

***Unit Strategic Fire Plan***  
***Santa Clara Unit***



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## SIGNATURE PAGE

### Unit Strategic Fire Plan developed for Santa Clara Unit:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is 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.

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**Unit Chief**

Steve Woodill

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**Date**

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**Pre-Fire Engineer**

Bryan Giambrone

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**Date**

## EXECUTIVE SUMMARY

The Santa Clara Unit Fire Management Plan documents the assessment of the fire situation in the unit, includes stakeholder contributions and priorities, and identifies strategic targets for pre-fire solutions as defined by the people who live and work with the local fire problem.

Responsibility for Pre Fire Engineering and Fire Protection Planning falls under the direction of the Fire Prevention Bureau. Pre Fire Engineering includes GIS mapping of assets 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 assessment system has four components:

- Level of Service (LOS)
- Assets at Risk (AAR)
- Hazardous Fuels
- Historic Fire Weather

This plan will utilize the five strategic objectives and Fire Plan Framework identified in the California Fire Plan and incorporates them into the planning and implementation process. The five objectives and framework components of the Santa Clara Fire Management Plan are as follows:

- Wildfire Protection Zones

To create wildfire protection zones that reduces the risks to citizens and firefighters.

- Initial Attack Success

Assess wildfire initial attack successes on lands of similar type. This is measured in terms of a percentage of fires that are successfully controlled before unacceptable costs and losses occur. The analyses can be used to determine the department and unit's level of service.

- Assets Protected

The plan has utilized a methodology for defining assets protected and their degree of risk from wildfire. The assets addressed in the plan are citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), rural communities, unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. Stakeholders for each of the assets at risk are identified. The assessment will enable the Unit and other fire service managers to set priorities for fire management project work.

- Fire Management Prescriptions

The fire management aspect focuses on alternatives to protect assets at risk. Projects include a combination of fuels modification, ignition management, fire-safe engineering activities such as regulation and zoning, educational programs, public information and road accessibility, department infrastructure including fire stations and water systems, alarms, and forest health. Pre Fire management prescriptions designed to protect these assets will also identify those who benefit and who should share in the project costs.

- Fiscal Framework

The California State Board of Forestry and Fire Protection and CAL-FIRE are developing a fiscal framework for assessing and monitoring annual and long term changes in California's wildland fire protection systems.

- Applications of the Fire Plan Framework

- Identify for state, federal, local officials and the public those areas of concentrated assets and high risk.
- Allow the Santa Clara Unit to create a more efficient fire protection system, focused on meaningful solutions for identified problem areas.
- Give citizens an opportunity to identify public and private assets to design and carry out projects to protect those assets.
- Identify, before fires start, where the most cost effective pre-fire and fire management investments can be implemented.
- Encourage an intergovernmental approach to reducing costs plus losses.
- Enable policy makers and the public to focus on what can be done to reduce future costs plus losses from wildfire.
- Through the land use and safety element of the Santa Clara, Alameda, Contra Costa, San Joaquin and Stanislaus County's general plan, incorporate elements of the California Fire Plan so that the county plan's support the state plan.

## **SECTION I: UNIT OVERVIEW**

### **UNIT DESCRIPTION**

The Santa Clara Unit is unique to the Department of Forestry and Fire Protection, located between the east side of the San Francisco Bay and the western Sacramento / San Joaquin valley, encompassing the Counties of Contra Costa, Alameda, Santa Clara, and western portions of Stanislaus and San Joaquin. There are a total of 1.3 million acres of direct protection area within the unit with a combined population of 5.5 million people. Air quality control is covered by Valley Air Quality Management and the Bay Area Air Quality Management District. Santa Clara Unit management staff work closely with these agencies to ensure reduced smoke plume impact as a result of our Vegetation Management program and wildland fire activity upon the local population.

The major population centers include the cities of San Jose and the surrounding, “Silicon Valley,” Oakland, Berkeley, Livermore/Pleasanton, Walnut Creek, Concord, Martinez and Richmond. Numerous major highways run through the unit and daily traffic congestion is a constant within the unit. Technology, manufacturing, heavy industry, three major sea ports, and three major airports all drive a large portion of the 5<sup>th</sup> largest economy in the world. Given the large population concentration in the unit, recreational use and open space preservation issues are constantly being addressed

Vegetation types in the unit range from annual grasses and brush in the eastern areas to large 80 plus year old brush fields and Coastal Redwood on the western edge of the unit. Recent large damaging fire's include the Lexington Fire (1985/ 13,128 acres), the Tunnel Fire (1991/ 1624 acres, 25 deaths and 3500 structures), the Croy Fire (2002/ 3007 acres and 300 structures), the Santa Clara Complex (2003/ 32,000 acres), the Lick Fire(2007/ 47,183 acres), and the Corral Fire (2009/ 12,500 acres). With the current population levels in the unit and the intrusion of urban development into wildland, the Santa Clara Unit is taking every opportunity to be proactive wildland fuels management. The unit is heavily involved in fire protection planning programs with our local cooperators to address existing problems, and identify areas where we can implement changes early in the planning stages. The Santa Clara Unit is located in an active earth quake fault area, as evidenced by the 1989 Loma Prieta earthquake, which the unit was heavily involved in the emergency response to.

Two Fire Safe Council's, Santa Clara Fire Safe, Diablo Fire Safe, and a working group formed after the Tunnel Fire to address projects in the local jurisdictions in the East Bay Hills interface areas, the Hills Emergency Forum are involved with fire safety and planning in the five county area. With input and cooperation from these groups, and the other stakeholder groups, the Unit managers establish goals and projects in the unit Fire Management plan to reduce the threat of large damaging fires. The document is the units' template for fuels reduction projects to pending, completed, and for general public review, and comment. The units Fire Plan allows us to respond to the needs and concerns of the public and identifies projects to be funded through cooperative grants and donations.

In 2008, the Federal Farm Bill added a provision to federal law that required states to conduct an assessment of forest resources. These assessments were to identify key issues and trends affecting all forest and rangelands in each state. Spatial areas (called priority landscapes) were delineated to help focus investments and other programs to deal with the associated issues. Three general themes were developed with eleven subthemes.

The three general themes are:

- 1- Conserve working forest and range landscapes.
- 2- Protect forests and rangelands from harm.
- 3- Enhance public benefits from trees, forests and rangelands.

These themes were then followed by eleven subthemes that provide more detail for a priority landscape rating.

High priority landscapes identified within the Santa Clara Unit include:

- Restoring wildfire impacted areas to maintain ecosystem health.
- Priority landscaping to protect communities from wildfire.
- Water quality and the threats within the watershed that affect water quality.
- Urban forestry tree planting.
- Urban forestry maintenance.
- Community wildfire planning.
- Wildfire threat to areas protected for habitat.

Overarching findings from the California's Forests and Rangelands 2010 assessment that affect the Santa Clara Unit include:

- Forest and rangelands remain valued assets critical to economic, social, and the environmental well-being of California.
- Forest and rangelands face a variety of threats, and trends indicate these threats are increasing in number.
- Demands on forest and rangeland resources are increasing
- Opportunities exist to improve the quality and quantity of benefits from these lands.
- Reaching desired future conditions will require political, social, and economic challenges.
- The potential to reach desired future conditions of our forest and rangelands will depend on taking advantage and augmenting existing collaborative efforts.

Priorities for the Santa Clara Unit include working with local landowners and governmental agencies for implementation of fire management plan objectives. Santa Clara Unit will continue to support the Community Wildfire Protection Plans (CWPPs) that are enacted within the unit and assist with grant funding for community wildfire protection projects. A continuance of the Vegetation Management Program (VMP) is a priority for healthy fuels management.

Additionally, through the use of this Fire Management Plan, the Santa Clara Unit is working 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 of Forestry and Fire Protection.

## UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

Initial attack forces are essential to keeping unwanted fires to a minimum. In order to do this, Santa Clara Unit maintains a strong force of personnel and equipment always ready to respond at a moments notice to any fire, be it a wildland fire or any other type of fire threatening the wildland.

In order to do this, Santa Clara Unit has 12 state funded fire stations (Forest Fire Stations) and 1 helitack base (Alma) under its jurisdiction. These stations and helitack base are fully staffed during declared fire season with two of the stations being staffed year round due to local fire service agreements. These stations combined provide for the staffing of 15 state owned fire engines, one state owned helicopter, and three transport/bulldozers.

Nine battalion chiefs are available in the unit and are strategically positioned throughout the unit in order to maintain quick response times of overhead personnel.

Three Law Enforcement/Prevention personnel are available within the unit and will frequently assist with initial attack operations.

In order for Santa Clara Unit to meet the objective of keeping 95% of all wildland fires to 10 acres or less (as defined by CAL FIRE), a large number of auto-aid agreements exist in the area. These auto-aid agreements allow for the nearest fire suppression resources to respond to the scene of a wildland fire and begin fire suppression activities.

The following list contains all the agencies that participate in auto-aid agreements with Santa Clara Unit:

East Bay Regional Parks Fire Department, Crockett Fire Department, Contra Costa Fire Protection District, East Contra Costa Fire Protection District, San Ramon Valley Fire Protection District, Rodeo-Hercules Fire Department, Moraga-Orinda Fire Protection District, Richmond Fire Department, El Cerrito Fire Department, East Bay Regional Parks Fire Department, Alameda County Fire Protection District, Berkeley Fire Department, Oakland Fire Department, Livermore-Pleasanton Fire Protection District, Hayward Fire Department, Piedmont Fire Department, Fremont Fire Department, Tracy Fire Department, West Stanislaus Fire Department, South Santa Clara County Fire District (Schedule A contract), Santa Clara County Fire Department, Gilroy Fire Department, Palo Alto Fire Department, Milpitas Fire Department

The Morgan Hill Emergency Command Center (ECC) provides Command and Control through dispatch agreements for Local Government Cooperative Agreements with the South Santa Clara County Fire District, Alameda County Fire Protection District at the Sunol Forest Fire Station and two Amador Contracts. One Amador Contract is at the Pacheco Forest Fire Station in Santa Clara County, and the other is at Sunshine Forest Fire Station in Contra Costa County.



## SECTION III: VALUES

### A: VALUES



The primary goal of wildland fire protection in the Santa Clara Unit is to safeguard the wide range of assets found within the unit from the effects of wildfire. The assets 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 assets at risk from wildfires and delineates their economic and non-economic assets: people, structures, timber, watershed, wildlife, unique scenic and recreation areas, range, wildlife, and air quality. The table below provides a description of the assets evaluated.

Asset at Risk	Public Issue Category	Location and ranking methodology
Fire-flood watersheds	Public safety Public welfare	Watersheds with a history of problems or proper conditions for future problems, ranked based on affected downstream population
Soil erosion	Environment	Watersheds ranked based on erosion potential
Water storage	Public welfare	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead storage capacity of facility
Water supply	Public health	Watershed area up to 20 miles upstream from 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)
Timber	Public welfare	Timberlands ranked based on value/susceptibility to damage
Range	Public welfare	Rangeland ranked based on potential replacement feed cost by region/owner/vegetation type
Air quality	Public health Environment Public welfare	Potential damages to health, materials, vegetation, and visibility; ranked based on vegetation type and air basin
Historic buildings	Public welfare	Historic buildings ranked based on fire susceptibility

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 based on input from California Department of Fish and Game and other stakeholders
Game wildlife	Public welfare Environment	Critical habitats and species locations based on input from California Department of Fish and Game 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

An example of an asset at risk within the Santa Clara Unit is the Mt. Hamilton Observatory. This observatory dates back to the late 1800's in which an observatory was built at the top of Mount Hamilton, located east of San Jose. This observatory would grow throughout the years and now has 9 research grade telescopes located in the area. A large number of structures including residences and other support facilities exist at the observatory. Due to the location of Mount Hamilton, numerous radio and microwave towers have been erected over the years as well as Copernicus Fire Lookout which is staffed during periods of high fire danger.

Many factors are involved in target area and asset at risk identification, including political climate of the region and suppression cost reductions. By looking at the 'big picture' and identifying the assets at risk, Santa Clara Unit staff along with input from other agencies and the public can confidently protect these areas and prioritize pre-fire projects.

## **B: COMMUNITIES**

During the 2000 fire season wildfires 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 their property. A fundamental step in realizing 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.

The California Department of Forestry and Fire Protection 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.

Three main factors were used to determine 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.

The Communities at Risk List includes a total of 1,264 communities. Of those, 843 are adjacent to federal lands (U.S. Forest Service, Bureau of Land Management, Department of Defense, etc.).

To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. A fundamental step in achieving this goal was the identification of communities that are at high risk of damage from wildfire. These high risk communities identified within the wildland-urban interface, the area where homes and wildlands 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.

With California's extensive urban Wildland-Urban Interface situation, the list of communities extends beyond just those adjacent to Federal lands. There are 1,287 communities currently on the Communities at Risk List. The California State Forester (CAL FIRE Director) has assigned the role of managing the list to the California Fire Alliance.

Within Santa Clara Unit, there are 50 designated Communities at Risk. The following list contains all the Communities at Risk within the unit:

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

## SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

### **A: FIRE PREVENTION**

In order to prevent unwanted fires from occurring, it is important to understand what is causing these fires. The Fire Prevention Bureau of Santa Clara Unit works diligently to determine the cause of all fires with the assistance of company officers. By understanding what the causes are, it allows the Bureau to focus education, enforcement, and patrol activities.

### ***IGNITION MANAGEMENT PLAN***

#### **5 Year Fire Season Ignition Statistics Average**

Wildland fire ignition statistics were tracked for the last years . The Unit experiences an average 145 fires within its Direct Protection Area (DPA) for the year.

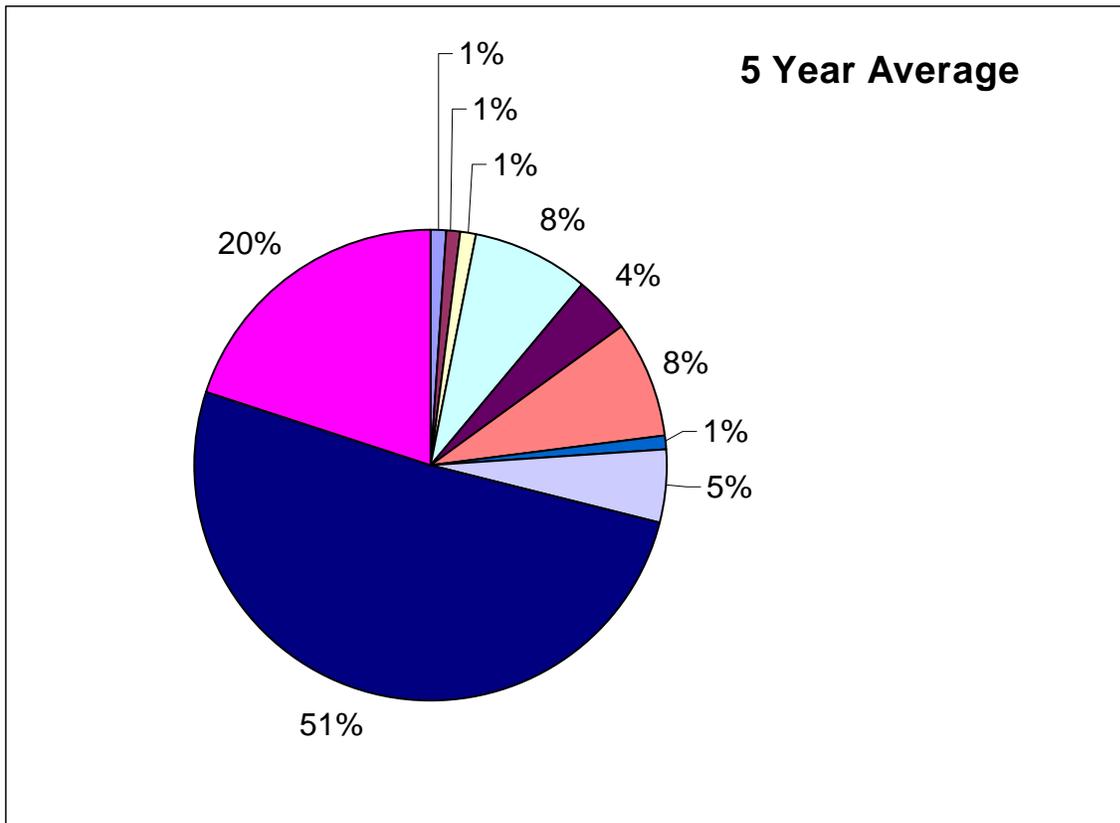
The last five largest fires in the Unit for were:

- 1) Orestimba Fire at 586 acres. Power line caused.
- 2) Diablo Fire at 475 acres. Undetermined caused.
- 3) Curry Fire at 185 acres. Power line caused
- 4) Vasco Fire at 115 acres. Power line caused
- 5) Zucca Fire at 100 acres. Equipment caused

Approximately 2500 acres burned on an average within the Direct Protection Area (DPA) of the Santa Clara Unit.

In reviewing fire causes during the last five years, it was found that causes of vegetation fires in the Unit were:

- 1) **Miscellaneous (51%)** [This section includes **Power line {18%}** and **Vehicle caused fires {24%}**]
- 2) **Undetermined ( 20%)**
- 3) **Debris ( 8%)**
- 4) **Equipment (8%)**
- 5) **Playing with Fire (5%)**
- 6) **Arson (4%)**
- 7) **Smoking (1%)**
- 8) **Campfires (1%)**
- 9) **Railroad (1%)**
- 10) **Lightning (1%).**



An analysis of the fire causes for the last five years was done and compiled below:

1) **Control Burning (debris burning)** accounted 8% of the total fires in the Unit. Due to other agencies within the Unit regulating controlled burns the education of those conducting controlled burns appears to have been reduced over the past number of years. This issue has been identified

and the Prevention Bureau is examining ways to provide the missing education component to those that wish to conduct controlled burns.

**2) Vehicles** accounted 24% of the total ignitions in the Unit. The Unit currently has a population of over 4 million people with a large percentage of that number operating motor vehicles of all types not including that daily influx of commuters transiting the Unit. Catalytic Converter failure and other maintenance issues remain the leading cause of fires caused by vehicles. With the current economic conditions there appears to be less maintenance done on vehicles which could potentially lead to an increase in the number of vehicle caused ignitions.

**3) Electrical power** accounted for 18% of the total ignitions in the Unit. Electrically caused fires resulted in three out of the five largest fires in the Unit. The electrical caused fires in the Unit can be separated into two distinct types. The first and most recognized is distribution caused fires. The second is generation/collection. The Unit is unique in the fact that the Altamont Wind Resource Area is located within our boundaries. The wind resource area currently contains approximately 4000 wind turbines that generate electricity for sale to the distribution grid. Most of the turbines located in the wind resource area are older models that are being replaced with newer more efficient and fire safe models. The Bureau plans on continuing our power line inspections to reduce the number of power line caused fires but number of inspections maybe impacted due to budget restrictions in the coming year.

**4) Equipment** accounted for 8% of the total ignitions in the Unit. One of the contributing factors in this category is the increasing number of people moving out into the wildfire prone areas of the Unit. These members of the public do not understand that the activities that would have not likely caused a fire in an urban environment are very hazardous and likely to cause a fire in the rural areas. Continued education is the key to reducing fires in this classification.

**5) Miscellaneous causes** accounted for 19% of the total ignitions in the Unit. This classification includes causes such as spontaneous combustion; fireplace ashes deposited improperly, shooting and other causes.

**6) Playing with Fire** accounted for 5% of the total ignitions in the Unit. The largest single cause in this category was the use of illegal fire works. The use of illegal fire works in the Unit is very prolific. The Bureau will continue to conduct patrols during the 4<sup>th</sup> of July period, in conjunction with our Volunteers in Prevention (VIPs) to reduce the use of illegal fireworks.

**7) Undetermined** accounted for 20% of the total ignitions in the Unit. Undetermined cause is utilized when the investigator cannot eliminate additional cause classifications. Continued hard work and dedication of the Unit's Fire Prevention Staff and the company officers who conduct thorough origin and cause investigations aid in the declining number in this cause class. The Bureau will continue to provide training to company officers to improve their skills at investigating fires.

**8) Arson** accounted for 4% of the total ignitions in the Unit. Enforcement of the fire laws in the State of California are a priority for the members of the Bureau. No arrests were made for arson fires.

**9) Lightning** accounted for 1% of the total ignitions in the Unit. Lightning is not a regular occurrence for the Unit and there is no way of stopping Lightning caused fires. The Unit's response to lightning caused fires is early detection and rapid response to reduce the acres burned.

**10) Smoking** accounted for 1%, of the total ignitions in the Unit. The majority of these fires were carelessly discarded cigarettes along our roadways of the years prior.

**11) Illegal campfires and campfire escapes** accounted for 1% of the total ignitions in the Unit. Both of these fires can be attributed to activity of illegal marijuana grows.

**12) Railroad** accounted 1% of the fires in the Unit. In comparison to the number of daily trains moving through the Unit this is a positive sign that the railroads are maintaining their equipment and clearances.

## **ENGINEERING & STRUCTURE IGNITABILITY**

The Santa Clara Unit has always known the threat of wildfire. Due to current fuel conditions, weather patterns, and increased human activity in wildland areas the occurrence of fire has become more of a danger than ever. In the event of a large wildfire, there potentially will not be enough emergency responders and equipment to protect each and every structure. In some instances, size, speed, and intensity of the fire, or building construction materials and surrounding vegetation, structures can ignite and potentially be destroyed before emergency responders can arrive. In order for a structure to survive it must be able to avoid ignition.

State and Local fire agencies having jurisdiction within the Santa Clara Unit continually provide wildland fire prevention education to those living in hazardous wildland fire areas. This education provides recommendations to reduce the chances of structure ignition.

The Wildland-Urban Interface Fire Area Building Standards were established to create minimum standards for materials and material assemblies and provide a reasonable level of exterior wildfire exposure protection for buildings in Wildland-Urban Interface Fire Areas. The use of ignition resistant materials and design to resist the intrusion of flame or burning embers projected by a wildfire and exposure to it will prove to be the most prudent effort California has made to try and mitigate the losses resulting from our repeating cycle of Wildland-Urban Interface fire disasters.

California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail there. These areas, or “zones,” are based on factors such as fuel (material that can burn), slope and fire weather. There are three zones, based on increasing fire hazard...medium, high and very high. The zones serve several purposes. They are used to designate areas where exterior wildfire exposure protection building codes apply to new buildings. It can be a factor in real estate disclosure. Local government considers fire hazard severity in the safety element of the general plan.

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshal’s emergency regulations amending the California Code of Regulations (CCR), Title 24, Part 2, known as the 2007 California Building Code (CBC).

In part it states that new buildings located in a fire hazard severity zone within state responsibility areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.

With the exception of the LE-100 program (fire safe clearances around structures), Santa Clara Unit has delegated the enforcement of these building standards to the local authority. The Unit however continues to provide guidance and assistance to local authorities who frequently inquire as to specific building standards, changes to State Responsibility Areas, and fire hazard severity zone designations.

## **INFORMATION AND EDUCATION**

CAL FIRE's Fire Safety Education Programs are spread throughout Santa Clara Unit and come in the form of fair exhibits, posters, flyers and thousands of other printed materials, radio and television spots, community meetings, one-on-one contacts with wildland homeowners, and the internet.

Santa Clara Unit makes it a priority that residents within the unit that reside in wildland areas are informed as to the dangers of wildfire. In order to do this, the Santa Clara Unit has put a priority on conducting LE-100 inspections. These inspections are conducted in order for the homeowner to become educated on section 4291 of the Public Resources Codes. This section states in part that all structures located within State Responsibility Areas shall have a clearance of up to 100 feet of flammable vegetation cleared around all structures. By conducting LE-100 inspections, Santa Clara Unit staff are able to have one-on-one contact with homeowners providing fire safety education while at the same time enforcing the Public Resources Code.

Unit staff is again taking an aggressive approach to conducting LE-100 inspections using both paid Unit staff and VIP's to handle the large task.

Another successful program within the Santa Clara Unit is the Volunteers In Prevention (VIP) program. This statewide program was designed to allow persons within the community to participate in assisting CAL FIRE with fire prevention and education programs. The Santa Clara Unit currently has in excess 70 members and conducts a yearly average of 62 public outreach and education program making an estimated 320,000 personal contacts, 24 news releases, over 4,000 LE-100 inspections, and when combined with other projects donated a total of 6,252 hours of personnel time to fire prevention engineering and education to the unit.

## B. VEGETATION MANAGEMENT



Attainment of the fuels reduction goals of the Santa Clara Unit Fire Plan will require on-the-ground effort on the Department's partial use of CAL-FIRE, CDC, CYA and CCC crews and equipment will likely be necessary in many areas where stakeholders do not have the finances or resources to do an effective job individually or as a group. The Vegetation Management program (VMP) is currently in a state of hibernation due to the state budget and financial constraints. While this is a temporary hold on the Program the unit currently has a variety of VMP projects in various stages of preparation, ranging from those with range, water shed and wildlife habitat improvement as the primary goals, i.e.: the Isabel Valley, Mt Mocho, and other eastern Santa Clara County burns. The PL 566 project and Mt. Diablo State Park burns will have a community fire protection goal in addition to wildlife habitat renewal. Santa Clara Unit will make a concerted effort to pursue projects that meet the wide array of demands placed on the Vegetation Management Program in Santa Clara Unit.

### **Objectives:**

The vegetation management program will shift emphasis to:

- Smaller projects closer to new developments
- Alternatives to fire, such as mechanical fuel treatment
- Emphasis on quality over quantity
- In some instances the program may be limited to simply providing wildland safety and protection zones around high value assets.

With the possibility of additional grant funding during the year, additional projects may evolve. VMP projects must be closely tied to the Santa Clara Unit Fire Management Plan. Since CAL-FIRE's most damaging fires are in urban interface, VMP projects must focus on critical, at-risk community developments or where projects reduce a fires potential to extend into those communities.

### **Action Plan:**

Funding and labor resources are always a challenge to obtain projected project completion dates.

Labor force availability is a limiting factor to achieving project completion. In the Santa Clara Unit the Ben Lomand Adult Conservation and Delta Adult Conservation camps are the main labor forces available to perform project tasks. Their cost and availability is an issue to use

them on the projects in Santa Clara County. California Department of Corrections camps outside of the Santa Clara Unit have long travel times to consider using them as possible labor.

An additional camp located in or adjacent to the northern sections of the Santa Clara Unit whose population would be made up of the CDC is a possible solution to this labor force deficiency that would also provide better strategic coverage for response to wildland fires. These crews would help implement the proposed projects listed in the Santa Clara Unit Fire Management Plan, thereby reducing Santa Clara Unit's wildland fire problem. The added crews would be valuable in preventing and combating periodic floods and disasters. They could also provide economic stimulus to more remote areas of Santa Clara Unit, and could assist agencies of local, state and federal government in completion of conservation-related work projects.

## SECTION V: PRE- FIRE MANAGEMENT TACTICS

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### DIVISION / BATTALION / PROGRAM PLANS

The following pages contain the Field Battalions lists of projects and goals for the implementation of the Santa Clara Units Fire Management Plan, the “Meat and Potatoes.” They are compiled by the field Battalion Chiefs with input from the units Pre Fire Engineer, Fire Safe Councils, Stakeholders, and the general 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 end point.

### **BATTALION ONE (MORGAN HILL)**

Battalion One is located in Santa Clara County’s Supervisor District One and lies solely in the State Responsibility Area (SRA) bordering the south side of Bailey Road in the northwest; east of Uvas Road; then westward on the Redwood Retreat Road; south along the Santa Cruz County line to San Benito County line; then jumps across the South Santa Clara Valley and San Benito County Line at San Felipe Road; to the Henry Coe State Park and private ranches to the west side of The County Line Road, including the Highway 152 corridor- from Dinosaur Point to Dunne Hill. In the open lands of the east side of Battalion One and Henry Coe Park there is a need for state agencies and local citizens to protect mountain Lions, black-tailed deer, ground squirrels, coyotes, raccoons, bobcats, and wild pigs roam. Also, there are golden eagles, California, quail, jays, woodpeckers, red-tailed hawks, turkey vultures, western bluebirds and wild turkeys.

Historically, the major wildland fire occurrence have been in the remote and sparsely populated eastern portion of the Battalion One, the 1936 Fire, the 1961 Bollinger Ridge Fire, , the 2007 Lick Fire, are the largest fires recorded in the Santa Clara Unit. Fire Season staffing (May through October) statistics for Battalion One are: 1 Battalion Chief; 6 permanent and 1 seasonal Fire Captain; 2 permanent and 1 seasonal Fire Apparatus Engineer; and 22 seasonal firefighters answered the calls with one utility, four fire engines and 1 reserve fire engine responded to incidents within the Battalion.

### **Objectives:**

1. Improve awareness and involvement between the Santa Clara County Fire Safe Council and south Santa Clara County communities by personnel at the fire station and the available “Living with Fire” in Santa Clara County handouts.
2. Continue hazard reduction inspections (LE100 Inspections) for structures with Volunteers In Prevention (VIP) and Engine Companies.
3. Continue input on all new construction and developments with the Santa Clara County Fire Marshall’s office.
4. Install and maintain a Remote Fire Weather Station (RAWS) in the foothills east of South Santa Clara County basin when funding becomes available.
5. Participate in all local community activities (i.e. Back Country Event, Renaissance Fair, Indian POW WOW, and Tarantella Festival)

6. Continue assistance for Henry Coe State Park, and private ranchers in fuel modification projects.
7. Continue 3.0 staffing on all state funded ICS Type III fire engines during fire season (June through October) and continue to seek 4.0 staffing, when funding permits, in for initial attack responses to further reduce the costs and losses due to wild land fires.
8. Train and pre-plan to assist local government for the possibility of Weapons of Mass Destruction (WMD) and terrorist acts.
9. Train and preplan to assist local government for the possibility of natural or man-made disasters which may occur.

### **BATTALION TWO (San Jose)**

The San Jose Battalion encompasses approximately 250 square miles of SRA lands in the northern and eastern portions 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. The wildland urban interface areas are adjacent to the Almaden Valley and the eastern foothills of San Jose.

Wildland fire activity in the battalion was very low due to mild weather conditions. It was reported to be the coolest location in the Bay Area. Most fires in the battalion are typically contained by the initial attack resource assignment. There is little to no structure loss or damage to public infrastructure. Fire Season staffing (May through October) statistics for Battalion Two are: 1 Battalion Chief; 4 permanent and 1 seasonal Fire Captain; and 10 seasonal firefighters answered the calls with one utility, two fire engines responded to incidents within the Battalion.

### **Objectives:**

1. Continue hazard reduction inspections (LE100 Inspections) for structures with Volunteers In Prevention (VIP) and Engine Companies.
2. Selected areas in the battalion were based on three factors; assets at risk, communities at risk, and watershed value. The three areas are Alum Rock Falls, Lick Observatory, and the community of Twin Creeks.
3. Develop concise pre-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 area of SRA lands.
4. Continue with pre-plans for areas of the Battalion that are remote.

### **BATTALION THREE (LOS GATOS)**

Battalion Three is located in Santa Clara County and lies solely in the State Responsibility Area (SRA) bordering the north of Highway 152; west of the Almaden Valley; then east of the Santa Cruz County line; South from the San Mateo County Line. The Battalion includes watershed for

local communities, as this watershed flows in to many lakes and streams managed by both the Santa Clara Valley Water District and the San Jose Water Company. The Battalion also is home to a large amount of Coastal Redwoods protected from development by open space districts along with County parks. The Battalion also has a number of small rural communities that have little or no governmental services.

Historically, the major wild land fire occurrence has been in the remote and sparsely populated South western portion of the Battalion Three, The 2009 Loma Fire, The 2008 Summit Fire, the 1994 Croy Fire and the 1987 Lexington Fire were large structure loss incidents in the Santa Clara Unit. The 2010 Fire Cause Statistics are consistent with previous years equipment use being the leading cause for preventable wild land fires. Fire Season Staffing (May through October) statistics for Battalion Three are: 1 Battalion Chief; 7 permanent and 2 seasonal Fire Captains; 2 Fire Pilots and 2 seasonal Fire Apparatus Engineers; and 25 seasonal firefighters answered the calls with one utility (circa 2002) two fire engines (circa 2008, 2010) one helicopter (circa 1968) and one helicopter service unit (circa 1996) responded to 688 separate incidents,

#### Action Plan

1. Support the ongoing shaded fuel break in conjunction with the Santa Clara Valley Water District and other stakeholders.
2. Assist both Mid Peninsula and the Santa Clara Open Space Districts in planning and implementing fuels reduction on lands they manage in the public trust.
3. Continue to expand the Fire Safe Council chipper program to include stakeholders in the Croy Ridge area.
4. Continue to assist and gain stakeholder support of the western Santa Clara County fuel break.
5. Continue to assist with the Community wildfire prevention plans in western Santa Clara County to include a countywide Community Wild Fire Protection Plan.

#### **BATTALION FOUR (ALAMEDA)**

Battalion four 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 hilly 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%). 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 predominately 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 m.p.h. In the eastern portion of the county on those same days wind velocities will be 15 to 25 m.p.h. 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's are tempered by the marine influence the higher wind speeds adversely affect fire behavior. Any fire starts with sustained fuel continuity downwind quickly progress into moderate to rapid rates of spread at the fires head. Quick initial attack by fire suppression forces is critical in these conditions.

Operationally, Battalion four is a complex environment for CAL FIRE. There are twelve local government fire agencies operating in Alameda County. Nine of these cities 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 four and the windy conditions have combined to create high damage loss fires historically. One 2 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 3000 homes for a loss of 1.8 billion dollars. Life safety at wildland fires is also 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.

### **Priority Areas:**

1. SRA-LRA wildland urban interface areas.

#### WUI Communities

Oakland-Berkeley Hills: 16,200 acres with an estimated population of 105,000. Oakland Fire, Berkeley Fire, East Bay Regional Parks and CAL FIRE have jurisdiction.

San Leandro-Castro Valley Hills: 8500 acres with an estimated population of 30,000. Alameda County Fire, East Bay Regional Parks and CAL FIRE have jurisdiction.

Hayward Hills: 5000 acres with an estimated population of 38,000. Hayward Fire, East Bay Regional Parks and CAL FIRE have jurisdiction.

Union City-Fremont Hills: 10,000 acres with an estimated population of 20,000. Alameda County Fire, Fremont Fire and CAL FIRE have jurisdiction.

Pleasanton Ridge-Kilcare Woods: 4000 acres with an estimated population of 5000. Livermore-Pleasanton Fire, East Bay Regional Parks and CAL FIRE have jurisdiction.

Palomares-Niles Canyon: 3500 acres with an estimated population of 1500. Alameda County Fire, Hayward Fire, Fremont Fire, East Bay regional Parks and CAL FIRE.

### **Action Plan:**

1. Continue and enhance the fuel modification and fuel reduction projects in the wildland-urban interface areas. Coordinate resources with the Hills Emergency Forum and the Diablo Fire Safe Council. Projects include but are not limited to:
  - Berkeley upper Strawberry Canyon fuel reduction project.
  - Diablo FireSafe East Bay roadside clearance project.
  - East Bay Regional Park Claremont Canyon fuel reduction project.
  - Tilden Park Eucalyptus removal project.
  - Oakland-Berkeley hills 15 mile fuel break project.
  - Oakland Shepherd Canyon shaded fuel break project
  - Chabot Park fuel reduction project.
  - Highway 24 Caldecott Tunnel fuel reduction project.
  
2. Obtain language changes in the conditions of approval for wind generators use permits requiring numbering and marking gates and road access utilizing the standards of PRC 4290 with regard to signage.
3. GIS / GPS mapping and marking of wind farm gates and road system
4. Conduct public information and education programs at local schools.
5. Distribute Fire Safe educational materials at public gatherings and public venues.

6. Utilize Volunteers in Prevention for targeted inspections of dwellings and buildings for compliance with PRC 4291.
7. Utilize Volunteers in Prevention to conduct bulk mailing of self inspection and fire safe guides to postal customers in high hazard areas.
8. Whenever dealing with the media suggest fire prevention messages to be included and integrated into their story.
9. Conduct meetings with agricultural groups such as the Cattleman's Association, and Farm Bureau to provide information and encourage the use of firebreaks and clearance around all improvements such as dwellings, barns, out buildings and wells.
10. Conduct training exercises and pre-fire season briefings with cooperating fire agencies and share pre-fire plans for special target hazards.

### **BATTALION FIVE (STANISLAUS)**

Battalion Five covers all of western Stanislaus County west of Interstate Five and bordered by San Joaquin County to the north and Merced County to the South. The Battalion includes a portion of eastern Santa Clara County which includes the San Antone valley and is bordered by the top of the China Grade on Mount Hamilton Road to the west of the San Antone Valley.

The vegetation and topography in Battalion Five transition from annual grass rangelands along the Interstate Five 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 fisheries 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. The Battalion includes wilderness areas of Coe State Park and the Frank Raines Off-Highway Vehicle Park located in Del Puerto Canyon.

Frank Raines Park is an 1800 acre multi use park operated by Stanislaus County, located 18 miles west of Patterson in Del Puerto Canyon. Eight hundred acres of the park is 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 23,3000 acre wilderness area of the 87,000 acre Coe State Park is located in western Stanislaus County. The wilderness area is environmentally sensitive and has a number of archeological sites within its boundaries.

The area has a significant history of large damaging wild land fires. While the majority of fires start along the Interstate 5 (I-5) corridor, the majority of large damaging fires have occurred in more remote areas of the Battalion. The primary factors contributing to 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.

### **Action Plan:**

1. Improve local operational efficiency and effectiveness by improving mutual and auto aid agreements between CDF and West Stanislaus Fire Protection District, City of Patterson, and City of Newman. This will include improving communications systems and dispatch procedures.
2. Review all development projects for compliance with PRC 4290 and make recommendations for fire defense improvements. This will include:
3. Participate as a voting member of the Stanislaus County Fire Authority in developing improved local fire codes, ordinances and fire prevention processes.
4. Participate in planning fire safe requirements for expansion of Frank Raines OHV Park.
5. Work with Caltrans and local landowners on mowing, discing, and other and 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.
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 mutual aid and communications 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.

### **Priority Areas:**

#### **Diablo Grande Development Fire Break / Fuel Reduction Project WUI**

Diablo Grande Development is a 28,500 acre Planned Residential and Resort Community (Specific Plan) located nine miles west of Patterson. Currently constructed (as part of the first phase) are two 18 hole golf courses and approximately 440 residential homes. This project consists of a combination of fire breaks, fuel reduction projects, and greenbelts.

#### **Mount Oso Road Fire Break**

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.

### **Stanislaus / Santa Clara County Line Road Fire Break**

This primarily ridge top road runs from the San Antone Valley to Highway 152. 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 Coe State Park and the Orestimba creek watersheds.

### **Fink Road Solar Farm**

The Fink Road Solar farm is a proposed 800 acre, 80 to 100 megawatt, photovoltaic solar energy farm located just west of Interstate 5 west of Newman.

### **Copper Mountain Solar Farm**

The Copper Mountain Solar farm is a proposed 13 megawatt photovoltaic solar energy farm located in portions of a 4,147 acre site within the confines of the Diablo Grande Development.

## **BATTALION SIX (CONTRA COSTA)**

The Contra Costa battalion covers all of Contra Costa, a small sliver of northwestern Alameda, and western San Joaquin Counties. There are several large landowners in the battalion. Four of the largest are the East Bay Regional Park District, Mt Diablo State Park, Contra Costa Water District, and the wind power consortium near the Altamont Pass.

Mt Diablo State Park encompasses approximately 30,000 acres of open space in the middle of the battalion. The Park had not experienced a significant wildland fire event in recent years.

The Contra Costa Water District includes the Los Vaqueros Reservoir and is a large stakeholder in overall watershed protection with close to 80,000 acres under management. The Los Vaqueros Reservoir and watershed incorporates some 20,000 acres and provides a domestic water supply to over 450,000 people.

While many fire safety steps have been taken by the wind power consortium, wind farms continue to be an ignition source for vegetation fires. We will continue to work with the wind farm owners in an effort to minimize this risk.

The population of Contra Costa County is now over one million people while the population of the San Joaquin County portion of the Battalion is over 100,000. In Contra Costa County the majority of citizens reside within the 19 incorporated cities, although more than 20% live in unincorporated communities. The continuing growth in the population further increases the pressure on areas of wildland urban interface. Top on the list of projects for the battalion are the cooperative agreements with other fire agencies. These include the continued staffing of Sunshine Forest Fire Station though the non-fire season months under the current Amador plan with the East Contra Costa Fire Protection District and updating and improving the Mutual Threat Zone response plans. The Diablo Fire Safe Council has been very successful in obtaining grant money to further fire safety and fuels management projects in Alameda and Contra Costa Counties. Battalion Six personnel will continue to support these projects in anyway possible.

The vegetation and wildlife habitat of Contra Costa County includes several broadly defined types: native and non-native forests and woodlands, shrub lands, grasslands, riparian woodland and scrub, and wetlands. Numerous plants and animals that are designated as rare, threatened, or endangered species or are candidates for such designation occur here.

Contra Costa County contains 13 major watersheds and sub-watersheds, with over 1300 miles of creeks and drainages. These watersheds form a crucial part of the Bay Area's domestic water supply, and are the location of several large reservoirs.

Wildfires are part of Contra Costa's natural eco-system. The Mediterranean-like climate, the rugged, wind-conducive topography, and fire-adaptive native vegetation set the stage for periodic burns.

In the past 60 years there have been more than 30 wildfires that were more than 300 acres and countless smaller fires in Contra Costa County mainly in the Central and Eastern portions of the County. In San Joaquin County there has been also more than 30 large wildfires many burning into adjacent Alameda and/or Stanislaus Counties. The acreage in San Joaquin County is more substantial than Contra Costa due to the expansive grass lands of the Altamont and I-5 corridor.

Finally with this year being the 20<sup>th</sup> anniversary of the Tunnel Fire that occurred in October of 1991 in the Oakland Hills, CAL FIRE will be continuing its relationship with the Hills Emergency Forum (HEF). This Forum made up of stakeholder agencies in both Alameda and Contra Costa Counties has worked tirelessly for 2 decades to both prevent and prepare for another Urban Interface Wildland event that could occur in the Oakland Hills area. The Tunnel Fire remains the largest loss of structures (2900) by wildfire in the history of California.

**Action Plan:**

1. Continue fuel modification, 4291 inspections and look at access and egress issues within and around the Community of Canyon.
2. Implement a fuel modification zone around Mt Diablo State Park boundaries.
3. Draft and implement a 20 to 25 year control burn cycle within the state park.  
Santa Clara Unit Fire Management Plan, 2009
4. Maintain Wind Farm fire plans and continue the inspections of the re-powering projects.
5. Begin focused enforcement of the 4291 code in the Alhambra Valley and Wildcat Canyon areas.
6. Begin groundwork for 4291 program in the San Pablo Watershed.
7. Continue working with Contra Costa Water District to protect and enhance the Los Vaqueros watershed and nature area.
8. Upkeep, maintenance and mapping of the Contra Costa County fire trails.
9. Remain active in the Diablo Fire Safe Council.

10. Educate the public on equipment caused fires.

11. Reduce arson fires.

12. Review/update Mt. Diablo State Park pre-fire management plan with State Parks and other local agency cooperators.

**Priority Areas:**

1. Canyon

Continue community meetings to assess the overall progress of fire safety and fuels modification projects in the community. Start a 5-year phase-in of 4291 code inspections. Address the access / egress issues with county planning, transportation and building officials. Using GIS based products and a fire behavior-modeling program such as Far Site or Behave conduct a series of fire scenarios in the Canyon area before fuel modification projects and after. Take this data and perform cost suppression estimates of fires before and after projected fuel modification efforts.

2. Mt Diablo State Park

A. Implement a fuel modification zone along the park boundaries to limit the spread of fires from the park into the urban interface and vice versa. Work with park management, US Fish and Wildlife and adjacent local governments to draft and implement a 20-year fire reduction plan in the park. This project would start at or near the top of Mt Diablo and proceed down slope and return to the top at the completion of a cycle. Santa Clara Unit Fire Management Plan, 2009 These burns would be limited to approximately 500 acres per year as conditions allow.

3. Alhambra Valley, Wild Cat Canyon and West Contra Costa County

Begin a focused, phased 4291 code enforcement program. Assess the region for fuel modification projects and secure contracts with local landowners.

4. Bollinger Canyon and Las Trampas Ridge

Working with East Bay Regional Parks, San Ramon Valley Fire Department and local landowners begin fuel modification on Las Trampas Ridge running north Continue 4291 and local weed abatement enforcement in the LRA and SRA areas.

5. Los Vaqueros Watershed and Mallory Ridge

Continue assisting Contra Costa Water District with fuel modification projects and control burns in the Los Vaqueros watershed sensitive areas. Assist Contra Costa Water District with weed abatement projects on Mallory Ridge.

**Battalion Seven (South Santa Clara County Fire District)**

The South Santa Clara County Fire District, known as Battalion Seven, is located in the southern San Francisco Bay Area. Battalion Seven provides fire control and advanced emergency medical services to 40,000 customers in the unincorporated areas of Morgan Hill, Gilroy, and the community of San Martin. The Battalion has 3 fire stations that cover approximately 300 square miles. The boundaries are: San Jose city limits to the North along highway 101 at Metcalf road;

to the Santa Cruz County Line; to the West Hecker Pass Highway; East to Bell Station on the Pacheco Pass Highway; South to the San Benito County Line at Pajaro River.

Battalion Seven protects: residential, commercial and light industrial occupancies; the wildland urban interface communities; 10 wildland Mutual Treat Zones, 450 miles of State Highways 152, 156, 25, and 101; 45 miles of two separate rail lines owned by Southern and Union Pacific Railroads, also used by Cal Train Commuter and Amtrak trains.

The San Andrea's, Hayward, and Sergeants Faults Zones run through Battalion Seven. One large major water supply from San Luis Reservoir and a gas pipeline run through the battalion.

The South Santa Clara County Fire District participates actively in automatic aid agreements, with the Gilroy City Fire Department, Santa Clara County Fire Department (Morgan Hill City), California Department of Forestry and Fire Protection (CAL FIRE), Pajaro Valley Fire District, San Benito County Fire, and San Jose City Fire Departments. We are 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 South Santa Clara County Fire District is an all risk emergency response battalion. Responding to approximately 4,500 incidents per year which include various assists to other fire departments, emergency medical services, structure, vehicle, and wildland fires, hazardous materials spills, water rescues, and public service assists as listed below:

### **BATTALION TWENTY (FIRE PREVENTION BUREAU)**

The Santa Clara Fire Prevention Bureau falls under the direction and supervision of the Unit's Eastbay Division Chief. The Bureau is staffed by a Battalion Chief, one Fire Captain Specialist, one Pre-Fire Engineer, who also doubles as a Fire Captain Specialist, and a Fire Prevention Specialist II (FPS II). All of the Prevention Bureau staff are California Peace Officers, except the FPS II. The Bureau is involved in all areas of prevention and is broken down into three separate, but related functions handled by the individuals assigned to the Bureau, education, engineering and enforcement.

The Volunteers in Prevention program is administered and coordinated by the FPS II. The VIP's currently have 78 members and conduct public outreach and education programs, news releases, 4,230 PRC- 4291 (LE-100 Defensible Space) inspections, and when combined with other projects of personnel time to fire prevention engineering and education to the unit.

Law Enforcement branch of the Bureau includes; fire investigation (origin and cause determination), issuing citations, and processing criminal complaints with local District Attorneys, and civil cost collections, which are returned to the States General Fund. The Bureau maintains active membership in the Santa Clara and Alameda County Fire Prevention Officers, and Fire Investigation groups, and is currently working to establish an interdisciplinary fire investigation team in Contra Costa County. In addition to these groups the Bureau is actively fostering working relationships with the over 40 other Law Enforcement agencies within the units boundaries.

Pre Fire Engineering and Fire Protection Planning are also handled by the Bureau. The majority of the Public Resources Code 4290 inspections are conducted by the local fire

department officials in cooperation with the local CAL FIRE Battalion Chief. The reason for having these local agreements is that many of the local agencies have requirements that are more restrictive than PRC 4291. In addition it makes the process easier for the property owner.

Pre Fire Engineering includes GIS mapping of assets at risk, wild land fuel belts, and the maintenance of various other GIS data layers for use in planning and implementing fuel reduction projects. The Bureau also provides technical support to for three Fire Safe Council's active in the unit, South Santa Clara County Fire Safe, Santa Clara Fire Safe, Diablo Fire Safe, and to the Hills Emergency Forum, a working group formed after the Tunnel Fire to address projects in the LRA and interface areas of the East Bay Hills and surrounding communities. With input and cooperation from these groups, and the associated stake holders, the Pre-Fire Engineer establishes goals and projects in the Unit's Fire Management Plan to reduce the threat of large damaging fires. The Fire Management Plan is the Unit's template for fuels reduction projects including pending, on going, and completed projects. The Unit's Fire Plan allows us to respond to the needs and concerns of the public and identifies projects to be funded through cooperative grants and donations.

Through the functions of education, engineering and enforcement, the goal of the Santa Clara Fire Prevention Bureau is working to reduce unplanned ignitions within the unit, 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 of Forestry and Fire Protection.

### **Education and (Volunteer in Prevention)/VIP**

The SCU VIP Program assists the Unit in a variety of Fire Prevention Activities. The Unit currently utilizes the VIP's to help support community outreach events, defensible space inspections (LE-100 Program), home and garden shows, educational events, staffing Copernicus Lookout and supporting the Unit during fires.

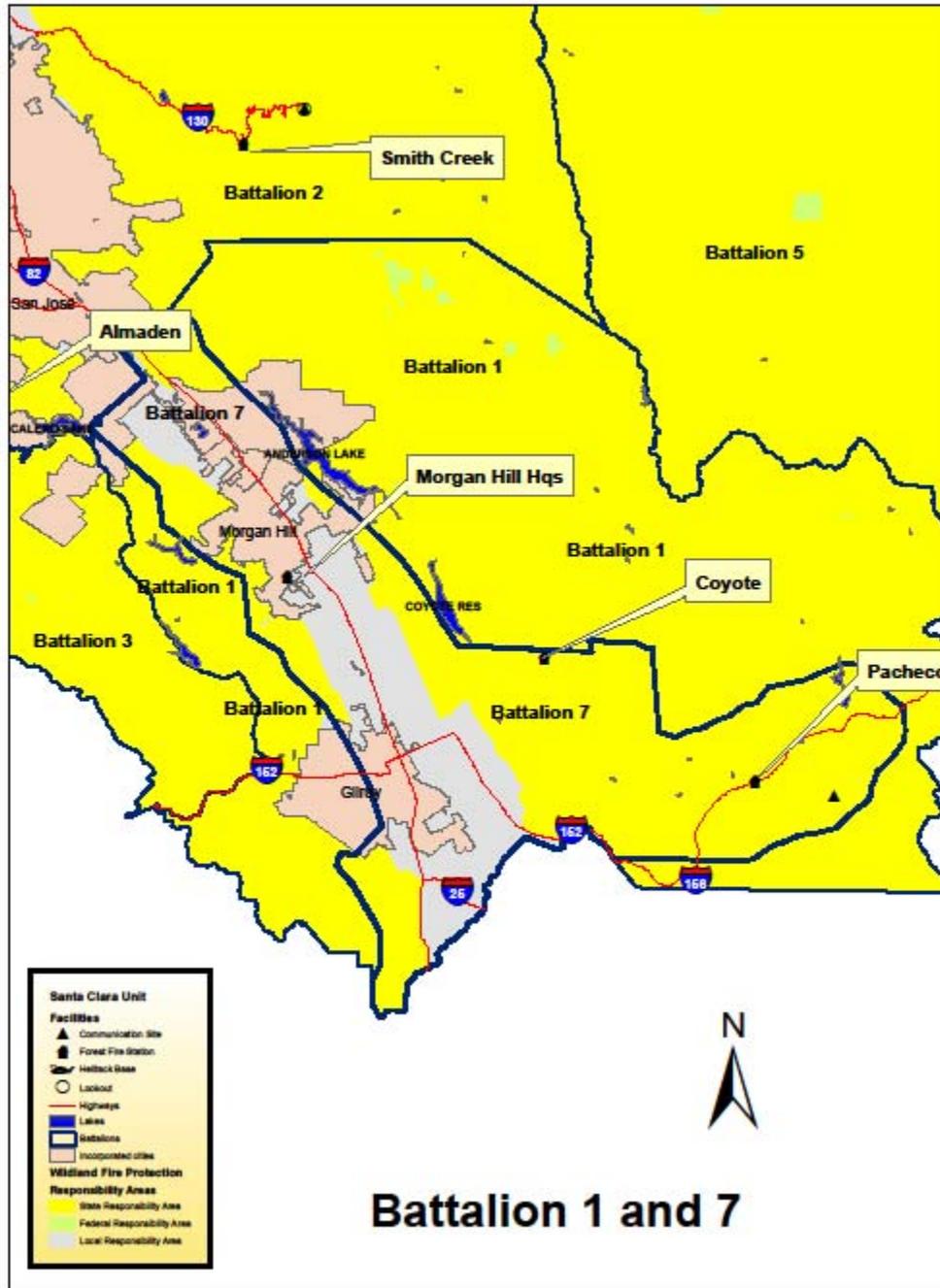


## **APPENDIX B: UNIT GOALS AND OBJECTIVES**

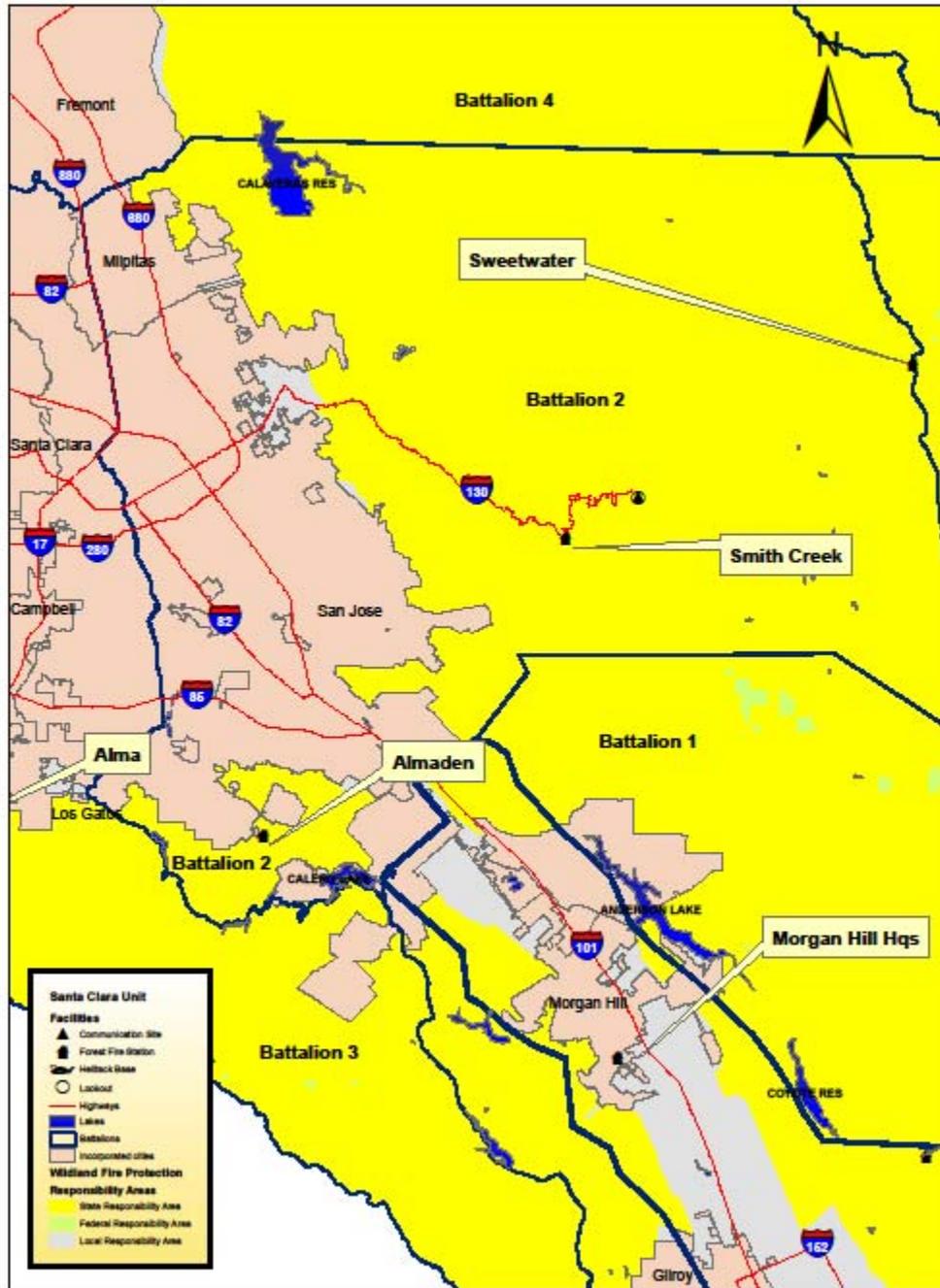




Battalions 1 and 7



# Battalion 2

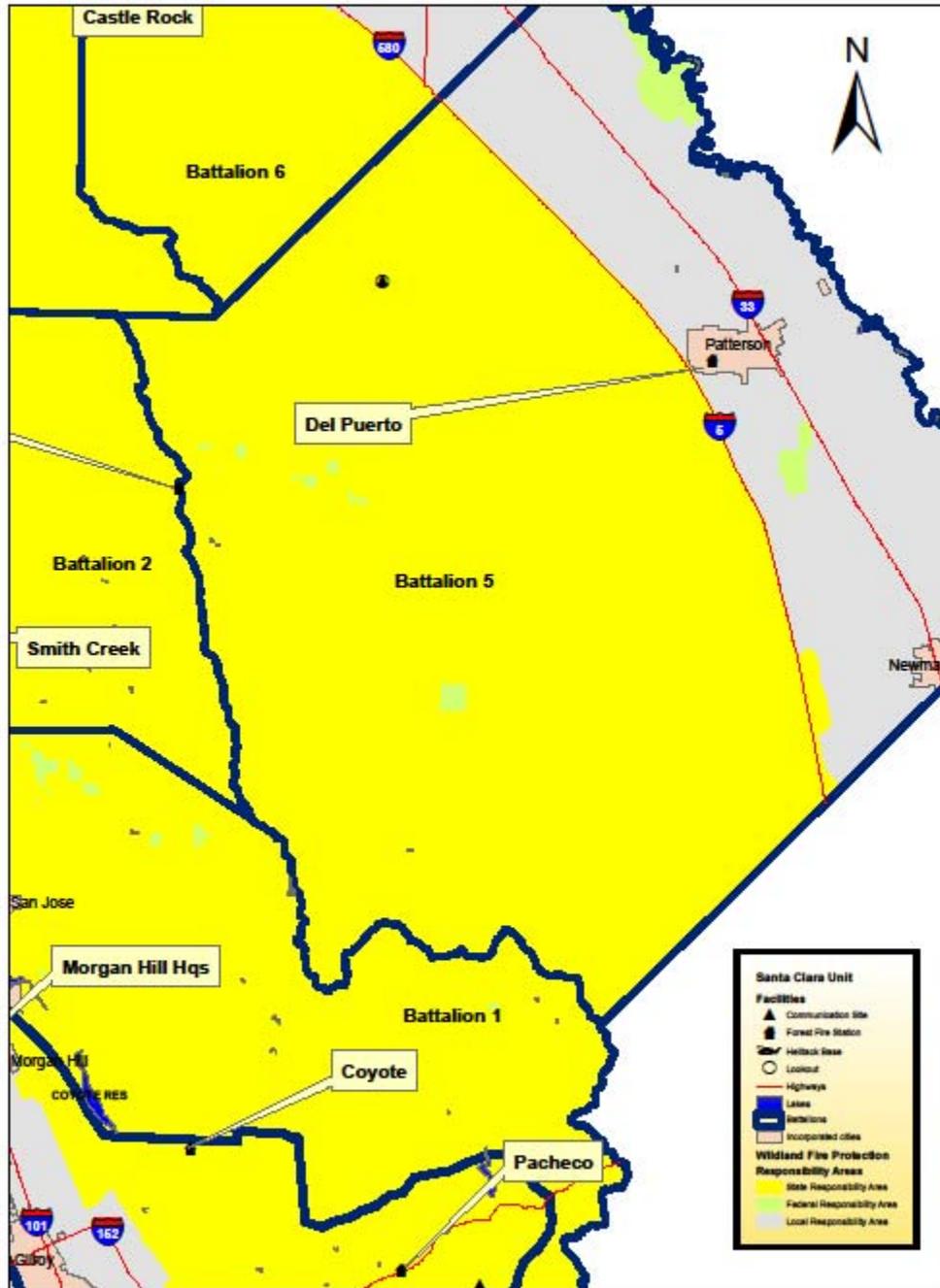


Battalion 3





# Battalion 5



**SUPPLEMENT: 2012**

**Annual Report of Unit Accomplishments**