL FIRE, should be reviewed by responsible parties and can be viewed at: ReadyForWildfire.org

- 1. Maintain a firebreak by removing and clearing away all flammable vegetation and other combustible growth within 30 feet of each building or structure, with certain exceptions pursuant to PRC §4291(a). Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create a condition that avoids spread of fire to other vegetation or to a building or structure.
- 2. Dead and dying woody surface fuels and aerial fuels within the Reduced Fuel Zone shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches. This guideline is primarily intended to eliminate trees, bushes, shrubs, and surface debris that are completely dead or with substantial amounts of dead branches or leaves/needles that would readily burn.
- 3. Down logs or stumps anywhere within 100 feet from the building or structure, when embedded in the soil, may be retained when isolated from other vegetation. Occasional (approximately one per acre) standing dead trees (snags) that are well- space from other vegetation, and which will not fall on buildings or structures or on roadways/driveways may be retained.
- 4. Within the Reduced Fuel Zone, properties with greater fire hazards will require greater clearing treatments.

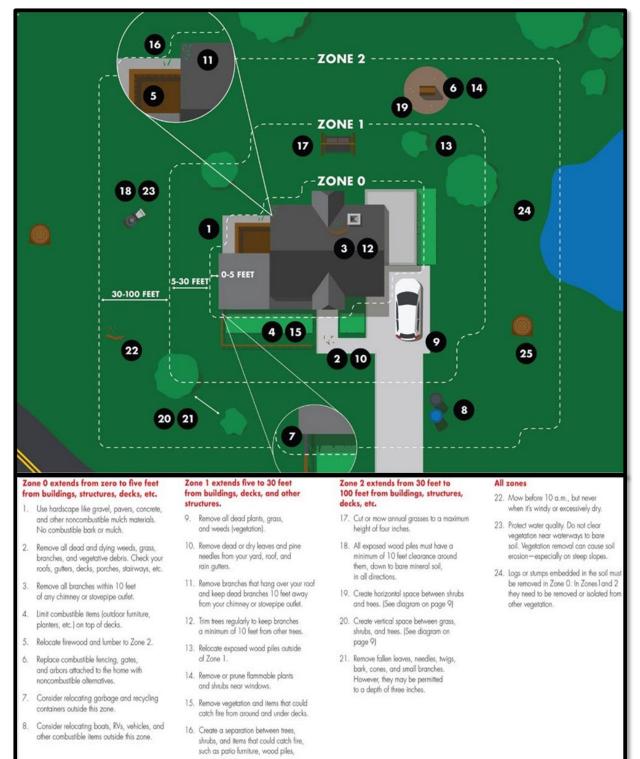


- 5. Clearance distances between vegetation will depend on the slope, vegetation size, vegetation type (brush, grass, trees), and other fuel characteristics (fuel compaction, chemical content etc.). Properties with greater fire hazards will require greater separation between fuels. For example, properties on steep slopes having large sized vegetation will require greater spacing between individual trees and bushes. Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant. For example, three individual manzanita plants growing together with a total foliage width of eight feet can be "grouped" and considered as one plant and spaced according to the Plant Spacing Guidelines. Grass should not exceed 4 inches in height. However, homeowners may keep grass and other forbs less than 18 inches in height above the ground when these grasses are isolated from other fuels or where necessary to stabilize the soil and prevent erosion. Clearance requirements include:
  - Horizontal clearance between aerial fuels, such as the outside edge of the tree crowns or high brush. Horizontal clearance helps stop the spread of fire from one fuel to the next.
  - Vertical clearance between lower limbs of aerial fuels and the nearest surface fuels and grass/weeds. Vertical clearance removes ladder fuels and helps prevent a fire from moving from the shorter fuels to the taller fuels.

To achieve defensible space while retaining a stand of larger trees with a continuous tree canopy apply the following treatments:

- Generally, remove all surface fuels greater than 4 inches in height. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and create conditions that reduce the spread of fire to other vegetation or structures.
- Remove lower limbs of trees ("prune") to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees). Properties with greater fire hazards, such as steeper slopes or more severe fire danger, will require pruning heights in the upper end of this range.





#### **Defensible Space Illustration**



#### RESOURCE MANAGEMENT

Unlike many other CAL FIRE Units, the SCU has little Forest Practice Regulation activity. This is primarily due to the small number of acres legally available for commercial timber harvesting, such as timberland production zone (TPZ) within the five counties served by SCU. Instead, most of the resource management concerns involve other activities that maintain or improve forest health, enhance wildfire resilience, improve ecosystem functions, and reduce hazardous vegetative fuel conditions in the State Responsibility Areas (SRA).

Resource Management includes the following positions:

- 1 Forester II Unit Forester (D1606)
- 1 Forestry Assistant II (F1691)
- 1 Environmental Scientist (F1692)
- 1 Fire Captain Pre-Fire Engineer (P1625)

CAL FIRE has several programs to assist private landowners, non-governmental organizations, and other agencies in achieving their resource management goals. Below is an overview of some programs managed by SCU Resource Management.

The Vegetation Management Program (VMP) and the Vegetation Treatment Program (VTP) are programs to assist landowners with their land management objectives using prescribed fire and mechanical treatments. Prescribed fire includes broadcast burns of large contiguous areas and hand pile burning in smaller and more sensitive areas. The use of prescribed fire mimics natural processes and restores fire to its historic role in wildland ecosystems and provides significant fire hazard reduction benefits that enhance public and firefighter safety. Mechanical treatments include manual cutting and chipping as well as using heavy equipment to masticate vegetation in certain situations. This may be used to prepare an area for burning or as a standalone treatment. Encouraging the best 'mix' of natural resource benefits from these lands, consistent with environmental protection and landowner objectives, is the Department's intent. VMP and VTP projects utilize a programmatic Environmental Impact Report (EIR) to achieve compliance with the California Environmental Quality Act (CEQA).



The **VMP** is a program that focuses on the use of prescribed fire and some mechanical means for addressing wildland fire fuel hazards and other resource management issues on State Responsibility Area (SRA) lands.

The VMP program has three broad goals, which encompass most Vegetation Management objectives:

- Optimization of soil and water productivity.
- Reduction of conflagration fires.
- Protection and improvement of intrinsic ecosystem values.

The **CalVTP** Programmatic Environmental Impact Report (EIR) supports the use of prescribed burning, mechanical treatments, hand crews, herbicides, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the Wildland-Urban Interface (WUI), to construct fuel breaks, and to restore healthy ecological fire regimes. The VMP/VTP Coordinator in SCU is also the Unit Forester and CEQA Coordinator (D1606). The coordinator is responsible for all aspects of the planning and development of the landowner agreement and burn plan. The Wildfire Resilience Forester I (F1691) and Environmental Scientist (F1692) assists the Unit Forester in planning and development.

VMP and VTP projects also provide valuable opportunities for training with live fire, command and control functions, and logistic support. These training opportunities are extended to many partnering agencies as well. A key distinction between a prescribed burn and a wildfire is that pre-planning a prescribed burn reduces uncertainty and makes the overall VMP project less complex. Prescribed burns are managed to achieve the landowner's goals, such as hazardous fuels reduction, native plant restoration/ invasive plant control, increasing water yields, and range improvement. The timing of a burn is often critical to the success of achieving these goals; fuel moisture, weather, and the life stage of flora are carefully monitored before and during a burn to achieve success while minimizing adverse impacts to desirable flora and fauna. A smoke management plan and applicable burn permits from the Bay Area Air Quality Management District (BAAQMD) are required before the burn to minimize smoke impacts to the public. Prior to ignition, the Incident Commander must confirm that proper approvals and notifications have been performed and then satisfactorily complete the VMP Go/No Go Checklist.



The California Climate Initiative (CCI) Wildfire Prevention grant program is managed by CAL FIRE for eligible applicants at the SCU level to support fire prevention activities that mitigate the potential for wildfire to impact habitable structures while improving long-term carbon sequestration levels. Qualifying projects include hazardous fuel reduction projects, fire prevention education, and fire prevention training and planning that reduce the risk of wildfire upon habitable structures in the SRA and LRA, as worsened by recent drought conditions. Grants awarded within SCU are administered by the Resource Management Division. CAL FIRE often provides substantial additional support for these projects with personnel, equipment, and technical support.

Wildfires throughout the State since 2017, have set a multitude of new records in wildfire impacts. These events increased the interest of many stakeholders in fire prevention planning and education, as well as vegetation management for reducing hazardous fuels. Although no solicitations occurred in 2020 and 2024, there has been very strong interest in this grant program, with many awards given within SCU.

The table below shows the approved and active CCI Fire Prevention funded grants issued to partnering organizations within the unit this current year. SCU Resource Management will provide grant management, technical support, and other assistance as needed.



Project Name	County	Project Location	Funding Recipient	Funding Amount	Grant Number
East Contra Costa Fire Restoration Project	Contra Costa	Central Contra Costa County	Contra Costa Resource Conservation District	\$299,957	5GG23116
Alameda County Fire Kilkare Road Access and Egress Work Project	Alameda	Sunol & Kilkare Woods	Alameda County Fire Department	\$351,160	5GG23115
Shepherd Canyon to Grass Valley Evacuation Route	Alameda	City of Oakland	City of Oakland	\$ 1,000,000	5TR23110
Augustin Bernal Community Park Fuels Reduction	Alameda	City of Berkeley	Berkeley Fire Department	\$1,007,000	5TR23111
Tunnel East Bay Hills Fuel Break	Alameda	Alameda County	East Bay Regional Park District	\$6,630,563	5GA20109



Project Name	County	Project Location	Funding Recipient	Funding Amount	Grant Number
Lafayette/Walnut Creek Shaded Fuel Break	Contra Costa	Lafayette/Walnut Creek	Contra Costa County FPD	\$3,000,780	5GA21144
Enhancement of Reduced Fuel Zones, Evac. Readiness, and Comm. Prep	Santa Clara	Santa Clara County	Santa Clara County FireSafe Council	\$1,456,579	5GG21228
Educational Videos for the Science and Prevention of Wildfires	Statewide	Statewide	Next Vista for Learning	\$191,400	5GA21124
Santa Clara County CWPP Update	Santa Clara	Santa Clara County	Santa Clara County FireSafe Council	\$250,000	5GA21127
Green Climber Purchase	Santa Clara	Santa Clara County	City of Morgan Hill	\$160,000	5GA21128
University of California – Berkeley Lab Wildland Fire Hazard Reduction	Alameda	Berkeley	Regents of the University of California Berkeley	\$2,878,104	5GA21143
Grizzly Peak Strategic Fuel Break Collaboration	Alameda, Contra Costa	Alameda and Contra Costa Counties	East Bay Regional Park District	\$2,800,000	5GA22212
Augustin Bernal Community Park Fuels Reduction	Alameda	Livermore- Pleasanton	Livermore- Pleasanton Fire Dept.	1,048,900	5GA22213

Table 9 – Active CCI Fire Prevention Grants



The California Climate Initiative (CCI) Forest Health grant program is managed by CAL FIRE for eligible applicants at the Sacramento level. This program provides funds for active restoration and reforestation activities aimed at providing more resilient and sustained forests to ensure the future existence of forests in California while also mitigating climate change, protecting communities from fire risk, strengthening rural economies, and improving California's water and air. SCU currently has one active Forest Health Grant project that was funded for the Santa Cruz Mountains of Santa Clara County between Lexington Reservoir and Page Mill Road. This grant is a partnership with the Santa Clara County Fire Safe Council, San Jose Water Co, Midpeninsula Regional Open Space District, Santa Clara County Parks, and others, known as the Los Gatos Creek Watershed Collaborative or "Collaborative". In May 2023, the Collaborative was awarded over 6.3 million in new Forest Health Grant funding for Phase 2, to continue work in the Los Gatos Creek Watershed, incorporating new treatment areas with Aldercroft Heights Firewise and Lupin Lodge.

Project Name	County	Project Location	Funding Recipient	Funding Amount	Grant Number
Los Gatos Creek Watershed Collaborative Forest Health	Santa Clara	Santa Cruz Mountains	Santa Clara Fire Safe Council	\$6,336,790	8GG22611

Table 10 - Active Forest Health Grants

The **California Forest Improvement Program (CFIP)** is a State cost-share program aimed at improving the economic value and environmental quality of forest lands. CFIP projects help sustain forest and wildlife resources to meet our future needs for a healthy environment and productive forests. Healthy forests are more resistant to drought, pests, and fire damage.

Qualified landowners can generally be reimbursed up to 75 percent of their expenses for tree planting, thinning, release, fuels management, erosion control, and fish and wildlife habitat improvement projects. Ninety percent cost-share rates may apply for projects on land damaged by wildfires, diseases, insects, wind, floods, landslides, or earthquakes during the last ten years. This program is managed by forestry assistance specialists (FAS) at the Sacramento level.



#### Projects funded by CFIP include:

- Preparation of a Management Plan and project supervision by a Registered Professional Forester.
- Site preparation, tree planting, and follow-up activities, such as adding browse guards, to enhance tree survival and growth.
- Tree thinning, release, and pruning.
- Fuels management and slash disposal work, if located more than 100 feet from dwellings.
- Erosion control, including revegetation, road rehabilitation, and installation of structures such as water bars, rocked crossings, or check dams, to reduce soil erosion and stream sedimentation.
- Fish and wildlife habitat improvement, including planting native oaks or riparian species, installing exclusion fencing around watercourses and wetlands, and stream restoration projects.

To qualify, the property must contain at least 20, but not more than 5,000 acres of forest land, and the property zoning must allow forest management activities to occur. Forest land is defined as areas having at least ten percent tree cover or suitable land where native tree species will be planted. The minimum project size for tree planting, thin/release/pruning, or fuels management work is five acres. The five-acre limitation does not apply to erosion control or fish and wildlife habitat improvement projects. Any work required under the Forest Practice Act is not eligible for CFIP funding. Planting or thinning of trees for use as Christmas trees, greenery, or firewood is also not eligible. Currently, there are no active CFIP contracts within SCU. There has been a tremendous amount of interest in the program, with several qualifying applicants. However, the lack of RPF availability precludes the execution of a formal contract. Multiple landowners in the Santa Cruz Mountains and other rural areas of the unit have interest in the program.

The **Urban Forestry Program** is managed statewide by staff in the Sacramento-based Urban Forestry Program. This program provides technical expertise and grants to create and maintain sustainable urban forests. Urban trees and community forests are important for providing energy conservation, reducing stormwater runoff, extending the life of surface streets, improving local air, soil, and water quality, reducing greenhouse gas emissions, improving public health, providing wildlife habitat, and increasing property values. Urban Forestry Program foresters provide expert support to communities, non-profit groups, and municipal governments within the SCU to create and maintain sustainable urban forests. These foresters also administer and provide technical support for grants that are offered for activities such as tree planting, municipal



tree inventories and management plans, urban forest educational efforts, and innovative urban forestry projects. These grants are now funded through the California Climate Initiative (CCI) program.

The Forest Health Management Program provides information to landowners and makes recommendations to the Board of Forestry regarding the health of California's forests. CAL FIRE entomologists and pathologists are available to examine forest health concerns at the local level when requested. They also provide education and training to agency and private foresters on current issues. The SCU Resource Management staff monitors local forest health conditions all year to determine if above normal stress and mortality are occurring. Drought and storm damage can have lasting impacts that not only affect fire hazard severity but also public safety, aesthetics, property values, and wildlife habitat. In January of 2024, Invasive Shothole Borers (ISHB) were discovered in California sycamore trees within San Jose City. The list of known host trees is very extensive, and the potential impacts to native and non-native trees could be severe. CAL FIRE Forest Health Specialists with expertise in forest pathology and entomology were immediately requested to assess the situation. Their research in concert with other State, Federal, and academic institutions continues. Their preliminary assessments strongly suggest that ISHB was unintentionally transported from Southern California, where it was first detected in 2003. SCU staff will continue to assist with research into the cause(s), foster information sharing, and promote mitigation measures to minimize the fire hazard, risks to public safety, and impacts to habitat and aesthetics.

The California Forest Stewardship Program was created to encourage good stewardship of California's private forestland. The program provides technical information and assistance to landowners to promote sound forest management and assists communities in solving forest-related issues. SCU Resource Management Division provides informal consultations to landowners with questions or concerns about general forest management topics and can provide referrals to other organizations when other subject matter expertise is appropriate.

The **Seed Bank Program**, based at the L.A. Moran Reforestation Center (LAMRC) in Davis, California, is intended to provide insurance against poor natural seed crop years and to maintain the widest possible genetic variety of forest tree species. The seed bank is a long-term depository of a wide range of commercial and non-commercial native species. LAMRC specializes in forest tree cone and seed processing and seed bank storage. CAL FIRE staff at the center continues to provide technical assistance to the forest industry, other agencies, and private landowners on cone and seed matters and seed collection activities.



CAL FIRE has recently resumed conifer seedling production at LAMRC. The LAMRC also works closely with federal and private nurseries to raise high-quality native tree seedlings for reforestation and afforestation needs. The SCU Resource Management Division conducts cone crop surveys, certifies appropriate collection trees, and coordinates with LAMRC to provide climbers to collect the cones when a local conifer cone crop is suitable for collecting.

**CAL FIRE's Environmental Protection Program** within the SCU is managed by the Unit Forester. All projects that CAL FIRE permits, funds, or carries out that may affect the environment are subject to disclosure and review under the California Environmental Quality Act (CEQA). SCU Resource Management staff performs this work when CAL FIRE is the Lead Agency.

Partnering organization projects are projects sponsored and funded by other governmental agencies, like parks, open space districts, and non-governmental organizations (NGO's) like Fire Safe Councils. These organizations have identified priority projects such as hazardous fuel reduction work, fire prevention education, and fire prevention planning. CAL FIRE often provides substantial additional support for these projects with personnel, equipment, and technical support. SCU personnel support for fuel reduction projects includes handcrews and engine companies.

SCU also has access to Conservation Camp crews from Ben Lomond Camp (San Mateo-Santa Cruz Unit), Delta Camp (Sonoma-Lake-Napa Unit), and Gabilan Camp (San Benito-Monterey Unit). SCU has chippers, chainsaws, a bulldozer brush rake, ball and chain, brush mower, terra torch, a skid steer masticator, and other tools specifically for fuel treatment projects. Technical support includes developing treatment prescriptions to achieve the landowner's objectives while mitigating potential adverse environmental impacts and preparing the CEQA compliance documentation.

SCU supports projects considered to be a high priority within Community Wildfire Protection Plans (CWPP) and those developed by stakeholders in High and Very High Fire Severity Zones as identified by CAL FIRE's Forest and Range Assessment Program.

SCU staff are aware of many projects in the planning stage that are intended to address areas and conditions of particular concern. SCU would like to support these projects with grants, crews, and technical advice to the extent possible. A table of proposed and active projects is included in Appendix A.



### **Priority Areas**

In general, the unit's priority for vegetation management are areas with Very High Fire Hazard Severity Zone designations, little or no recent fire history, and areas with high population in the SRA (especially in the wildland-urban Interface). Each of the unit's Battalion Chiefs have identified specific priority areas within their Battalion. A table of planned projects that SCU anticipates assisting partnering organizations with during 2025 is included in Appendix A.

- Reduce hazardous vegetation for defensible space at CAL FIRE facilities such as fire stations, radio repeater sites, and fire lookouts.
- Plan, prepare, and conduct prescribed burn projects.
- Maintain Truck Trails, where CAL FIRE has use agreements and CEQA compliance. This requires periodic maintenance of roadside vegetation and road surfaces to ensure adequate emergency response capability.
- Promote CFIP agreements with local qualifying landowners to restore and enhance ecosystem functions and to reduce hazardous vegetative fuel conditions.
- Provide grant administration and technical assistance to projects funded by CCI grants.
- Provide technical assistance and material support whenever possible, to partnering organizations' projects.



# **SECTION V: PRE-FIRE MANAGEMENT TACTICS**

Pre-fire management tactics are employed by the SCU through multiple programs that are available to each planning area. These programs can be tailored to meet the needs at a countywide or community level. These programs are also scalable to meet the needs of the county and communities we serve.

#### **DIVISION / BATTALION / PROGRAM DESCRIPTION & PLANS**

The following pages contain descriptions of each field Battalion and lists of projects and goals for the implementation of the Santa Clara Unit Fire Plan. They are compiled by the field Battalion Chiefs with input from the Pre-Fire Engineer, FireSafe Councils, other stakeholders, and the public through community outreach. While they reflect an amazing cross-section of goals and ideas, they are not inflexible or cast in stone, nor are they the only options available to mitigate a problem. These are suggestions and a starting point for the journey, not the endpoint.

#### **BATTALION 1**

Battalion 1 covers portions of Western, Southern, and Eastern Santa Clara County and lies solely in the State Responsibility Area (SRA). The boundary of the Western portion follows the south side of Bailey Road (San Jose) in the Northwest; East of Uvas Road; then westward on the Redwood Retreat Road; South along the Santa Cruz County line to the San Benito County line. The boundary of the Eastern portion follows the San Benito County Line at San Felipe Road to the Henry Coe State Park and private ranches to the west side of County Line Road, including the Highway 152 corridor - from Dinosaur Point to Dunne Hill.

Battalion 1 is comprised of three state facilities: Pacheco, Coyote, and Headquarters. Pacheco Fire Station is located along Highway 152 and is home to one Type III Engine. Coyote Fire Station is located near Coyote Creek and Hunting Hollow and is home to one Type III Engine, staffed with personnel during peak fire season. Headquarters Fire Station is located within the City of Morgan Hill along Monterey Road and Butterfield Boulevard and is home to two Type III Engines staffed with personnel during peak fire season. Headquarters also houses one of three Bulldozers in SCU.

Headquarters Fire Station is co-located with South Santa Clara County Fire District (SSCCFD) Fire Station 1 under a cooperative fire agreement with CAL FIRE, SSCCFD, and the City of Morgan Hill. Headquarters is also home to the Emergency Command Center (ECC), Fleet Management Shop, Logistics Center, Resource Management, Training Bureau, and Fire Prevention Bureau.



Topography in the Battalion ranges from rolling hills bordering the Santa Clara Valley and Highway 152 corridor to steep slopes at higher elevations covered with brush and conifers at the mid and upper elevations. Portions of the Battalion, such as Henry Coe State Park and the Western border with the San Mateo-Santa Cruz Unit (CZU) are remote and require extended travel times for ground resources to make access. The Battalion also encompasses thousands of acres of watershed, critical to domestic drinking water, contains a habitat critical to numerous animal and plant species, and has an abundance of historic and prehistoric cultural sites.

Fuels in the Battalion range from annual grass and oak woodland at (60%) of the lower, more arid elevations, to conifers at (10%) of the upper elevations of the western border of the Battalion with CZU. The mid elevations, as well as shaded slopes of the lower elevations and the Southern aspects of the upper elevations have a significant amount of California mixed chaparral species at (30%). Depending on the live fuel moisture content of these fuel models and any adverse weather conditions, these fuels can present significant fire behavior and resistance to fire control efforts.

Due to the influence of the Pacific Ocean, Battalion 1 typically enjoys a mild Mediterranean climate. Summer months in the western portion of the Battalion are characterized by coastal fog, which arrives from the ocean around 10 p.m. and dissipates the next morning by 10 a.m. The eastern portion of the Battalion above 2000 feet is often above the marine influence, allowing fires to burn actively at night. Both wind and low relative humidity play important roles in influencing fire behavior in the Battalion. On most days, afternoon winds in the Santa Clara Valley blow from 10-15mph. During the night, dry air over the higher elevations of the eastern portion of the Battalion sinks towards the Central Valley, causing moderate downslope winds and a drop in humidity, commonly into the single digits, typically between midnight and 4:00 AM, above 1500 feet. Extended travel times into these areas, combined with heavy fuel loads, can create significant fire behavior concerns.

In addition to CAL FIRE and its cooperative agreements, there are two paid fire agencies operating in Battalion 1 that border SRA. Historically, major wildland fire occurrences have been in the remote and sparsely populated eastern portion of the Battalion. The 1936 Fire, the 1961 Bollinger Ridge Fire, and the 2007 Lick Fire are some of the largest fires recorded in the SCU. The Croy Fire occurred in the fall of 2002 in the hills west of Morgan Hill City and burned for a week, destroying numerous structures. Other recent notable fires include the Hummingbird and Whitehurst Fires in 2008 and the Crews Fire in 2020. These fires required a significant commitment of resources and time to prevent structure loss.



A complex wildland urban interface zone (WUI) exists in the Battalion. Many residences are in areas with poor access, steep slopes, and heavy fuels. Fires in the Battalion often require significant resource augmentation and coordination with local government resources. With the cooperation of local fire agencies, Mutual Threat Zones (MTZs) have been created, allowing a significant increase in initial attack capabilities and therefore an increased probability of fires being contained with the initial attack response.

Fire prevention in Battalion 1 will focus on comprehensive defensible space inspections (LE-100a), public education, fuel reduction projects, shaded fuel break construction, and improving road access to remote areas. One of the oldest FireSafe demonstration gardens in the State is in the Battalion at the SCU Headquarters. The "Chris W. Morgan Firesafe Demonstration Garden" is named in honor of retired Fire Prevention Specialist II Chris Morgan and his years of service to fire prevention in SCU. Other notable ongoing projects in the Battalion include the County Line Road fuel break and fire road maintenance, cooperative operations with other public entities on various Vegetation Management Program projects in and around Henry Coe State Park and Santa Clara County Parks (State Parks, Fish and Wildlife, and Santa Clara County Open Space) requiring close interagency cooperation and planning. These ongoing projects accomplish both fuel reduction and provide access to isolated areas of eastern Santa Clara County.

### **Priority Areas**

- Continue to maintain the Santa Clara County Line Road Fuel Break. This Road runs from the San Antonio Valley at Hwy 130 to Hwy 152 just east of Pacheco Fire Station. This road serves as critical access to fires in Coe Park and the Orestimba Creek Watershed.
- 2. Continue the development of concise pre-response and evacuation plans for the Croy Road, and Watsonville Road areas. These plans and maps will provide personnel, including ECC staff and incident management teams, with the location of strategic control points and access into remote SRA land.
- Obtain and install additional water tanks for fire protection at the Coyote Fire Station and the Canada de Los Osos Ecological Reserve.
- 4. Develop and establish a FireSafe demonstration garden at Pacheco Station.
- 5. Install fire prevention signs for the public at the Coyote Fire Station.
- 6. Assist Henry Coe State Park and private ranchers in fuel modification projects.
- 7. Assist the County of Santa Clara with the Mt. Madonna fuels reduction project.



- 1. Continue to maintain the Santa Clara County Line Road Fuel Break. This Road connects the San Antonio Valley at Highway 130 to Highway 152 just east of the Pacheco Fire Station. This road serves as a critical access to fires in Henry Coe Park and the Orestimba Creek Watershed.
- Conduct a vegetation management project in cooperation with the California Department of Fish and Wildlife within the area of Cañada de los Osos Ecological Reserve.
- Continue homeowner defensible space inspections (LE100 Inspections) for habitable structures with Volunteers in Prevention (VIP), Engine Companies, and dedicated defensible space inspectors.
- 4. Continue providing input on all new construction and developments with the Santa Clara County Fire Marshall's office.
- 5. Participate in various local community activities.
- Assist with training and planning to assist local government for the possibility of natural or man-made disasters.
- 7. Maintain the Pacheco Peak repeater site, as it is a key communication site for the unit.
- 8. Assist Henry Coe State Park and private ranchers in fuel modification projects.
- Develop concise pre-response and evacuation plans for the battalion. These
  plans and maps will provide new personnel, ECC staff, and incident management
  teams with the location of strategic control points and access into the vast area of
  SRA lands.
- 10. Whenever dealing with the media, suggest fire prevention messages to be included and integrated into their story.
- 11. Conduct public information and education programs at local schools.
- 12. Distribute FireSafe educational materials at public gatherings and public venues.
- 13. Improve awareness and involvement between the Santa Clara County FireSafe Council and South Santa Clara County communities with personnel at the fire station.



#### **BATTALION 2**

Battalion 2 encompasses approximately 250 square miles of SRA lands in the Northeastern portion of Santa Clara County and the SRA lands in the Almaden Valley. A major portion of the Battalion covers the remote, undeveloped area of the Diablo Range.

Topography in Battalion 2 ranges from the foothills South and East of the Bay to the mountainous areas of the Diablo Range. Fuel types are generally grassland (30%), oak woodland (30%), California mixed chaparral (30%), and mixed conifer (10%), along the ridgelines of the Diablo Range.

Most of the fuels in the wildland urban interface (WUI) areas on the border of San Jose City would be classified as a grass model, except for the Alum Rock area. The fuel type that presents the greatest threat for this interface area is the eucalyptus trees. These trees will be the main source of firebrand production and have the potential to cause moderate to long-range spot fire ignitions and will make control efforts and structure defense difficult.

Higher elevations above the frequent inversion layer stay very dry and commonly experience nighttime subsidence with an offshore component, dropping the relative humidity into the single digits. Extreme fire behavior has been observed on several wildfires above 2,000 feet in elevation in the Diablo Range due to this microclimate. In late summer and fall, when the offshore flow is more prevalent and the live fuel moistures reach critical levels, large fire potential is quite high. Strong pressure gradients between interior California and the ocean produce very strong winds through the area.

Battalion 2 is made up of two single-engine stations: Almaden and Smith Creek. Almaden Station operates year-round and is typically staffed with a Fire Captain, Engineer, and Firefighter. Smith Creek Station is open for 9 months each year and is staffed by one Fire Captain and two Firefighters.

Most of Battalion 2 encompasses the rural areas East of San Jose. An expansive Wildland urban interface zone exists in the East San Jose foothills as well as in the Almaden Valley area South of San Jose City. This creates the potential for a significant wildfire within the City of San Jose that could result in considerable structure loss. Some high-density Local Responsibility Area (LRA) communities in the lower foothills are intermixed with native wildland fuels, eucalyptus trees, and flammable non-native landscaping.



The alignment of a high wind event could drive a fire front through these subdivisions, with the structures themselves becoming the main source of fuel loading and fire spread. The remote SRA areas also have a high potential for major fires, but ignitions are limited. In 2003 and 2020, lightning ignited numerous fires in the Diablo Range, with several becoming major incidents.

Most fires in the Battalion are typically contained by the initial attack resource assignment. Cooperation with the San Jose Fire Department and augmented dispatches provides a significant factor in the rapid containment of fire starts in the wildland urban interface zone. Fire Prevention in Battalion 2 focuses on public information and education. Fuel reduction projects are a priority in the areas of Grant Ranch County Park and the Lick Observatory. Several vegetation management burns are also planned for private landholdings in the Eastern portion of the Battalion.

### **Priority Areas**

The priority areas within the Battalion were based on three factors: Values at Risk, Communities at Risk, and Watershed Value. The five areas are:

- 1. Smith Creek Truck Trail Maintenance
- 2. Lick Observatory
- 3. The Community of Twin Creeks
- 4. North and South Fuel Breaks
- 5. Casa Loma Road

- Continue homeowner defensible space inspections (LE100 Inspections) for habitable structures.
- 2. Conduct Vegetation Management Program (VMP) projects within the Grant Ranch and Calero County Parks.
- 3. Provide support for the establishment of a Santa Clara County-wide Community Wildfire Protection Plan.
- 4. Continue development and maintenance of a fuel break around Copernicus Lookout.
- 5. Continue repairs and improvements to the Copernicus Lookout.
- 6. Install additional water tanks for fire protection at Smith Creek Station.



- 7. Conduct public information and education programs at local schools.
- 8. Distribute Fire Safe educational materials at public gatherings and public venues.
- 9. Educate the public on proper techniques and procedures for home hardening.
- 10. Implement wildland exercises and training with cooperators and adjoining agencies.

#### **BATTALION 3**

Battalion 3 is in Santa Clara County and is along the eastern slope of the Santa Cruz Mountains from Los Altos right at the San Mateo County line south to Hecker Pass (Hwy 152) west of Gilroy. The Battalion resides solely in the State Responsibility Area (SRA) and enjoys positive working relationships with the Santa Clara Central Fire Protection District in the north, the San Jose Fire Department centrally, and Morgan Hill and South Santa Clara County Fire District (CAL FIRE cooperative fire protection agreements) to the South. Within the Battalion are the primary domestic water supply watersheds for Silicon Valley, providing water to over two million residents through six reservoirs and two water companies: the Santa Clara Valley Water District and the San Jose Water Company. The Battalion is home to a large amount of coast redwood protected from development by the Open Space Districts and County Parks.

The large population centers of Palo Alto, Cupertino, Los Gatos, and Saratoga are all within the Local Responsibility Areas (LRA) but are treated as Mutual Threat Zones (MTZ). The weather in Battalion 3 is typical of a Mediterranean climate. Fog often rolls in during the evening hours and burns off late the next morning. Onshore breezes from the Pacific raise humidity and moderate fire danger most summer afternoons. Evening inversions that set up above the fog layer create extremely low humidity levels overnight and create humidity readings that can be as much as 30% lower 500 ft. above the fog. Offshore flow, coupled with low 100 and 1000-hour fuel moisture levels in late summer, fall, and even in the winter months, creates critical fire weather conditions. The historic large fires in this battalion have occurred under the influence of strong north winds, which bring the entire Santa Cruz Mountain range into a critical wind alignment when they surface. The East Slope of the Santa Cruz Mountains receives, on average 25 inches of rain per year. Strong, moist Pacific storms come off the ocean and create orographic lift on the mountain range, producing significant rainfall. During drought conditions, as seen in the Battalion between 2012-2016, live fuels can become extremely stressed and hit critically low levels around August instead of mid-September, and result in fires that become resistant to control, as seen in the 2008-2009 fire season, and the Loma Fire in 2016.

Fuels in Battalion 3 are diverse and can change rapidly over the mountain range depending on slope, aspect, and elevation. Elevations in the Battalion range from 350ft above sea level in the valley up to nearly 4000 ft. on the summits of Loma Prieta and



Mt. Umunhum. Grass/Oak woodlands dominate the lower elevations, transitioning to mixed conifers and mixed chaparral on the upper slopes. Conifer trees in this area include Coast Redwood, Douglas Fir, Gray Pine, Knobcone Pine, and Monterey Pine. Chapparal is dominant and extremely continuous on the southwest aspects of the eastern mountain range, with some stands having little to no recorded fire history.

The National Fire Danger Rating System (NFDRS) fuel models most common in the battalion are V (Grass), X (Brush), Y (Timber), and Z (Slash/Blowdown). The State Highway 17 corridor is densely populated and has a large amount of coastal redwood, a significant understory of brush, and young trees from decades of build-up.

Fires starting along Highway 17 can take large amounts of resources to control due to the down and dead fuel components in the understory and extended travel times due to the route being heavily traveled by commuters. Traffic coming to a standstill on major and alternate routes during a fire can extend resource response times to more than triple their regular response times due to the congestion.

The battalion has two fire stations: Alma Fire Station in Los Gatos at Lexington Reservoir and Stevens Creek Fire Station in Cupertino on the Stevens Creek Reservoir. Both stations are staffed with one Type 3 Engine Company. The battalion is also home to the Alma Helitack Base, which houses one S70i Fire Hawk Helicopter and one Helicopter Support Unit.

During fire season, the battalion responds to SRA-related wildland fires and responds with the Santa Clara Central Fire Protection District to assist with their life/property mission. During the winter months, Stevens Creek station is closed, and Alma station remains open to assist with Unit Vegetation Management Projects and assist Santa Clara County with emergency incidents such as vehicle accidents, structure fires, medical aids, and any other emergencies within their initial response area. The Helicopter is also staffed seven days a week and is available for water dropping and rescue missions. Alma Helitack Base is now designated as a 24-hour night base. With the helicopter's night vision goggles (NVG) capabilities, it is equipped to respond to wildfires day and night.

The battalion has a history of large, devastating fire occurrences, including the 2016 Loma Fire, the 2009 Loma Fire, the 2008 Summit Fire, the 2002 Croy Fire, the 1996 Cats Fire, and the 1985 Lexington Fire. Alma Fire Station, named after the town of Alma, was the original Santa Clara Unit Headquarters before it was moved for the construction of the dam at Lexington Reservoir in 1953. The towns of Alma and Lexington were consumed when the reservoir was created. When the reservoir lowers during drought years, foundations from houses and structures from the towns, as well as the original "Santa Cruz Highway," can be seen. The station was moved to its present location, and the headquarters was then moved to Morgan Hill.



#### **Priority Areas**

- 1. The Lexington Basin area includes Aldercroft Heights, Chemeketa Park, Redwood Estates, Soda Springs Canyon, and the State Highway 17 Corridor. These communities combined cover 3,000 acres and include an estimated population of 2,400 residents. The average number of vehicles travelling per day on State Route 17 past the Alma Fire Station location is 55,000 and includes many commuters to Silicon Valley and other locations in the Bay Area. There is also a significant amount of commercial traffic travelling through the area, supporting large communities in Santa Cruz and Santa Clara Counties.
- 2. The Saratoga area includes Highway 9 and Highway 35 Corridors, Stevens Canyon Road, Redwood Lodge Road, and Sanborn County Park.
- 3. Loma Chiquita and Casa Loma area of the Loma Prieta Headwaters Fuel Break Project, formally known as the PL-566 Llagas Creek Watershed Project. These communities combined cover 5,500 acres and include an estimated population of 175 residents.
- 4. SRA Lands that border urban areas such as Los Altos Hills and others.
- Watershed areas controlled by the Santa Clara County Open Space Authority, Mid-Peninsula Open Space District, San Jose Water Company, and Santa Clara County Parks.

- 1. Continue fuel modification work within the Lexington Basin in support of the Lexington Hills Community Wildfire Protection Plan (CWPP) and the new Santa Clara County CWPP on projects including Montevina Road, Morell Road, Moody Gulch, Black Road, Bear Creek Road, and Hwy 17.
- 2. Conduct fuel modification work within the vicinity of Saratoga (including Highway 35 and Highway 9), Redwood Lodge Road, Sanborn County Park, and Stevens Canyon Road.
- Conduct fuel modification along escape routes on Loma Chiquita and Casa Loma Roads, fuel break around the Loma Prieta repeater site, and fuel modification along Chual Spur Road.
- 4. Conduct fuel modification at Rancho Canada Del Oro Open Space and the Sierra Azul Open Space Preserve.
- Assist the Santa Clara County Fire Safe Council through grants to expand a chipper program to include stakeholders in the Croy Ridge, Loma Chiquita, and Casa Loma communities.



- 6. Assist in gaining stakeholder support for a shaded fuel break along the western boundary of Santa Clara County.
- 7. Assist Santa Clara County Parks with a shaded fuel break around campgrounds and cabin structures in Mt. Madonna County Park.
- 8. Continuing maintenance of evacuation routes on Morrill, Montevina, and Wright Station Roads.
- Assist in securing grant money in pursuit of above-ground water storage tanks for fire suppression use at the Bear Creek Stables in the Sierra Azul Open Space Preserve.
- 10. Assist County Parks and the South Skyline Fire Safe Council in maintaining a fuel break along Charcoal Road from Table Mountain through to Sanborn County Park.
- 11. Continue homeowner defensible space inspections (LE 100) in and around the Lexington Basin with a focus on the communities of Aldercroft Heights and Soda Springs Canyon.
- 12. Continue homeowner defensible space inspections (LE 100) in the Stevens Canyon area with a focus on Montebello and Redwood Lodge Roads.
- 13. Continue collaborative work with the South Skyline FireSafe Council in Santa Cruz County along Skyline Road (Highway 35), including fuel modification work to maintain an evacuation route between Santa Clara and Santa Cruz Counties.
- 14. Distribute FireSafe educational materials at public gatherings and public venues.
- 15. Whenever dealing with the media, suggest fire prevention messages to be included and integrated into their story.



## **BATTALION 4**

Battalion 4 covers the entire County of Alameda. Alameda County has a population of 1.5 million people. It is geographically located on the Eastern side of the San Francisco Bay and stretches eastward from Oakland into the greater San Joaquin Valley near Tracy. Contra Costa County borders it to the north, while Santa Clara and San Joaquin border it to the south and east.

Topography ranges from rolling hills near the bay to mountainous elevations up to 4000 feet, with steep canyon drainages south of Livermore. Fuel types are generally grass (50%), chaparral (30%), and oak woodland (20%). The weather during fire season is temperate near the bay and hotter and drier further inland, approaching the inland valleys. The most significant weather factor in Alameda County is wind. Wind patterns are predominantly west to east during fire season due to the cooler marine air flowing from the San Francisco Bay into the Livermore and San Joaquin valleys. Wind speeds vary, but on most summer days, the winds near the bay are 10 to 20 mph; in the eastern portion of the county, on those same days, wind velocities will be 15 to 25 mph. Wind velocities of 40 to 50 mph in the eastern portion of the Battalion are not uncommon under normal weather patterns. Even though relative humidity is tempered by the marine influence, the higher wind speeds adversely affect fire behavior. Any fire starts with sustained fuel continuity downwind of the origin of the fire quickly progresses into moderate to rapid rates of spread at the fire's head. Quick initial attack by fire suppression forces is critical in these conditions.

Sunol Fire Station is home to two Type III Engines and one Type II Bulldozer. Sunol Fire Station is also home to one Type I Advanced Life Support (ALS) Engine and one Type VI Engine staffed by CAL FIRE personnel under a cooperative fire agreement with the Alameda County Fire Department (ACFD).

Operationally, Battalion 4 is a complex environment for CAL FIRE. There are eleven local government fire agencies operating in Alameda County. Combined, there are 125 paid companies in the Alameda County Fire Service. Nine of the eleven departments border CAL FIRE state responsibility areas (SRA).

There are approximately 70 miles of wildland urban interface (WUI) separating local government responsibility areas (LRA) from the 286,000 acres of CAL FIRE jurisdiction. The interface area is densely populated with homes that easily exceed one million dollars each. The high values at risk in Battalion 4 and the windy conditions have combined to create high damage loss fires historically. A single two-acre fire in the Oakland Berkeley Hills destroyed two homes and damaged a third, for a total damage loss of four million dollars. The 1991 Tunnel fire destroyed 3,000 homes for a loss of 1.8 billion dollars. Life safety at wildland fires is a major concern.



There have been 28 wildland fire fatalities in Alameda County going back to 1968, including citizens, police, and firefighters. Coordination during wildland fire evacuations in the densely populated interface areas is a major challenge. Coordination with local government fire resources is critical to fire response in Alameda County. An extensive cooperative effort over the past ten years to create and manage mutual threat zones and responses to fires has dramatically increased CAL FIRE's initial attack capability in this area. That, coupled with CAL FIRE moving additional fire engines and helicopters into the East Bay during times of high fire danger, increases the probability of keeping fires small and therefore reducing the need for evacuations and reducing dollar loss.

The focus for fire prevention in Battalion 4 is public education, information, planning, and fuel reduction in prioritized areas. This focus includes a strong relationship with stakeholders to maximize the effectiveness of limited resources to accomplish prioritized objectives. East Bay Regional Parks and the University of California, Berkeley completed an Environmental Impact Report to address fuels management by way of the establishment of fuel breaks, shaded fuel breaks, and the reduction of hazardous trees and other vegetation within their jurisdiction of Alameda County. Similar environmental compliance documents are in progress by the City of Oakland for their open space lands.

CAL FIRE is partnered with local government fire agencies, the Diablo FireSafe Council (DFSC), and the Hills Emergency Forum. This partnership is designed to reach beyond the fire service to involve homeowners, community leaders, planners, developers, insurance companies, public utilities, and others to reduce the risk of wildfire before a fire starts. In 2018, the University of California, Berkeley received a \$3.6 million grant for fire hazard reduction and protection of key evacuation zones on their Hill Campus. In 2021, the University of California, Board of Regents certified the Final Environmental Impact Report (EIR) for the UC Berkeley Hill Campus Wildland Vegetative Fuel Management Plan. The Plan identifies two fuel break projects, four temporary refuge areas, and three fire hazard reduction treatments, totaling approximately 600 acres.

Evacuation support projects completed under the grant included along Centennial Drive, Claremont Avenue, and the Jordan Fire Trail. In November 2020, Berkeley residents voted for Measure FF to create a parcel tax generating \$12.7 million for emergency response and preparedness. In 2021, the Fire Department formed its Wildland Urban Interface Division with an enhanced vegetation management inspection program, development of a Community Wildfire Protection Plan (CWPP), the City's Safe Passages program focused on evacuation, and risk reduction in collaboration with adjacent agencies. In 2022, the Berkley Fire Department started putting together its Community Wildfire Protection Plan (CWPP), and it was approved on May 16th, 2023.



In 2021, five projects were completed in high fire areas in Oakland and Castro Valley, expending almost \$23,500 in grant funds, matched by over \$176,500 in community funds and sweat equity. Focus areas for new grant funding will be used for a cost-share program for hazardous fuel reduction, "defensible space" and chipping, outreach, education, planning for new projects, and preparing residents for evacuation. In addition, over \$100,000 of DFSC obtained grant funds were spent removing trees that could fall and block key evacuation routes in Oakland.

Funding will also be used to work with CAL FIRE and Alameda County Stakeholders to update the Alameda Countywide Community Wildfire Prevention Plan (CWPP) during 2022-23, participate in the development of the first Regional Priority Plan (RPP), and identify future community-focused appendices. Alameda County adopted its first Community Wildfire Prevention Plan (CWPP) in 2011 and adopted an updated plan in 2015. The community of Sunol adopted a site-specific CWPP plan in 2017. In 2021, a new grant funding of \$493,850 for both Alameda and Contra Costa will extend the program to March 2025.

#### **Priority Areas**

Wildland urban interface (WUI) areas that are SRA/ local responsibility area (LRA) jurisdiction:

- Oakland-Berkeley Hills 16,200 acres protecting an estimated population of over 500,000. Oakland Fire, Berkeley Fire, East Bay Regional Park District, University of California, Berkeley, and CAL FIRE have jurisdiction. Continuing to work with Diablo Fire Safe Council and community members on cost-share hazardous fuel reduction projects, including those in Berkeley and Oakland.
- 2. San Leandro-Castro Valley Hills 8,500 acres protecting an estimated population of 154,800. Alameda County Fire, East Bay Regional Park District, and CAL FIRE have jurisdiction. Continuing to work with Diablo Fire Safe Council and community members on cost-share hazardous fuel reduction projects, including those in Castro Valley and San Leandro.
- Hayward Hills 5,000 acres protecting an estimated population of 58,969 in Hayward & Fairview. Hayward Fire, East Bay Regional Park District, and CAL FIRE have jurisdiction.
- 4. Union City-Fremont Hills 10,000 acres protecting an estimated population of 310,460. Alameda County Fire, Fremont Fire, and CAL FIRE have jurisdiction.



- 5. Pleasanton Ridge Kilkare Woods Sunol 4,000 acres protecting an estimated population of 5,000. Alameda County Fire, Livermore-Pleasanton Fire, East Bay Regional Park District, and CAL FIRE have jurisdiction. Affected by the 2020 SCU Lightning Complex Fire. Continuing to work with Diablo Fire Safe Council and community members on cost-share hazardous fuel reduction projects, including those along Pleasanton Ridge, and in Kilkare Woods and Sunol.
- 6. Palomares Niles Canyon 3,500 acres with an estimated population of 1,500. Alameda County Fire, Hayward Fire, Fremont Fire, East Bay Regional Park District, and CAL FIRE.
- 7. San Francisco Water District Alameda County Watershed, 5000 acres.

#### **Objectives**

Continue and enhance fuel modification and fuel reduction projects in the wildland urban interface areas. Coordinate resources with the Hills Emergency Forum, the Diablo Fire Safe Council, and community members on cost-share hazardous fuel reduction projects. Projects include but are not limited to:

- 1. Sunol-Diablo FireSafe Council cost-share hazardous fuel reduction projects with Sunol and Kilkare Woods community members. Starting in 2025, the Alameda County Fire Department will be working on a fuel reduction project on Kilkare Road in the community of Sunol. This project will reduce the fuel loading along Kilkare Road and is a CAL FIRE grant-funded project.
- 2. Castro Valley-Diablo FireSafe Council cost-share hazardous fuel reduction projects with Castro Valley community members.
- 3. Berkeley upper Strawberry Canyon fuel reduction project, including the University of California, Berkeley's, hazardous fuel reduction projects along Centennial Road and Claremont Avenue for escape routes.
- 4. Diablo Fire Safe Council East Bay roadside clearance and evacuation support hazardous fuel reduction projects.
- 5. East Bay Regional Park, Claremont Canyon fuel reduction project, and University of California, Berkeley evacuation support project, hazardous fuel reduction along Claremont Canyon Road and East-West Trail (ridgetop).
- 6. Tilden Park eucalyptus removal project.
- 7. Oakland-Berkeley Hills 15-mile fuel break project and Diablo Fire Safe Council cost-share hazardous fuel reduction projects with the Oakland and Berkeley communities.



- 8. Oakland Shepherd Canyon shaded fuel break project.
- 9. East Bay Regional Parks Anthony Chabot Park fuel reduction project. East Bay Regional Park District is currently operating a carbonator for their fuel reduction project of 80 initial acres at Anthony Chabot Regional Park. The carbonator is turning the fuels burned into biochar and will be shipped out of the park for use in gardens and several other uses.
- 10. Highway 24 Caldecott Tunnel fuel reduction project.
- 11. Hayward Hills-Fairview Diablo Fire Safe Fuel Reduction Project.
- 12. Oakland Joaquin Miller Park The CAL FIRE SCU hand crews and fuel reduction engines are working on a fuel reduction project meant to reduce fire activity and enhance access for fire equipment in a populated area. The reduction of fuels will help in slowing any potential fire spread around the main arteries throughout the park.
- 13. Support investigations into tree mortality issues related to pests and diseases affecting acacia, eucalyptus, Monterey pine and other species.
- 14. Assist local partner agencies with locating facilities that accept biomass from fuel reduction projects.
- 15. Permits requiring numbering and marking gates and road access utilizing the standards of PRC 4290 with regard to signage.
- 16. Conduct geographic information system (GIS) / global positioning satellite (GPS) mapping and marking of wind farm gates and road system for emergency responses.
- 17. Conduct public information and education programs at local schools.
- 18. Distribute Fire Safe educational materials at public gatherings and public venues. Support Firewise community activities.
- 19. Utilize Defensible Space Inspectors and Volunteers in Prevention for targeted inspections of dwellings and buildings for LE 100 inspections and compliance with PRC 4291. Support local partner agencies in distributing home hardening information.
- 20. Whenever dealing with the media, suggest fire prevention messages to be included and integrated into their story.
- 21. Conduct meetings with agricultural groups such as the Cattlemen's Association and Farm Bureau to provide information and encourage the use of firebreaks and clearance around all improvements such as dwellings, barns, outbuildings, and wells.



- 22. Conduct training exercises and pre-fire season briefings with cooperating fire agencies and share pre-fire plans for special target hazards.
- 23. Assist with an update of the countywide community wildfire prevention plan (CWPP); update planned for 2024. Assist with the development of the Regional Priority Plan for forestry, fire protection, and watershed improvements in support of California's Wildfire and Forest Resilience Action Plan (Governor's Forest Management Task Force Plan, Jan 2021).
- 24. Work with the Alameda County Evacuation Task Force to develop concise pre-response and evacuation plans for priority areas in the Battalion. These plans and maps will provide new personnel, ECC staff, and incident management teams with the location of strategic control points and access into the SRA lands.
- 25. Work with Diablo Fire Safe Council to promote evacuation preparedness in community members, in conjunction with wildfire prevention and the Alameda County Evacuation Task.
- 26. Assist with the development of the Regional Priority Plan for forestry, fire protection, and watershed improvements in support of California's Wildfire and Forest Resilience Action Plan (Governor's Forest Management Task Force Plan, Jan 2021).



#### **BATTALION 5**

Battalion 5 covers Western Stanislaus County, west of the San Joaquin River between San Joaquin County to the North and Merced County to the South.

Most of Stanislaus County between the San Joaquin River and Interstate 5 is a local responsibility area (LRA). The Battalion also includes a portion of Eastern Santa Clara County, including the San Antonio Valley, and is bordered by the top of the China Grade on Mount Hamilton Road to the west of the San Antonio Valley.

The vegetation and topography in Battalion 5 transitions from annual grass rangelands on rolling foothills along the Interstate 5 corridor to remote, steep, brush and pine-covered mountains to the west. The area includes over 230,000 acres of watershed critical to maintaining downstream water quality. All runoff flows into the San Joaquin River, a valuable fishery and source of agricultural and domestic water supply. Numerous plants and animals that are designated as rare, threatened, or endangered species, or are candidates for such designation, occur here.

The Battalion includes sparsely populated rural and ranch properties and a planned upscale residential resort community in the Salado Creek area, being developed under the Diablo Grande Specific Plan. Currently, development at Diablo Grande consists of a golf course and just over 800 homes. The Battalion includes wilderness areas of Henry Coe State Park and the Frank Raines Off-Highway Vehicle Park.

Frank Raines Park is an 800-acre multi-use park operated by Stanislaus County, located 18 miles west of Patterson in Del Puerto Canyon. Eight hundred acres of the park are designated for off-highway vehicle (OHV) use. The OHV portion of the park is in very steep and treacherous terrain. Because of the steep terrain and the potential fire risk, the OHV portion of the park is typically closed from June through October of each year. The 23,300-acre wilderness area of the 87,000-acre Henry Coe State Park is in Western Stanislaus County. The wilderness area is environmentally sensitive and has several archeological sites within its boundaries.

The Battalion has a significant history of large, damaging wildland fires. With many of the fires starting along the Interstate 5 corridor, most large, damaging fires have occurred in the more remote areas of the Battalion. The primary factors contributing to the difficulty of control have been the steep, inaccessible terrain, the extreme burning conditions from decadent brush and pine trees, and the prolonged response time for fire suppression resources to the remote areas of the Battalion.



### **Priority Areas**

- 1. Diablo Grande Development Fire Break / Fuel Reduction Project in the wildland urban interface (WUI).
- 2. Diablo Grande Development is a 28,500-acre planned residential and resort community located nine miles west of Patterson. Currently constructed there is one 18-hole golf course and approximately 800 residential homes. This project consists of a combination of fire breaks, fuel reduction projects, and green belts.
- 3. The Mount Oso Road fire break is maintained by CAL FIRE to provide safe access and to act as a critical fire break to protect the critical communications facilities, which serve central California, located at the summit of Mount Oso.
- 4. Stanislaus/Santa Clara County Line Road fire break. This primarily ridge-top road runs from the San Antone Valley to Highway 152 at the Merced and Santa Clara County lines. The road serves as a critical access road and a fire break between the urban interface of Santa Clara County and the environmentally sensitive wilderness areas of Henry Coe State Park and the Orestimba Creek watersheds.

- 1. Improve local operational efficiency and effectiveness by continuing to improve mutual and auto-aid agreements between CAL FIRE, the West Stanislaus Fire Protection District, and the City of Patterson. This will include improving communications systems and dispatch procedures. The Current Automatic Aid Agreement with the City of Patterson has been in place since 2014 and was updated in 2021. An Automatic Aid Agreement with West Stanislaus Fire Protection District was completed in May of 2022.
- 2. Review all development projects for compliance with PRC 4290 and make recommendations for fire defense improvements.
- Continue participating as a voting member of the Stanislaus County Fire
   Authority in developing improved local fire codes, ordinances, and fire prevention
   processes.
- 4. Work with Caltrans and local landowners on mowing, disking, and other fuel reduction projects along the I-5 corridor, to prevent large wind-driven fires that endanger the motoring public and interrupt transportation and commerce through the area.
- 5. Work with Caltrans on opening the median of Interstate-5 for an emergency vehicle to cross.



- 6. Work with the electric utilities (PG&E and TID) on grading fire roads and maintaining fuel breaks along critical transmission lines.
- 7. Work closely with local fire officials to improve communication between agencies.
- 8. Maintain critical fire roads and fuel breaks.
- 9. Work with West Stanislaus County Fire Protection Districts and Stanislaus County Parks on improving fire safety conditions in Frank Raines OHV Park.
- 10. Develop concise pre-response and evacuation plans for priority areas within the Battalion. These plans and maps will provide new personnel, ECC staff, and incident management teams with the location of strategic control points and access to the SRA lands.
- 11. Repair the Mt. Oso Fire Lookout Facility and bring it back to operational status to use in the detection of wildfire on the East side of the unit. Seek funding and a fiscal sponsor to establish a fire detection camera at Mt. Oso.
- 12. Distribute Fire Safe educational materials at public gatherings and public venues.
- 13. When working with the media, it is essential to incorporate fire prevention messages into their stories. This approach not only increases awareness but also plays a critical role in promoting community safety and wildfire resiliency.



#### **BATTALION 6**

In Battalion 6, the focus on fire prevention is public education, defensible space, and fuel reduction projects in prioritized areas. One of our biggest partners in this field is the Diablo FireSafe Council (DFSC). The DFSC has been very successful in obtaining grant money to further fire safety and fuels management projects. In 2021, the DFSC received a grant for \$493,850 for both Contra Costa and Alameda Counties to support wildfire prevention programs and fuel reduction work, through March 2025. Past grants have benefited multiple communities in Alameda and Contra Costa Counties including El Cerrito, Kensington, Lafayette, Moraga, Orinda, and Walnut Creek (Rossmoor).

Focus areas for grant funding include hazardous fuel reduction for defensible space, home-owner assistance chipping, evacuation route improvements, and educational outreach. Funding will also be used to work with Contra Costa County Stakeholders to implement a county-wide Community Wildfire Protection Plan (CWPP) and identify future priority projects. The last Contra Costa County CWPP was approved by the County Board of Supervisors in May of 2020. Community-focused CWPPs were also prepared for the El Cerrito-Kensington area, the City of Richmond and the communities of Moraga and Orinda.

In 2021, the Contra Costa Resource Conservation District was awarded a grant from the Coastal Conservancy to prepare a Regional Priority Plan (RPP) for Alameda and Contra Costa Counties, that compliments each county's CWPP. In 2024, the DFSC also received a Coastal Conservancy grant to update this RPP to coincide with updated CWPPs for both counties.

In 2023, CALFIRE awarded a Wildfire Prevention grant to the Contra Costa County RCD to prepare a Vegetation Treatment Program (VTP) and Burn Plan for portions of Marsh Creek State Park, Round Valley Regional Preserve, and the Los Vaqueros Watershed. This project is currently in the development stages.

CAL FIRE will be continuing its relationship with the Hills Emergency Forum (HEF). This Forum, made up of nine stakeholder agencies in both Alameda and Contra Costa Counties, has worked tirelessly for over two decades, since the 1991 Tunnel Fire, to both prevent and prepare for another wildland urban interface event that could occur in the Oakland Hills area. Battalion 6 personnel will continue to support the CWPP, RPP, and all other projects.



### **Priority Areas**

Wildland urban interface (WUI) areas that are SRA/LRA jurisdiction, as well as sensitive infrastructure and cultural areas:

- 1. Canyon: 1,200 acres with an estimated population of 500. This area is near the borders of Contra Costa and Alameda Counties and has very poor access and evacuation routes for citizens. Moraga-Orinda Fire, East Bay Regional Parks, and CAL FIRE have jurisdiction. Continuing to work with Diablo FireSafe Council and community members on cost-share projects.
- 2. Mt Diablo State Park contains 30,000 acres that border the communities of Danville, Alamo, Diablo, Walnut Creek, Clayton, and Morgan Territory, with an estimated population of 20,000. This area has numerous State and Federally protected plant and animal species as well as sites with very high cultural importance to Native Americans. Battalion 6 staff are currently working with Save Mt. Diablo, Diablo FireSafe Council, and community members to provide technical assistance with fuel modification.
- 3. Alhambra Valley, Wildcat Canyon, and West Contra Costa County: 25,000 acres with an estimated population of 20,000. Richmond Fire, Contra Costa County Fire, Moraga-Orinda Fire, Pinole Fire, Rodeo-Hercules Fire, Crockett Fire, East Bay Regional Parks, and CAL FIRE have jurisdiction. Continuing to work with Diablo FireSafe Council and community members on cost-share projects, including those in Briones, East Richmond Heights, Moraga, Orinda, and Richmond.
- 4. Bollinger Canyon and Las Trampas Ridge: 5,400 acres with an estimated population of 5,000, including Saint Mary's College in Moraga. Moraga-Orinda Fire, San Ramon Valley Fire, East Bay Regional Parks, and CAL FIRE have jurisdiction. Continuing to work with Diablo FireSafe Council and community members on cost-share projects, including those in Bollinger Canyon and Hunsaker Canyon.
- 5. Los Vaqueros Watershed and Mallory Ridge: 25,000 acres with an estimated population of less than 2,000. This area includes the Los Vaqueros Reservoir, which provides drinking water to nearly half a million citizens.
- 6. North Orinda Shaded Fuel Break: 19 miles long with over 1,500 acres, the North Orinda Shaded Fuel Break was created in 2019 along Lafayette Ridge in Briones Regional Park, following Happy Valley Road in Orinda through Russell Reserve, east along Bear Creek Road to Wildcat Canyon Road, then north along Inspiration Point. Protecting not only the 62,000 residents of Orinda and Lafayette, but also the Briones and San Pablo Reservoirs, which provide drinking



water to over 1.4 million residents. The shaded fuel break is designed to slow the spread of wildfire across county lines into Alameda County and the cities of Albany, Berkeley, Emeryville, Oakland, and Piedmont. The North Orinda Shaded Fuel Break also will slow the spread of fire into other Contra Costa County communities including: Acalanes Ridge, Alamo, Alhambra Valley, Canyon, Castle Hill, Concord, Contra Costa Center, East Richmond Heights, El Cerrito, El Sobrante, Hercules, Kensington, Martinez, Moraga, Pacheco, Pinole, Pleasant Hill, Reliez Valley, Richmond, San Miguel, Saranap, Shell Ridge and Walnut Creek. Where Moraga-Orinda Fire, Contra Costa County Fire Protection District, East Bay Municipal Utilities District, East Bay Regional Parks, Berkeley Fire, and CAL FIRE have jurisdiction.

7. Lafayette / Walnut Creek Shaded Fuel Break: 14 miles long with 250 acres in Lafayette, Moraga, and Walnut Creek. Contra Costa County Fire Protection District requested grant funding for this project from the California Climate Investments Fire Prevention Grant through Cal Fire. The primary fuel reduction efforts will consist of two fuel reduction modules, each consisting of a hand crew, a chipper, and two medium-duty excavators equipped with forestry rotary brush cutters on articulating arms. In areas that the excavators cannot access, work will be accomplished using hand crews and chippers. The prescription consists of ladder fuels removed, duff and litter greater than 1" diameter removed or piled for winter burning, concentrations of brush thinned or removed, low-hanging branches within 6' of the ground trimmed. Annual grass and weeds cut or grazed to less than 6" by cattle and goats. The second operation will be the removal of dead, dying, or diseased trees within the identified fuel break. Most hazard fuels will be piled for winter burning. Cut trees will be removed or chipped on site, dependent on size, health of the tree, and access. To mitigate brood stratum opportunities for beetles, downed logs will not be left on site in accordance with Forest Practice Rules and VMPs.

- Continue and enhance the fuel modification, fuel reduction, and roadside clearance evacuation support projects in the wildland urban interface areas. Coordinate resources with the Diablo FireSafe Council and the Hills Emergency Forum. Projects include but are not limited to:
  - i. Morgan Territory / Marsh Creek
  - ii. Kensington Hills
  - iii. Moraga area
  - iv. Orinda area



- v. Lafayette area
- vi. El Cerrito area
- vii. Richmond area
- viii. Walnut Creek area (Rossmoor)
- ix. Hills Emergency Forum fuel reduction projects
- x. Highway 24 Caldecott Tunnel
- xi. Grizzly Peak Boulevard County boundary with Alameda County
- xii. Russell Reserve and North Orinda shaded fuel break
- 2. In cooperation with Moraga-Orinda Fire, conduct LE-100 inspections and look at access and egress issues within the Community of Canyon. Promote evacuation preparedness, in conjunction with wildfire prevention.
- 3. Review/update Mt. Diablo State Park pre-fire management plan with State Parks and other local agency cooperators
- 4. Utilize Defensible Space Inspectors and Volunteers in Prevention for targeted priority areas.
- 5. Continue working with Contra Costa Water District to protect and enhance the Los Vaqueros watershed and nature area.
- 6. Update the countywide CWPP and develop appendices for communities working with Diablo Fire Safe Council. Support Firewise communities in their efforts to assist with the implementation of projects at the local level.
- 7. Assist with the development of the Regional Priority Plan for forestry, fire protection, and watershed improvements in support of California's Wildfire and Forest Resilience Action Plan (Governor's Forest Management Task Force Plan, Jan 2021).
- 8. Support investigations on tree dieback issues related to unknown pests/ diseases affecting acacia, eucalyptus, Monterey pine, and other species. It was first recognized in 2020 and is under investigation with CAL FIRE forest specialists and the USDA US Forest Service Research Lab staff.
- 9. Assist local partner agencies in addressing biomass disposal issues and opportunities related to fuel reduction projects.



- 10. Upkeep, maintenance, and mapping of the Contra Costa County fire trails.
- 11. Remain active in the Diablo FireSafe Council.
- 12. Participate in public education events at public gatherings and venues.
- 13. Conduct training exercises and pre-fire season briefings with cooperating fire agencies and share pre-fire plans for special target hazards.
- 14. Develop concise pre-attack plans and compartment maps that will provide new personnel, ECC staff, and overhead teams with the location of strategic control points and access into the vast areas of SRA lands.
- 15. Educating the public on the equipment may cause fires.
- 16. Reduce arson fires.
- 17. Conduct public information and education programs at local schools.
- 18. Distribute FireSafe educational materials at public gatherings and public venues.
- 19. Whenever dealing with the media, suggest fire prevention messages to be included and integrated into their story.
- 20. Inspections of dwellings and buildings for LE-100 inspections and compliance with PRC 4291. Support local partner agencies in distributing home hardening information.



# **BATTALION 7 (Cooperative Fire Protection)**

The South Santa Clara County Fire District and the Morgan Hill Fire Department together are known as Battalion 7, located in the southern end of Santa Clara County.

Battalion 7 provides All-Risk emergency services, including Advanced Life Support (Paramedics). The Battalion serves a population of approximately 70,000 people in the City of Morgan Hill and the unincorporated areas of Gilroy, San Martin, Pacheco Pass, and Coyote. The Battalion has six fire stations that cover approximately 300 square miles.

Battalion 7 protects residential, commercial, and light industrial occupancies, wildland, wildland urban interface communities, ten wildland Mutual Threat Zones, 80 miles of State Highways 152, 156, 25, and 101, and 45 miles of two separate rail lines owned by Southern and Union Pacific Railroads, which Cal Train Commuter and Amtrak trains also use.

The San Andreas, Hayward, and the Sargent-Berrocal Fault Zone run through Battalion 7. A major water supply from San Luis Reservoir and a major natural gas transmission pipeline also run through the Battalion.

Since 1999, Battalion 7 has provided Advanced Life Support (ALS) services for all community members. Battalion staff work closely with the local ambulance provider, Rural Metro, and Santa Clara County EMS. Along with fire suppression and emergency medical service (EMS), battalion personnel are trained in many other aspects of emergency responses. These include vehicle extrication, hazardous material response, earthquake, and river and flood preparedness. The Battalion also provides fire prevention education and code enforcement to the public. Battalion staff includes four Battalion Chiefs (Battalion 67 overseeing South Santa Clara County Fire District operations, Battalion 57 overseeing Morgan Hill Fire Department operations, Battalion 59 as the Fire Marshal for the City of Morgan Hill, and Battalion 69 as Battalion 7 EMS Coordinator), one Fire Captain in the position of Deputy Fire Marshal for the City of Morgan Hill, nine Fire Captains/Paramedics, six Fire Captains, fifteen Fire Apparatus Engineers/Paramedics, fourteen Fire Apparatus Engineers, three Firefighter II/Paramedics, one Mechanic, four Communication Operators, and two Staff Services Analysts.

The Battalion operates seven Type I Fire Engines, one 105-foot Aerial Fire Truck, one Paramedic Squad, one Ambulance, one Type III engine, two 3,000-gallon Water Tenders, two Utility Vehicles, four Chief Officer Vehicles, one Kubota all-terrain vehicle, and one Technical Rescue Trailer. The Battalion is supported by its sixteen Volunteer Firefighters. In addition to emergency response, Volunteer Firefighters are frequently utilized to staff stations when front-line engines are at other emergencies. Volunteer Firefighters are also involved in numerous charitable activities and fundraisers.



Battalion 7 actively participates in automatic aid agreements with the Gilroy Fire Department, California Department of Forestry and Fire Protection (CAL FIRE), Pajaro Valley Fire District, Hollister Fire Department, and the San Jose Fire Department. Battalion 7 is also an active participant in the Santa Clara County and State of California Mutual Aid Plans, responding to disasters in the County and throughout California. The Battalion is an all-risk emergency response battalion. Personnel respond to approximately 6,500 incidents per year, including various assistance requests by other fire departments, emergency medical services, structure fires, vehicle accidents, wildland fires, hazardous materials releases, water rescues, and public service assists.

## **BATTALION 7 - South Santa Clara County Fire District**

The South Santa Clara County Fire District was established in 1980 when the Gilroy Rural Fire District merged with the Morgan Hill Rural Fire District.

Personnel and administration for the South Santa Clara County Fire District are provided by the California Department of Forestry and Fire Protection (CAL FIRE) under a cooperative agreement. CAL FIRE is the largest all-risk emergency service and resource protection agency within the United States. SCU is responsible for over 1.34 million acres of State Responsibility Area (SRA), as well as Local Responsibility (LRA).

The Insurance Service Organization Rating (ISO) rating for the South Santa Clara County Fire District is a 5/10. The ISO rating of 5 is for properties within five miles of any fire station or any fire department with which we currently have an auto aid agreement. The ISO rating of 10 is anything outside of that five-mile zone.

A seven-member Board of Fire Commissioners oversees the South Santa Clara County Fire District. The Santa Clara County Board of Supervisors appoints them. Each Board Member lives in a different area of the Fire District and represents the local community's diversified views. The Board provides input, oversight, and budget management as representatives of the Santa Clara County Board of Directors. Properties in Battalion 7 that are in the SRA are inspected for defensible space against wildfire.



# **BATTALION 7 - City of Morgan Hill Fire Department**

The City of Morgan Hill was incorporated in 1906 and is a General Law City operating under the Council-Manager form of government. It is a community of approximately 13 square miles, serving over 45,000 people. It is located 12 miles south of San Jose and 50 miles northeast of Monterey. It is a comfortable, thriving residential community, surrounded by agricultural lands producing fruits, vegetables, and wines. Two fire stations provide fire and emergency medical service (EMS) delivery in the City, the El Toro and Dunne Hill fire stations.

In 2022, the city added a two-person Paramedic Squad to increase the available resources to respond to emergency incidents. The construction of a third fire station started in 2023 and is scheduled for completion in November 2024.

The Insurance Service Organization Rating (ISO) rating for the City, updated in 2021, is 3/3X. The ISO rating of 3 is for properties within five miles of any fire station or any fire department with which we currently have an auto aid agreement. The ISO rating of 3X (formerly 9) is anything outside of that 5-mile zone.

# **BATTALION 7 - Morgan Hill Fire Marshal's Office**

The Office of the Fire Marshal is committed to the Protection of Life and Property through the development and application of Fire Prevention Engineering, Education, and Enforcement.

The Fire Marshal's Office provides planning input for developers, plan checking, and inspection services at the various levels required by the City of Morgan Hill. Plan checks for all specialized fire detection and suppression systems are performed by outside resources, while the inspection of these systems is performed by the Fire Marshal's Office personnel and recorded through our Streamline program.

Additionally, the Fire Marshal's Office provides oversight for fire prevention in wildland areas, represents the Department on matters relating to the development, promulgation, and enforcement of related codes and ordinances, and conducts presentations to City Council and/or represents the Department at civic or professional group meetings. The Fire Marshal's office also provides training and education to both fire staff and the public.

By ensuring the enforcement of all fire prevention laws, regulating the use and maintenance of buildings, codes, and ordinances related to the protection of life, property, and the environment from fire and unauthorized or accidental hazardous material releases, the Morgan Hill Fire Marshal's Office makes the community a safer place for everyone.



# **Priority Areas**

Conduct homeowner defensible space inspections (LE-100 inspections within the State responsibility areas):

- 1. Holiday Lake Estates/ Jackson Oaks
- 2. El Matador Drive
- Redwood Retreat Road
- 4. Developed areas East of New Avenue.
- 5. Day Road
- 6. Burchell Road
- 7. Chesbro Reservoir and Live Oak area

- 1. To keep structure fires to the room of origin on the valley floor, to the floor of origin in rural locations, and to the building of origin in extremely rural or mountainous areas of Battalion 7.
- 2. To treat, package, and transport patients to definitive care within 1 hour.
- 3. To meet designated EMS response times 95% or above.
- 4. To adopt the California Fire Code every three years.
- 5. To minimize the interface fire threats.
- 6. To identify high fire severity zones and complete pre-response and evacuation plans.
- 7. To identify fuel reduction and modification projects in the high fire severity zones.
- 8. To support a Community Emergency Response Team (CERT).
- 9. To maintain adequate staffing at all fire stations.
- 10. To pursue additional funding for improved service using grant resources.



- 11. To continue exploring regionalization possibilities.
- 12. Educate the public about the Santa Clara County FireSafe Council.
- 13. Maintain school and special event programs.
- 14. Assist CAL FIRE staff in conducting homeowner defensible space inspections.
- 15. Continue to recruit and retain volunteer firefighters.
- 16. To provide employees with the latest fire and EMS training to support objectives 1 and 2.
- 17. Continue to work with and support all our cooperators.
- 18. Work in cooperation with the Santa Clara County FireSafe Council, local law enforcement, and our local cooperators to develop evacuation plans and fire plans for communities at risk, susceptible to a major incident.
- 19. Utilize the reverse 911 system for public notification during major incidents that may impact their communities.



# **BATTALION 9 (Emergency Command Center)**

The SCU Emergency Command Center (ECC) is one of 21 Emergency Command Centers within the agency. Using the radio call sign "Morgan Hill", the ECC provides command and control services for seven field Battalions, 18 fire stations, the Fire Prevention Bureau, and one Helicopter Base. The 12 State-funded fire stations in SCU are strategically positioned within Santa Clara, Alameda, Contra Costa, Western San Joaquin, and Western Stanislaus Counties.

Those 12 stations house 16 Type III Engine Companies to protect State Responsibility Areas (SRA). Six fire stations under "Schedule A" cooperative agreements house six Type I advanced life support (ALS) Engines, one ladder truck, one Type III Engine, one Squad, and two Type I water tenders serving the South Santa Clara County Fire District, the City of Morgan Hill, and Alameda County Fire. The one Helicopter Base houses a State-owned Type I fire/ rescue capable helicopter. Two of the SRA stations provide fire protection outside of State-declared fire season under Amador contracts serving Contra Costa County Fire District and the South Santa Clara County Fire District.

ECC staffing consists of one full-time Battalion Chief, six permanent full-time Fire Captains, six permanent full-time Communications Operators, and one Research Data Specialist II. The ECC always maintains a staffing level of two qualified staff on duty. During State-declared Fire Season, the staffing is augmented to three qualified staff during daylight hours. One Duty Officer (Fire Captain) is always on duty as a part of our staffing model.

The ECC provides communications, logistical support, and maintains command and control of all resources within SCU. Resources may be utilized to mitigate wildfires and to assist local, State, and Federal Government with any emergency management needs, including, but not limited to fires, floods, and earthquakes in the Local Responsibility Areas (LRA) within SCU or elsewhere in the State.

A portion of the LRA lands in SCU are protected by means of 110 Mutual Threat Zone Agreements (MTZs) established between CAL FIRE and local governments. MTZs are divided into geographic areas dictated by community, geography, and structure density, in relation to State Responsibility Areas (SRA).

The ECC works hand in hand with our cooperators by means of Mutual Aid and Automatic Aid Agreements. On a day-to-day basis, the ECC assists adjoining jurisdictions by means of Automatic Aid Agreements. These agreements allow CAL FIRE and its cooperators to dispatch the closest available resource to any given incident. On a broader scale, if a given entity determines the incident they are responding to will exceed or has exceeded their capabilities, CAL FIRE will assist as requested to manage and mitigate the incident.



The ECC provides a leadership role in the monitoring of fire weather conditions within SCU. The issuing of Red Flag Warnings and Fire Weather Watches are a foundation for determining wildfire threat. The ECC works closely with the Monterey and Sacramento Fire Weather Office to anticipate such weather events, which allows the ECC to augment staffing prior to potentially higher fire activity that accompanies some weather events. The ECC also works closely with the SCU Duty Chief and the Northern Region Operations Center (NOPS) Duty Officer as it pertains to pre-positioning of CAL FIRE resources in critical areas of the State and tracking of costs associated with these movements and augmentations.

The ECC manages two Remote Automated Weather Stations (RAWS) and monitors fourteen RAWS (which are the property of California State Parks, San Francisco Water Department, East Bay Regional Parks District, Contra Costa Water District, Oakland Fire Department, Central Fire Protection District, San Jose Fire Department and San Jose State University) daily to set the appropriate dispatch levels based on calculated burn indices. A Standard Response is pre-determined for each dispatch level in the event of a wildfire or other type of fire determined to be a threat to the wildland. Dispatch levels and responses are determined based on the Unit's Fire Danger Operating Plan.

The ECC Expanded Operation (SCU Expanded) is a co-located facility that supports operations on an incident that goes beyond the scope of initial attack, to be managed off the main ECC floor. The ECC can then continue to maintain the day-to-day business of the unit. The SCU Expanded operation can fully manage Crews, Equipment, Overhead, Supplies, and General Information. When an initial attack incident occurs that has the potential to become an extended attack or major incident, the ECC Duty Officer can request to open the SCU Expanded. Additional staffing can be requested by call-back of off-duty ECC personnel or by requesting an ECC Support Team to be activated by NOPS.

# **Priority Areas**

- 1. The ECC will endeavor to meet or exceed the call processing and dispatching recommendations set forth in NFPA 121 and NENA Standards.
- 2. To hold the public and fire service personnel's safety as the number one priority in relation to ECC responsibilities.
- 3. Provide proper notification to the public through designated processes, including the media, regarding incidents and events that have a potential effect on their safety.
- 4. Maintain the efficiency of all tasks required and perform them in a timely manner.



- 5. To maintain a proper database to use in the event of an emergency to query and activate proper resources to mitigate an event.
- 6. Maintain a high level of customer service to the public and cooperating agencies.

- To provide accurate and timely dispatching services to the population served by SCU and our cooperators through training, instruction, and procedural guidelines.
- 2. To provide notifications to CAL FIRE and cooperator resources of all incidents in SCU, based on information collected, the approved standard response plans, and the Duty Officer's knowledge and experience.
- 3. To keep unit personnel and cooperators informed in areas of significance, including the media, regarding incidents and events that have a potential effect on their safety.
- 4. Aggressively initiate the Fire Management Assistance Grant (FMAG) request process as soon as an incident is identified to meet the criteria of any given wildland fire that is damaging or threatening to damage infrastructure within SCU.
- 5. To maintain the ECC and unit telecommunications resources to meet the needs of unit personnel with fiscal responsibility.
- 6. Employ new technologies for incident information gathering and sharing.
- 7. Provide accurate and timely incident information to NOPS and Sacramento staff through the ICS 209 reporting program and the Report on Conditions (ROC) procedures.
- 8. Continue to improve and expand SCU's frequency management capabilities.
- 9. Monitor the ALERTCalifornia cameras as an aide in the early detection of wildfires.



# **BATTALION 20 (Fire Prevention / Law Enforcement Bureau)**

The Santa Clara Fire Prevention Bureau falls under the direction and supervision of the Unit Chief. The Bureau is staffed by a Battalion Chief, three Fire Captain Specialists (FCS), a Fire Prevention Specialist (FPS), a Forestry Technician (AB-38 Inspector), seasonal Defensible Space Inspectors, and Volunteers In Prevention (VIP's). The Battalion Chief and Fire Captain Specialists are granted Law Enforcement authority by the CAL FIRE Director under California Public Resources Code (PRC) 4156 and are California POST-certified Peace Officers, authorized under California Penal Code 830.2 (g). The Bureau is involved in all areas of law enforcement, fire prevention, education, engineering, and enforcement. There are three separate, but related functions handled by the individuals assigned to the Bureau: Education, Prevention, and Enforcement.

In 2024, Defensible Space Inspectors and unit staff conducted 6,353 PRC 4291(LE-100) inspections. The Defensible Space Inspectors are continuously interacting and educating the public on the importance of defensible space around buildings in our communities. In 2025, the SCU is again taking a collaborative and progressive approach to conducting LE-100 inspections using Defensible Space Inspectors, unit staff, and VIPs to handle the large task.

Another successful program within SCU is the Volunteers in Prevention (VIP) program. The VIPs program is administered and coordinated by the FCS and FPS. The VIP's currently have 30 members and conduct public education programs, staff Mt. Copernicus Lookout, and provide logistical support in the unit when requested. The VIP's staff the Lookout with a minimum of two personnel, eight hours a day on the weekends and during some weekdays during fire season. When combined with other projects, they have donated hundreds of hours of their personal time to fire prevention education in the unit. We are continuously seeking VIPs to join the team and expand the program.

The Law Enforcement branch of the Bureau includes fire origin and cause (O&C) investigations, issuing citations, processing criminal complaints with local District Attorneys, and civil cost recovery, the funds of which are returned to the State's General Fund. The Bureau maintains active membership in the Santa Clara County Arson Task Force. In addition to actively fostering working relationships with the over 40 other Law Enforcement agencies within the unit's boundaries.



- 1. Identify arson fires early, develop suspects, and make arrests swiftly to protect the public.
- 2. Utilize Defensible Space Inspectors for residential fire inspections (LE-100) according to PRC 4291.
- 3. Utilize the AB 38 inspection process, inspecting recently sold homes according to PRC 4291, while educating the public in wildfire preparedness.
- 4. Educate the public on the laws and how to properly remove flammable vegetation to maintain clearance in and around inhabited structures to prevent structures from being damaged, and to provide a means for firefighters to defend them.
- 5. Directly patrol the areas that pose a high fire danger risk to citizens for education and enforcement.
- 6. Provide Law Enforcement mutual aid, as requested from other agencies.
- 7. Implement the unit's Fire Plan to reduce the threat of large, damaging fires by vegetation management treatments.
- 8. Implement the SCU VIP Program to assist the unit in a variety of fire prevention activities to educate the public in wildfire awareness.
- 9. Collaborate with the Local Agency fire investigators in the detection and investigation of fires that occur within the SRA and assist with fire investigations in LRA.



### SANTA CLARA UNIT HAND CREWS

#### Mt. Hamilton Fire Center – MHC 1 and MHC 2

CAL FIRE, in cooperation with the California Military Department (CMD), have agreed to accomplish fire prevention, firefighter training, and incident support by performing hazardous fuel reduction and wildland fire suppression. There are a total of 14 Fire Crews that have been established across the State of California, as a part of "Taskforce Rattlesnake". The Santa Clara Unit is hosting two of these crews, and they will be based out of the National Guard Armory on Hedding Street in San Jose.

#### **Program Staffing**

6 - CAL FIRE Fire Captains (FC)

6 - CAL FIRE Fire Apparatus Engineers (FAE)

48 - CMD Personnel





#### **Schedule**

Shifts for the CAL FIRE personnel have been adjusted to support two crews Monday-Friday, when most of the fuel reduction work will be accomplished. There will be one crew working on Saturday and Sunday. Typical staffing for each crew will be 1 - Fire Captain, 1 - CAL FIRE FAE and 12-20 CMD personnel. Thursday is a dedicated training day, as both crews are on duty.

#### **Training**

The Fire Captains assigned to the program assisted with the initial training of the National Guard members at Camp Roberts the week of April 5th. The unit is hosting an additional two weeks of formal training. As part of their initial training, the program members will be training with the CZU Unit Fire Crews as they prepare for their readiness exercise. The Fire Captains and Engineers are receiving specialized Fire Crew Supervisor training. The goal is to have all personnel trained and ready for the annual certification exercise, which is held annually in mid-May.

#### Location

The operation is based out of the National Guard Armory on 251 W. Hedding Street in San Jose, CA. The facility is home to the 1113th Transportation Company, where the Taskforce was given the use of three former repair bays and an office area to use. CAL FIRE and service members have spent a few weeks cleaning the area of surplus material and painting.



The building will house the two emergency crew transport vehicles and can be used as a classroom. The rear of the building has a separate room that is being used to store and maintain the hand tools. The office area has been painted, carpet installed, desks have been added, and they have also created a storage area and a break room.

The program members utilized tables, benches, and filing cabinets to create a chainsaw maintenance area to securely store and maintain the small motor equipment.

#### **Fuels Reduction Projects**

The Unit's Resources Management team has identified fuel reduction projects to utilize the CMD crews. The near-term projects include prescribed fire preparation at Grant Ranch County Park and fuel mitigation work at. Sanborn County Park, Joaquin Miller Park. These projects will also prepare the CMD crews for the readiness exercise, as they train to become qualified as a Type I Initial Attack Crew.

#### Type I Fire Crew

These Type I Fire Crews can operate without restrictions, performing the full range of wildland fire duties. These duties include initial attack, fireline construction, firing operations, and mop-up. The crew will have a minimum one B-level sawyers and four level A Sawyers. They will respond in Emergency Crew Transports and may have support vehicles as well. Their radio identifiers are "MHC 1" and "MHC 2" and may be dispatched in a "Golf" strike team configuration.

#### Pacheco Fire Center – PCH 1 and PCH 2

The CAL FIRE Pacheco Fire Fighter Hand Crew was formed to accomplish fire prevention, firefighter training, and incident support by performing hazardous fuel reduction and wildland fire suppression. The Santa Clara Unit is host to one firefighter crew that is based out of the San Jose Airport at (1433 Airport Blvd, San Jose, CA).

## **Program Staffing**

- 4 CAL FIRE Fire Captains
- 3 CAL FIRE Fire Apparatus Engineers
- 40 Firefighter 1 Crew members
- 1 Cook
- 1 Office Assistant







#### **Schedule**

Shifts for the CAL FIRE personnel have been adjusted to support one crew a day, seven days a week. Monday-Thursday, they are assigned to fuels reduction work throughout the Unit. Both crews are assigned a dedicated training day with PCH 1 training on Sundays and PCH 2 training on Fridays. Saturdays are unassigned days utilized for training, administrative duties, fuels reduction projects, or station projects.

#### **Training**

Firefighters receive two weeks of formal crew-specific training after their initial CAL FIRE new hire / rehire Fire Fighter Academy hosted in the unit. As part of their initial training, the program members train with the California National Guard Fire Crews as they prepare for their readiness exercise. The Fire Captains assigned to the program go through the CAL FIRE C-212 process to become a certified Crew Boss. Additionally, the Captains assigned to the program have assisted with the initial training of National Guard members at Camp Roberts. The goal is to have all personnel trained and ready for the annual certification exercise before peak fire season. After the successful completion of the exercise, both crews will be certified as Type I crews for the unit and statewide response.

#### Location

The operation is based out of San Jose Airport at 1433 Airport Blvd, San Jose, CA. The facility was formerly San Jose City Airport Fire Station #20. Crew members spent several weeks cleaning the old fire station, making it their own. The facility consists of two buildings, the main building includes a barracks with beds for thirty firefighters, a kitchen, a dining room, and restrooms. The second building is a Detached Garage converted into a day room and training room. In addition to the building's three Conex boxes, which have been utilized for a gear locker, a storage room, a tool room/supply cache, and a saw / small motor equipment shop.

#### **Fuels Reduction Projects**

The Unit's Resources Management team has identified fuel reduction projects within SCU for which the Pacheco crews will be utilized. Recent projects include prescribed fire preparation and VMP at Grant Ranch County Park and fuel mitigation work in Morgan Hill. These projects will also prepare Pacheco Crew for the readiness exercise as they train to become qualified as a Type I crew.



#### Type I Fire Crew

These Type I Fire Crews can operate without restrictions, performing the full range of wildland fire duties. These duties include initial attack fireline construction, firing operations, and mop-up. The crew has a minimum of one B-level sawyer and four personnel trained to the A-level. They will respond in Emergency Crew Transports and may have support vehicles as well. Their radio identifiers are "PCH 1" and "PCH 2" and may be dispatched in a "Golf" strike team configuration.

## SAFETY PROGRAM

The vision of the SCU Safety Program is to enhance fire department safety by seeking creative and alternative safety training mechanisms, encouraging employee support within the safety program, and ensuring employee participation at all levels for a successful safety program.

The Santa Clara Unit Safety Program actively participates in the Santa Clara County, Contra Costa, and Alameda Counties Safety Officer's Associations. In addition, the Santa Clara Unit Safety Battalion Chief participates in regular meetings with the East Bay Regional Parks District, Mount Diablo and Henry Coe State Parks, the Morgan Hill Police Department, the Santa Clara County Sheriff's Office, the California Highway Patrol, and other responding agencies.

The Safety Battalion Chief (B1618) oversees Unit Safety Committee meetings to discuss safety issues, review personnel and vehicle accidents, identify issues that could lead to potential employee injuries or hazards, and ensure CAL FIRE's safety policies and procedures are being adhered to in the fire stations and on incidents.

#### **Priorities**

- 1. Protect the life and physical well-being of employees.
- 2. Protect the life, physical well-being, and property of the public.
- 3. Provide a safe and healthy work environment for employees.
- 4. Identify potential work hazards and initiate reasonable actions to eliminate or control them before they contribute to accidents, injury, or illness.
- 5. Respond to employee reports of Unsafe Practices (IIPP-8) in a timely and effective manner.
- 6. Make safety a normal part of all work practices and procedures.
- Investigate work-related accidents, injuries, and illnesses promptly and implement improved accident prevention methods.



- 8. Maintain employee well-being and minimize the loss of productivity due to injury.
- 9. Reduce the frequency and severity of occupational illnesses, injuries, and property damage.
- 10. Comply with safety-related laws, regulations, and policies, such as state safety orders published in the California Code of Regulations (CCR), Title 8.
- 11. Assist with the unit's Health and Wellness Program.
- 12. Ensure all CAL-OSHA inspections or violations are handled in an appropriate manner.
- 13. Conduct unit and State safety meetings to ensure any unsafe issues are discussed and handled in a timely and appropriate manner.
- 14. Ensure the department's Critical Incident Stress Management teams are utilized when necessary.

- 1. Review accident reports to determine causation and develop prevention recommendations.
- 2. Review IIPP-8 forms submitted by employees and follow through with solutions and reply to the employees in a timely manner.
- 3. Develop a "Lessons Learned" educational format to disseminate information to the unit for Safety Review.
- 4. Recommend guidelines and programs for safety education and training.
- 5. Exchange ideas to improve methods of operations safely and efficiently.
- 6. Maintain an active role in the unit-wide safety inspections to address concerns with health and safety issues at all unit facilities.
- 7. Develop recommendations regarding unit policy and procedures within the program.
- 8. Disseminate safety information to keep managers, supervisors, and employees informed of safety hazards and prevention techniques.
- 9. Evaluate the effectiveness of the Unit Safety Program on an annual basis.



- 10. Participate in and evaluate the employee fitness program and monitor employee nutrition.
- 11. Maintain an open line of communication at the unit and State level with CAL-OSHA and its regulations.
- 12. Facilitate quarterly unit safety meetings and annual State safety meetings.

#### TRAINING BUREAU

The Santa Clara Unit Training Bureau's responsibility is to provide ongoing training, education, and certification to fire service personnel. All training is focused on providing and maintaining the highest quality emergency services at both fire and medical responses to the citizens of California. Instructional programs target operational efficiency with emphasis on safe operating procedures for our personnel in all aspects of fire and emergency operations.

Cooperative training is held with local, county, and volunteer fire departments, emergency medical services (EMS) agencies, FireSafe Councils, five different Sheriff Offices, the California Highway Patrol, County Parks, and various city police departments.

SCU Training Bureau personnel actively participate in the Santa Clara County, Contra Costa County, and Alameda County Training Officer's Associations. In addition, SCU Battalion Chiefs participate in regular meetings with the Santa Clara County FireSafe Council, the Diablo Fire Safe Council, East Bay Regional Parks District, Mount Diablo State Park, Henry Coe State Park, Morgan Hill Police Department, Santa Clara County Sheriff's Office, and other responding agencies. The Battalion Chiefs assist these agencies with wildland fire training exercises and provide the Training Battalion with a list of training needs so that joint operations may take place. This provides cost-effective operations and allows for enhanced interagency partnerships.

To accomplish the training objectives in 2025, the bureau will provide training to students with the positions of Company Officer, Firefighter, Volunteer Firefighter, and even other local cooperators with the SCU. There are also numerous training hours logged by all personnel using the online training program Vector Solutions. There was also a significant amount of staff time spent to coordinate students, courses, instructors, recording and tracking training, and ensuring that those newly qualified and trainees are listed in the statewide Interagency Resource Ordering Capability (IROC) program. The Training Bureau is also managing the training needs assessment for CAL FIRE SCU personnel, which supports personnel becoming qualified through attending Incident Command System (ICS) courses. The Incident Qualification System (IQS) is a program managed by the Training Bureau following the guidelines set in CAL FIRE's Position Development Guide.



The #1 priority of the SCU Training Bureau is to provide for the overall safety of all permanent personnel and seasonal employees through instructional programs that target operational efficiency with emphasis on safe operating procedures in all aspects of fire and emergency operations. The Training Bureau's responsibility is to facilitate and ensure coordination of the unit-wide Training Plan, match training courses with approved personnel training requests, and maintain a central location for updated training records for all employees.

The Staff includes: one Battalion Chief, two permanent Fire Captains, and one Fire Captain who works in training during non-peak staffing periods. The Training Bureau is responsible for training five volunteer fire companies in Santa Clara County under a cooperative agreement with Santa Clara County. Staff continually strive to provide creative, cost-effective, innovative training with the highest commitment to safety. The State-funded training operations, which are divided into 18 separate program areas, are a seven-day-a-week operation, and listed below are:

Administrative and Office Staff	Pre-Fire Engineering
Battalion Chiefs	Vegetation Management
Company Officers	Emergency Medical Services
Firefighters	Hazardous Materials Responses
Training Bureau	Volunteer Firefighters
Emergency Command Center	Volunteers-in-Prevention (VIPs)
Alma Helitack	Fire Safe Councils
Fire Prevention	Joint-Agency Operations
Automotive Fleet Maintenance	Joint Apprenticeship Program (JAC)

#### **Priorities**

- 1. Deliver continual professional training in an annual workshop and provide a 12-month training program via internet-based training and Engine Company level training, ongoing.
- 2. Attend Training Officer's meetings with local cooperators to determine their needs in response to all-risk incidents.
- 3. Participate in the county wildland exercises in Santa Clara, Alameda, and Contra Costa Counties Spring 2024.



- 4. Work with the South Bay Regional Training Consortium to facilitate continuing education training with the unit personnel, ongoing.
- 5. Facilitate and coordinate the unit's instructors and develop additional cadre members within the unit, on an ongoing basis.
- 6. Continue to improve user ability and education with the Vector Solutions program. Items include the tracking of the 3-year apprenticeship completion for unit personnel in the JAC program, annual CAL FIRE assignments, EMS, and OSHA-based requirements per rank, ongoing.
- 7. Enter the unit's data into IQS and empower each employee to determine the ICS track based on their training and experience. Their needs will assist in establishing their training needs analysis, as well as completing open task books, on an ongoing basis.
- 8. Provide Strike Team Leader/Engine presentations for our local government cooperators, ongoing.
- 9. Maintain the Annual Training Plan with a monthly training and EMS topic stemming from a variety of all-risk drills and safety training for Santa Clara unit personnel, ongoing.
- 10. Meet with the Volunteer Fire Companies to discuss their needs and share with them the mandates for fire and rescue responses commensurate with their level of training and equipment. Develop a training calendar for summer and coordinate with on-duty engine companies. Assist annually with training support and ensure classes are held to meet the minimum requirements for response, ongoing.
- 11. Identify personnel who can act in the capacity of mentors and establish a list of personnel who need to be mentored, succession planning as well as in specialized positions and cadres, and ongoing.
- 12. Provide Chief Officer and Company Officer certification courses through State Fire Training to Chief and Company Officers within SCU, ongoing.
- 13. Instruct 200/300 level ICS courses designed for Firefighters through Battalion Chief ranks to strengthen the unit's ability to manage Type 3 incidents and to support incidents outside SCU, ongoing.
- 14. Determine the stakeholders and reach out to them to establish an Optional Skill Program that will work for response between all counties, ongoing.



- 15. Work with the Training Officers in the San Mateo-Santa Cruz, Sonoma-Lake-Napa Unit, Marin County Fire Department, Madera-Mariposa-Merced Unit, and San Benito-Monterey Units to co-host classes that fulfill the needs of all units' personnel, such as JAC and specialty courses, ongoing.
- 16. Working jointly with the SCU ECC, review and update the unit's Emergency Resources Directory (ERD).
- 17. Working with the Program Managers and Battalion Chiefs, determine the unit's training needs for the Northern Region Training allocations worksheet. Fill the student selections based on allocated training slots and advise their respective program managers for their planning purposes, ongoing.
- 18. Enhance electronic dissemination of training announcements utilizing Vector Solutions, social media, and Training Officers' websites, ongoing.
- 19. Seek outside funding through the South Bay Consortium for all trainingrelated items, not limited to training props, supplies, and curriculum, ongoing.
- 20. Maintain agreement at Mallaguerra Training Center with a classroom and outdoor gym.
- 21. JAC Program 1st and 3rd year test. Completing all mandatory training within their 3-year time frame, ensuring all JAC personnel are given the ability to attend required courses.

- 1. Provide continual professional training to all personnel in the unit through classroom-based, manipulative-based, and technology-based training.
- 2. Ensure local cooperators are receiving the required training for response to all risk emergencies.
- 3. Provide and coordinate law enforcement (LE) training for the unit's LE Officers and cooperators.
- 4. Foster and improve personnel involvement in instructional cadres.
- 5. Provide a process for employees to successfully complete their required JAC training.
- 6. Implement the IQS program to better track and qualify our personnel in ICS.
- 7. Improve the unit's physical fitness program and base it on the Peace Officer's Standardized Training (POST) Standards.



- 8. Provide a Unit Readiness Drill to measure the performance of our personnel and to identify training deficiencies.
- 9. Provide annual Strike Team Leader refresher classes to our cooperators.
- 10. Establish and maintain a training calendar for unit personnel.
- 11. Maintain a priority trainee list for incidents within and outside of the unit.
- 12. Develop and maintain a standardized training program for the volunteer companies.
- 13. Provide support and mentoring for new Fire Captains, Battalion Chiefs, and Division Chiefs in the unit.
- 14. Train our Company Officers and Chief Officers to the State Fire Training Standards.
- 15. Host 200-level ICS courses and JAC program courses.
- 16. Develop and support Optional Scope of Skills training programs for the unit's Emergency Medical Technicians (EMTs).
- 17. Work with the adjacent CAL FIRE San Mateo-Santa Cruz Unit, Sonoma-Lake-Napa Unit, Marin County Fire Department, and San Benito-Monterey on a regional training plan, cohost courses benefiting unit personnel, and a Truck Academy.
- 18. Identify the legal State and Federal requirements for training in each program area. Work with CAL FIRE and local government agencies to determine mandates.



# **EMS BUREAU**

The SCU EMS program is a very dynamic and constantly evolving program. EMS responses account for over 75% of all incidents our resources respond to throughout 5 counties. The program is overseen by one Battalion Chief and oversees approximately 275 Emergency Medical Technicians (EMT), 30 Paramedics, and 40 Public Safety-First Aid (PSFA) Responders. Approximately 20% of the EMTs and Paramedics are funded by Schedule A contracts, and the other 80% of the employees are funded by the State.

The EMTs and Paramedics staff at peak 23 fire engines, one squad, one truck, four crew buses, one helicopter, three bulldozers, and numerous administrative vehicles. It is the responsibility of the EMS Program to ensure all EMTs, Paramedics, and PSFAs are in good standing with all certifications and licenses. It is the EMS Programs responsibility to ensure all PSFA, EMT's, Paramedics are trained in all new and previous protocols and policies that are implemented at the State Emergency Medical Services Authority (EMSA) and Local Emergency Medical Services Authority (LEMSA), as well as ensure PSFA, EMT's, and Paramedics are delivering the highest level of professional EMS services.

# **EMS Training and License/Certification Renewal**

Our employees are required to be certified or licensed prior to being hired. EMS training and education occur throughout the calendar year. Each EMT is required to have 24 hours of Continuing Education Units (CEU) every two years, and Paramedics are required to have 48 hours of CEUs every 2 years. With all the employees combined, it requires 7,200 hours of training and education every two years to maintain their certifications and licenses. To achieve the need of 7,200 hours of EMS training, the EMS program utilizes many different training platforms and formats to accomplish this need.

Every two years, each employee receives CPR training, with each class being 4 hours long. Every two years, every Paramedic receives 16-24 hours of refresher training in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). The EMS program ensures that each EMT or Paramedic is current with their certifications/licenses and assists with any renewal issues and their applications. Each EMS class that is going to be a CE-qualified class requires multiple aspects to have it fall within regulations to issue a CE to an employee. Each class requires a qualified instructor of record, a course outline, course content, written or hands-on testing, and an evaluation. Once the course meets the criteria, then the CE must be issued/printed utilizing security techniques outlined by regulations.



#### **EMSA/LEMSA**

In SCU, each of the five counties we serve, has its own Local Emergency Medical Service Agency (LEMSA). Each LEMSA has its own staff and Medical Director which create their own protocols/policies as well as committees/meetings. Each LEMSA has 3-5 different meetings or committees that the SCU EMS program attends. These meetings many times overlap with other meetings with another LEMSA. Since employees can work in all 5 counties/LEMSA's, every employee needs to be educated about each protocol and policy in every county. It is the responsibility of the EMS Battalion Chief (EMS BC) to ensure the employees are current with their protocols and policies in every county we operate in. For example, the 5 different LEMSA's do not have the same protocol for treating a patient in cardiac arrest.

The EMS program must instruct each employee on the five different ways we perform CPR on a cardiac arrest patient, depending on which LEMSA you are currently working under in SCU. Each year, the Emergency Medical Service Agency (EMSA) or LEMSA updates or revises its protocols and policies based on science, new equipment, new data, and new procedures. When this occurs, it requires the EMTs and Paramedics to be trained in person or online to the new standard for each LEMSA. On average, these annual training courses are an additional four hours of training and education for each EMT and Paramedic.

It is the responsibility of the EMS BC to attend different monthly and quarterly meetings for each of the five LEMSAs, to ensure SCU is recognized as an EMS provider in each LEMSA, and that we are current on any upcoming changes. It is the EMS program's responsibility to work with the LEMSA and EMSA if there are any patient care issues. The EMS program is ultimately responsible for ensuring all apparatus meet the minimum EMS equipment and employees meet the required training levels.

# Data Management and CQI/QA

It is the responsibility of the EMS BC to ensure that all the EMTs and Paramedics are utilizing a Patient Care Record (PCR) for all EMS responses. The EMS BC will weekly ensure that all PCRs are complete and accurate, and we are following each LEMSA's Requirements. Continuous Quality Improvement/Quality Assurance is a critical process to ensure our EMTs and Paramedics are providing the highest level of care within their scope of practice. This is done by reviewing patient care records (PCR's), conducting inperson EMS scenarios, and the EMS BC responding to incidents to witness patient care evaluations and treatment. It is the goal of the EMS program that 25% of all PCRs are reviewed by the EMS program. State EMSA and LEMSA's set "core measures" for CQI/QA which requires the EMS program to review all PCR's when a patient was in cardiac arrest, deceased, had certain medications administered to the patients, patient refused care, all patients that received controlled substances, all major trauma victims, all patients having a heart attack, all patients having a stroke, and all pediatric patients.



During this process, we determine if the PCR is complete, accurate, routine medical care was given, and all protocols and policies were followed correctly. If it is determined that something in the PCR is missing or the protocol/policy was not followed correctly, then follow up with the EMT or Paramedic is done to determine if it was a documentation error or truly a protocol/policy breach. If there was a breach in protocol or policy, then initiate an investigation and determine a course of action, either by education or discipline.

Morgan Hill Fire Department and South Santa Clara County Fire District contract with Stanford Emergency Medical Services for a Medical Director. The Medical Director assigned to us is Dr. Mulkerin. He is very proactive with CQI/QA and training our Schedule A employees, and he also assists with training Schedule B employees. He is an integral part of our EMS program that helps us with training, and new procedures, and protocol updates. He is also vital in ensuring our EMTs and Paramedics are providing the highest level of care. He will work with the LEMSA to help with any personal improvement plans that our EMTs or Paramedics might be placed on due to numerous reasons that could occur.

CAL FIRE has implemented for all Schedule B apparatus the first time ever an electronic PCR (ePCR) program This new program will increase the workload for CQI and troubleshooting IT issues when it comes to login issues, iPad issues, and adding new employees and removing employees who no longer work in SCU. With this new ePCR program, it will increase the coordination needs with all five LEMSAs to ensure data is properly received by the appropriate LEMSA. This will also incur additional new employee training and refresher training for employees.

## **EMT & Paramedic Accreditation**

It is the responsibility of the EMS program to ensure that each EMT and Paramedic is meeting the accreditation requirements in certain LEMSAs.

Santa Clara County LEMSA requires all EMTs and Paramedics to be accredited in the county to be able to work in the county and to utilize the optional scope of practice. Each EMT and Paramedic needs to apply online, schedule with LEMSA a written test, conduct a live scan, and take certain online classes to meet the requirements. Annually, at the end of the calendar year, each EMT and Paramedic is required to attend an "EMS Update" class to maintain their accreditation. Paramedics are required to go through a five-field evaluation process when initially accrediting as a Paramedic.



• Alameda County requires each paramedic to be accredited. This requires the paramedic to attend a County LESMA class. Then the paramedic must take and pass multiple written exams. Once complete, the paramedic will do the 5-call evaluation with one of our cooperators. After that is complete, the paramedic must go through "critical thinking evaluations" with a panel of paramedics. Once successful with the above, the Paramedic can then perform all roles as a solo paramedic. To continue their accreditation, they must attend annual skill sessions and "EMS updates" at the end of the year.

#### **CAL FIRE EMS**

The SCU EMS program is very proactive with working collaboratively with the CAL FIRE EMS Program. The EMS BC attends a monthly EMS statewide EMS Coordinators Conference Call. This meeting tends to last about two hours and has a wide variety of EMS topics we review and discuss.

## **EMS Contractual Agreements**

It is the responsibility of the EMS program to follow all EMS contracts. This entails making sure we are meeting our response time requirements, staffing, and other requirements as outlined in our contracts. Each month, the EMS BC reviews all "late calls" for the Morgan Hill Fire Department and the South Santa Clara County Fire District. During the review of these "late calls," the EMS BC determines if the call is late. The EMS BC will utilize various ways to obtain accurate information and programs to review the "late call". The EMS BC will review CAD notes, communicate with the ECC and ECC BC to review and conduct a tape review, will contact the responding crew to see if there were any other factors, and will contact other cooperators if they responded to the incident because they were the closest resource. The EMS BC will ensure our naming convention and staffing levels of apparatus meet the requirements of Santa Clara County EMS.

# American Heart Association (AHA) Training Site

SCU is an approved AHA training site that requires time and effort to maintain. SCU has five certified AHA instructors who are certified to teach CPR, ACLS, and PALS to our employees. To maintain this status, each instructor must meet certain criteria each year to maintain their instructor rating. Once an instructor has completed teaching a course, all course documentation must be collected, accurate, and stored for a duration of four years, and then the course completion certification must be emailed via the AHA website to the student.



#### **Controlled Substances**

The EMS Program is responsible for ensuring SCU is following all current Federal/State/Local laws, regulations, and policies regarding controlled substances. The EMS program ensures we have the documentation of all controlled substances from "cradle to grave" for each vial of controlled substance in our possession.

## **Equipment and Supply Management**

The EMS program is responsible for ensuring the inventory of the correct EMS supplies and equipment. Each month, fire stations submit their equipment or supply needs. The EMS program will then fill their request using a hand stock of supplies or equipment. If needed, the EMS program will order through a vendor for the equipment or supplies needed to be sent to the fire stations. Since we have five different LEMSAs the equipment and supplies can be different depending on what fire station is ordering, because of the LEMSA jurisdiction in which the apparatus is located.

#### **Priorities**

- Ensure all employees maintain their required level of training and certifications to respond to all types of Emergency Medical Services (EMS) related incidents.
- 2. Ensure all apparatus have the required EMS-related equipment, supplies, and devices outlined by the State Emergency Medical Services Authority (EMSA), Local Emergency Medical Services Authority (LEMSA), and CAL FIRE.
- 3. Ensure all employees are trained in the use of all EMS-related equipment, procedures, medications, supplies, and devices based on their EMS level of certification and scope of practice outlined by EMSA, LEMSA, and CAL FIRE.
- 4. Ensure the EMS Program maintains constant communications and relationships with all five LEMSA's and cooperators we provide service in.
- 5. Ensure the unit is performing and maintaining Continuous Quality Improvement (CQI) and Quality Assurance (QA) programs that meet the requirements outlined by Federal, State, and Local guidelines.
- 6. Maintain an accurate database of all personnel's EMS certifications and EMS licenses and their expirations.
- 7. Maintain weekly and monthly communications with our Medical Directors for CAL FIRE and the Schedule A program.



- 1. Provide a minimum of 5,000 hours of EMS Continuing Education Units (CEU) annually via in person classes, virtual platforms, or online training which will ensure personnel are trained and educated in existing or any new policy changes, protocol changes, scope of practice changes, and equipment/device/medication/procedure changes.
- 2. Perform CQI/QA review and core measure reviews on all incidents that are required by State and Local policies, for example: 100% review of all cardiac arrest patients, pediatric patients, major trauma patients, and when certain medications were administered by our personnel to a patient.
- 3. Perform weekly reports and audits of personnel's EMS certifications and license expirations.
- 4. Attend all monthly LEMSA and EMS Cooperator meetings in all five counties where we provide services.
- 5. Attend EMS conventions and workshops to know the recent or proposed changes to protocols, policies, medications, or legislation.
- 6. Harbor great communications and relationships with our Medical Directors, Medical Administrators, EMS Specialists, EMS Chiefs that work for CAL FIRE, State EMSA, LEMSAs, and all our fire department and ambulance cooperators.
- 7. Maintain EMS budgets that allow for the purchase of EMS devices, equipment, and medications.



# **SECTION VI: REFERENCES**

#### Software

- Google Earth Pro
- ArcGIS Pro

# Online Mapping Resources

- ArcGIS Online
- Google Maps



# **SECTION VII: APPENDICES**

# **APPENDIX A: PRE-FIRE PROJECTS**

Project Name	Status	Project Type
Hacienda Trail Clearing	Planned	Fuel Reduction
Butterfield Channel Project	Active	Fuel Reduction
Calero Dead Man's Curve	Active	Fuel Reduction
Grant Ranch Fuel Reduction	Active	Fuel Reduction
Joaquin Miller Park	Active	Fuel Reduction
Sanborn County Park Fuel Reduction	Active	Fuel Reduction
Malaguerra	Active	Fuel Reduction
Malech	Active	Fuel Reduction
Mt. Madonna Summit	Active	Fuel Reduction
Tunnel East Bay Hills Fuel Break	Active	Fuel Reduction
Grant Ranch VMP 2022-2033	Active	Broadcast Burn
Bailey VMP	Active	Broadcast Burn

Table 11 - Pre-Fire Projects



This is a table of projects that the Santa Clara Unit supports and may participate in. SCU reserves the right to support additional future projects as they become known.

Project	County	Project Location	Partnering Organization
* Kilkare Road Access and Egress Fuel Reduction	Alameda	Sunol, Kilkare	Alameda County Fire Department
Joaquin Miller Park Fuel Reduction	Alameda	Joaquin Miller Park	City of Oakland, Friends of Joaquin Miller Park, Friends of Sausal Creek
Rinihmu Pulte'irekne Fuel Reduction	Alameda	Joaquin Miller Park	City of Oakland, Sogorea Te' Land Trust, Friends of Sausal Creek
* Augustin Bernal Community Park Fuels Reduction	Alameda	Livermore	City of Pleasanton, Livermore- Pleasanton Fire District
* Berkeley Lab Wildland Fire Hazard	Alameda	UC Berkeley	UC Berkeley, Lawrence- Berkeley National Laboratory
Regional Priority Plan (RPP)	Alameda & Contra Costa County	County-Wide	Diablo Fire Safe Council
* Community Wildfire Protection Plan (CWPP)	Alameda County	County-Wide	Diablo Fire Safe Council
Calaveras Prescribed Burn	Alameda County	East of Sunol	San Francisco Public Utilities Commission
* Grizzly Peak Strategic Fuel Break Collaboration	Alameda, Contra Costa	Grizzly Peak	East Bay Regional Park District, East Bay Municipal Utilities District, UC Berkeley, City of Berkeley, City of Oakland
Fire Prevention Education	Alameda, Contra Costa	County-Wide	Diablo FireSafe Council, Oakland FireSafe Council, Berkeley FireSafe Council, West Contra Costa County FireSafe Council



Project	County	Project Location	Partnering Organization
Regional Priority Plan	Alameda/ Contra Costa	County-Wide	Alameda County RCD, Contra Costa County RCD
Mt. Diablo Prescribed Burn Assistance	Contra Costa	South of Clayton	CA State Parks & Recreation (Mt. Diablo State Park)
Hillside Natural Area Fire Resilience	Contra Costa	El Cerrito	City of El Cerrito
Water Supply for Aerial Firefighting Operations	Contra Costa	County-Wide	Contra Costa County Fire District
Wildcat Creek Fuel Break	Contra Costa	Richmond-Berkeley	Contra Costa County Fire District
El Cerrito Vegetation Management and Fuel Reduction	Contra Costa	El Cerrito	Contra Costa County Fire District
* Lafayette / Walnut Creek Shaded Fuel Break	Contra Costa	Lafayette, Walnut Creek, Rossmoor	Contra Costa County Fire District, Golden Rain Foundation
CWPP Update	Contra Costa	County-Wide	Diablo FSC
North Orinda Shaded Fuel Break Maintenance	Contra Costa	Orinda	Moraga Orinda Fire District
Orinda Fuel Break	Contra Costa	Orinda	Moraga Orinda Fire District
* Tunnel East Bay Hills Fuel Break	Contra Costa	Moraga-Orinda Fire District	Moraga-Orinda Fire District, East Bay Municipal Utilities District



Project	County	Project Location	Partnering Organization
Orinda Downs Owners Association Fuel Break	Contra Costa	Orinda Downs	Orinda Downs Owners Association, Moraga Orinda Fire District, Diablo Firesafe Council, East Bay Municipal Utilities District
* East Contra Costa Fire Restoration Project Prescribed Burn	Contra Costa County	Marsh Creek	Contra Costa County Resource Conservation District, CA State Parks & Recreation (Marsh Creek SP), Contra Costa Water District, Contra Costa County Flood Control District, East Bay Regional Parks
Fire Ecology & Fire Weather Research Assistance	Multiple	County-Wide	San Jose State University Fire Weather Lab
Fuel Reduction and Pile Burning Assistance	Santa Clara	Henry Coe State Park	CA State Parks & Recreation (Henry W Coe State Park)
* Community Wildfire Protection Plan (CWPP) Annex Development	Santa Clara	City of Morgan Hill	City of Morgan Hill
Genasys Protect (Zonehaven) Implementation	Santa Clara	Morgan Hill City	City of Morgan Hill
HLE & JO Community Fuelbreak	Santa Clara	City of Morgan Hill	City of Morgan Hill
Llagas Eucalyptus along Escape Routes	Santa Clara	City of Morgan Hill	City of Morgan Hill
* CDLO Prescribed Burn	Santa Clara	Canada de los Osos Ecological Reserve; East of Gilroy	Loma Prieta Resource Conservation District, California Dept. of Fish and Wildlife



Project	County	Project Location	Partnering Organization
* Westbrook Prescribed Burn	Santa Clara	West of Gilroy	Loma Prieta Resource Conservation District, private ranch, Gavilan Community College
Shaded Fuel Break Connectivity Project	Santa Clara	Los Altos Hills County Fire District	Los Altos Hills County Fire District, Caltrans, Santa Clara Central County Fire District. Midpeninsula Regional Open Space District, Hidden Villa Land Trust
* Mule Trail Prescribed Burn	Santa Clara	Mt. Hamilton Range	North Santa Clara County Resource Conservation District, private ranches
* San Antonio Valley Prescribed Burn	Santa Clara	San Antonio Valley	North Santa Clara County Resource Conservation District, private ranches
Ridgetop Fuel Break	Santa Clara	Gilroy	Private Ranch
Pine Ridge Prescribed Burn	Santa Clara	East of Morgan Hill	Private Ranch, CA State Parks & Recreation (Henry W Coe State Park)
Pacheco Peak Truck Trail Maintenance	Santa Clara	Pacheco Peak	Private Ranches
Smith Creek Truck Trail	Santa Clara	East of San Jose	Private Ranches, Santa Clara County Parks
Summit Road Evacuation Route	Santa Clara	Summit Road, Loma Chiquita	Santa Clara County FireSafe Council
East Dunne Evacuation Route	Santa Clara	East Dunne Road	Santa Clara County FireSafe Council
* Los Gatos Creek Watershed Collaborative Forest Health Project	Santa Clara	Los Gatos Creek Watershed	Santa Clara County FireSafe Council



Project	County	Project Location	Partnering Organization
Fuel Break and Pile Burning	Santa Clara	Mt. Madonna County Park	Santa Clara County Parks
Grant Ranch Prescribed Burn	Santa Clara	Joseph D. Grant Park	Santa Clara County Parks
Bull Run Pile Burning	Santa Clara	Almaden Quicksilver County Park	Santa Clara County Parks
Sanborn Forest Health Project	Santa Clara	Sanborn County Park	Santa Clara County Parks, Caltrans
Four Corners Training Site for Wildfire Resiliency	Santa Clara	Chesbro Reservoir	Seventh Generation Rising, LLC
Stanford University Prescribed Burn	Santa Clara	Stanford University	Stanford University, CAL FIRE- CZU
Fuel Break	Santa Clara	Copernicus Peak Lookout	UCSC - Lick Observatory
Lick Observatory Shaded Fuel Break	Santa Clara	Mt. Hamilton Range	University of California Santa Cruz
Henry W. Coe State Park Prescribed Burn Assistance	Santa Clara	Eastern Santa Clara County	CA State Parks & Recreation (Henry W. Coe State Park)
Loma Prieta Headwaters Fuel Break Project	Santa Clara County	Loma Prieta Peak Area	Santa Clara County FireSafe Council et al.
Fire Prevention Education	Santa Clara	County-Wide	Santa Clara County FireSafe Council
County Line Road Truck Trail Maintenance	Santa Clara, Stanislaus	San Antonio Valley - Pacheco Pass	Private Ranches, CA State Parks & Recreation (Henry W. Coe State Park)
Mt. Oso Truck Trail Maintenance	Stanislaus	Del Puerto Canyon	Private Ranches

Table 12 - Supported Projects in SCU. \* = Supported with CAL FIRE Grant Funding



## APPENDIX B: UNIT GOALS AND OBJECTIVES

#### Goal 1:

Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state, and federal responsibility areas.

#### Objective:

Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management and activities, including ongoing maintenance.

#### Measurement Criteria:

CAL FIRE will report to the Board of Forestry on the number of crews available each year, with a description of projects, including acres treated, completed by each unit. Report the number of agreements and/or amount of funding and acres treated that involve grants or partnerships with federal agencies, resource conservation districts, local firesafe councils, fire districts, watershed groups, or other nonprofit or community groups that support the ability to carry out fuels reduction projects.

#### Goal 2:

Address post-fire responsibilities for natural resource recovery, including fire suppression repair (FSR) at the unit and or Incident Management Team's (IMT) discretion.

#### Objectives:

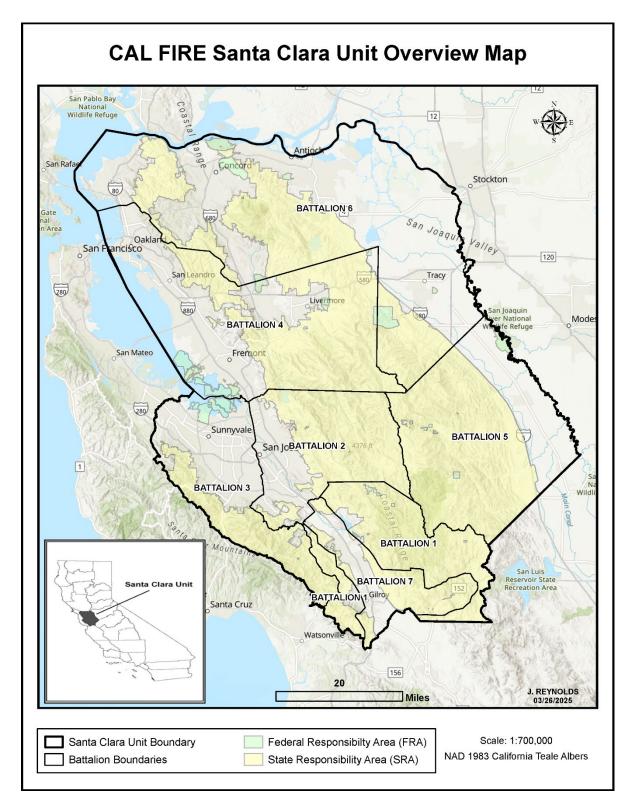
Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g., fuel breaks, fire lines) developed during a fire suppression effort, taking into consideration those identified in previous planning efforts.

#### Measurement Criteria:

CAL FIRE is to schedule a post-fire review of the planning documents that cover the area affected by the fire. Review the goals, objectives, and projects to identify successes and failures. Review the features developed during the fire and incorporate them into the Unit Fire Plan. Incident Management Teams may conduct this post-fire assessment under the direction of the Unit Chief. FSR tasks that exceed Unit capabilities may be referred to the incident Comp/Claims or the Victim's Compensation Board for consideration.



# **APPENDIX C: UNIT MAPS**



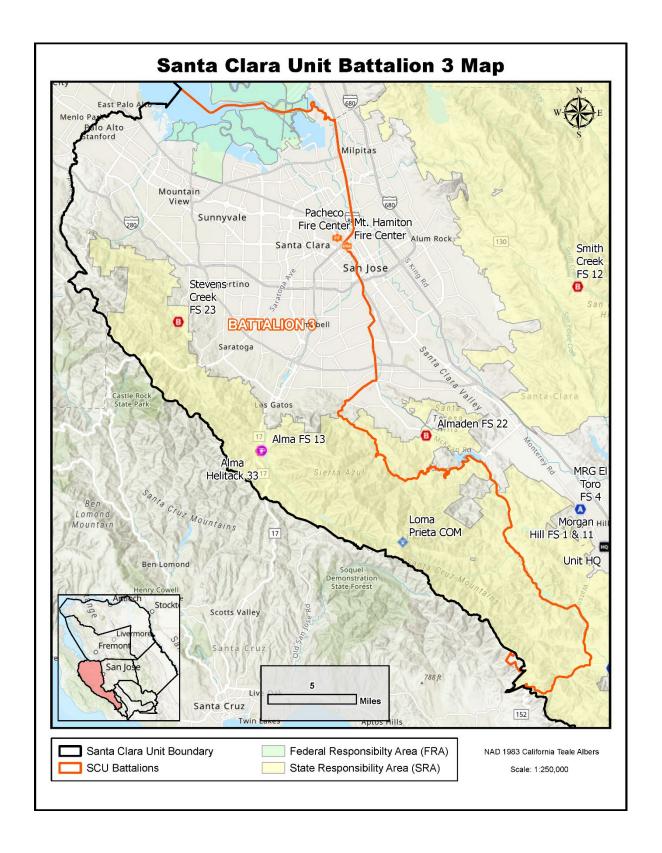




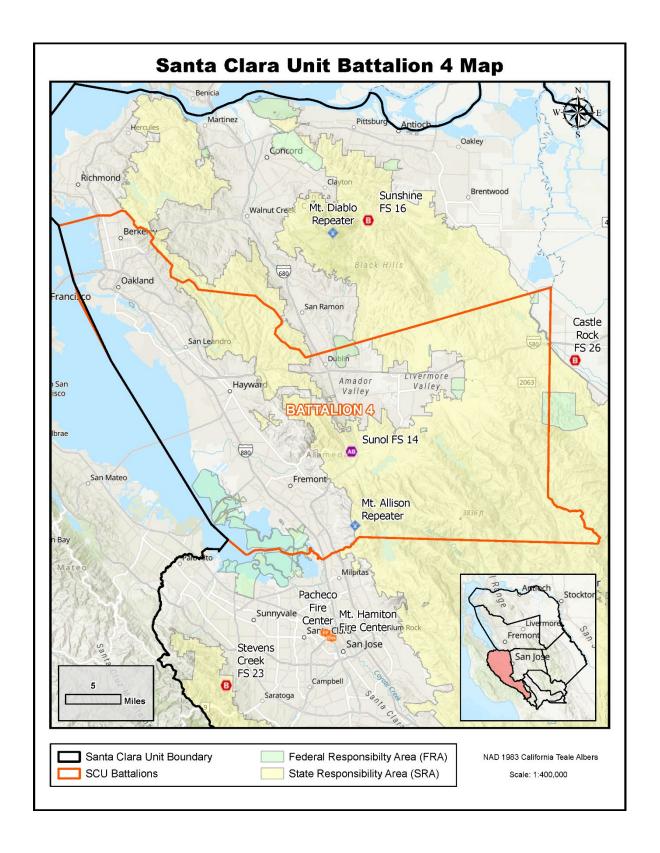




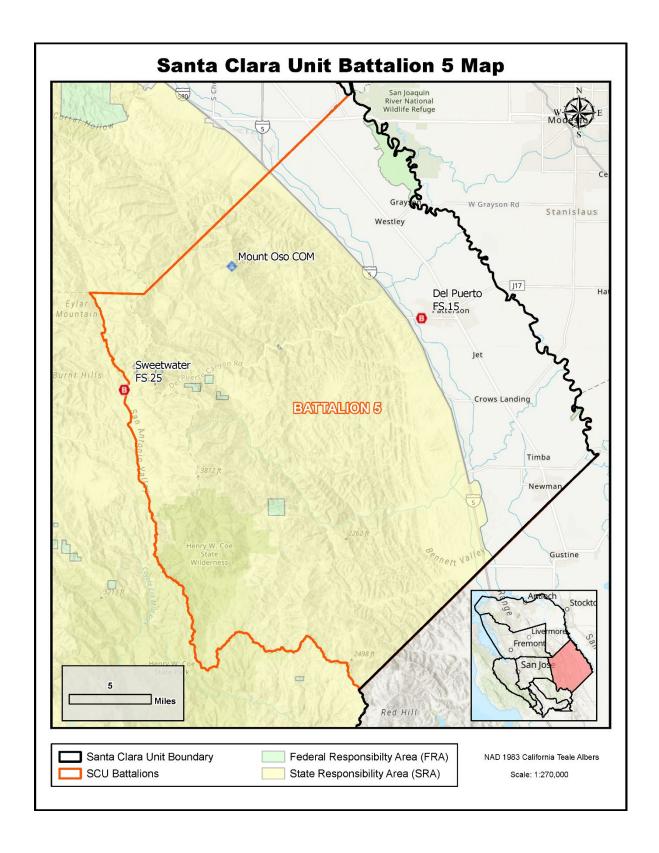




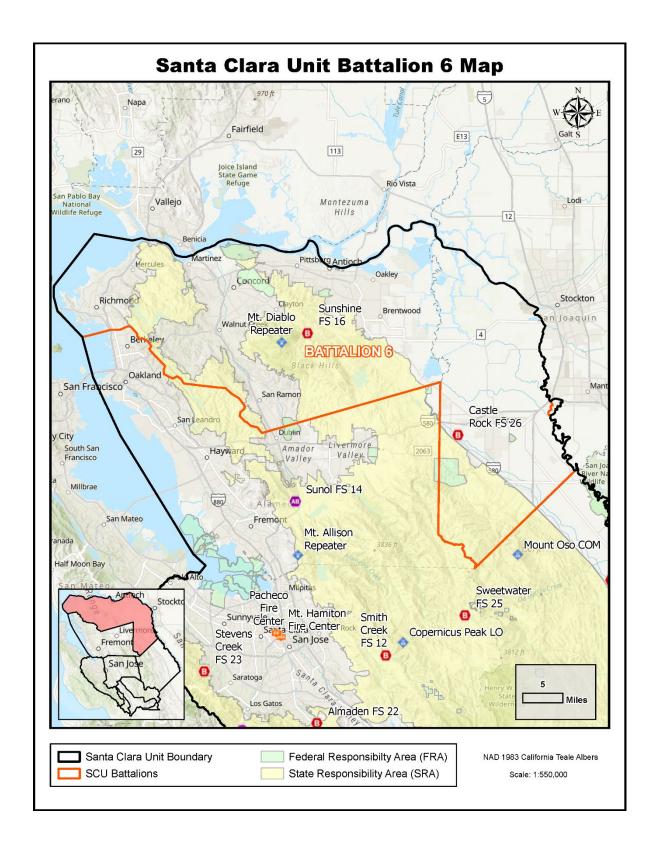




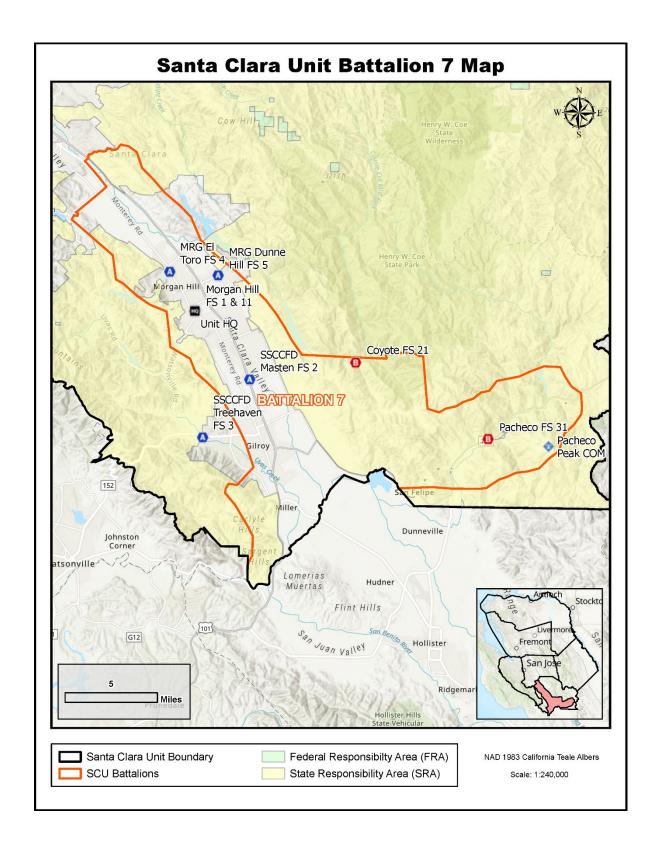














## APPENDIX D: FIRE STATIONS AND APPARATUS

#### **South Division**

#### Battalion 1

**Headquarters Station** 

• E1661, E1671, D1641

**Coyote Station** 

• E1681

Pacheco Station

• E1677

## **Battalion 2**

**Smith Creek Station** 

• E1662

Almaden Station

• E1672

#### Battalion 3

Alma Station

• E1673

Stevens Creek Station

E1663

Alma Helitack Base

Alma Copter

#### **East Division**

#### Battalion 4

**Sunol Station** 

- E1664, E1684, D1644
- E14, E614 (ACF)

## Battalion 5

Del Puerto Station

• E1675, E1685, D1645

**Sweetwater Station** 

• E1665

#### Battalion 6

**Sunshine Station** 

• E1666, E1676

Castle Rock Station

• E1656

#### **Cooperative Fire Protection**

#### Battalion 7

Morgan Hill Station (SCC)

• E67, WT67

Masten Station (SCC)

• E68, WT68

Treehaven Station (SCC)

• E69, E369

El Toro Station (MRG)

• E57, T57, SQ59, RM58

Dunne Hill Station (MRG)

• E58

#### **Hand Crews**

Mount Hamilton Fire Center

- Mount Hamilton Crew 1
- Mount Hamilton Crew 2

Pacheco Fire Center

- Pacheco Crew 1
- Pacheco Crew 2