

**Santa Clara Unit
Strategic Fire Plan, 2011**

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.

2011 IGNITION MANAGEMENT PLAN

2010 Fire Season Ignition Statistics

Wildland fire ignition statistics were tracked for the entire year of 2010. The Unit experienced 133 fires within its Direct Protection Area (DPA) for the year. This number represents a 9% decrease from 2009 (147 fires).

The five largest fires in the Unit for 2010 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 1967 acres burned within the DPA of the Santa Clara Unit during 2010.

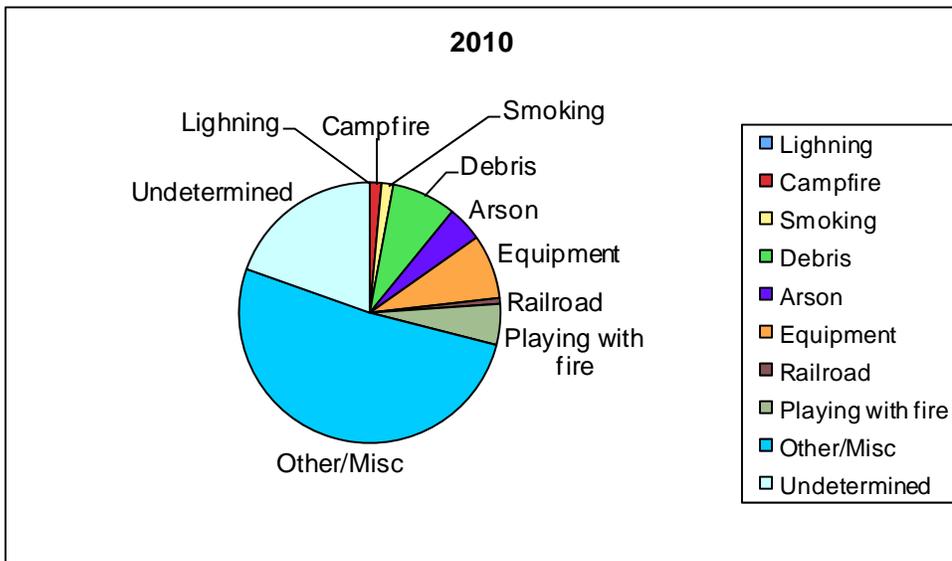
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In reviewing fire causes during the 2010 season, it was found that the five leading causes of vegetation fires in the Unit were:

- 1) **Miscellaneous (71 fires – 52%) [This section includes Power line {25 fires – 18%} and Vehicle caused fires {33 fires – 24%}]**
- 2) **Undetermined (27 fires – 20%)**
- 3) **Debris (11 fires – 8%)**
- 4) **Equipment (11 fires – 8%)**
- 5) **Playing with Fire (7 fires – 5%)**

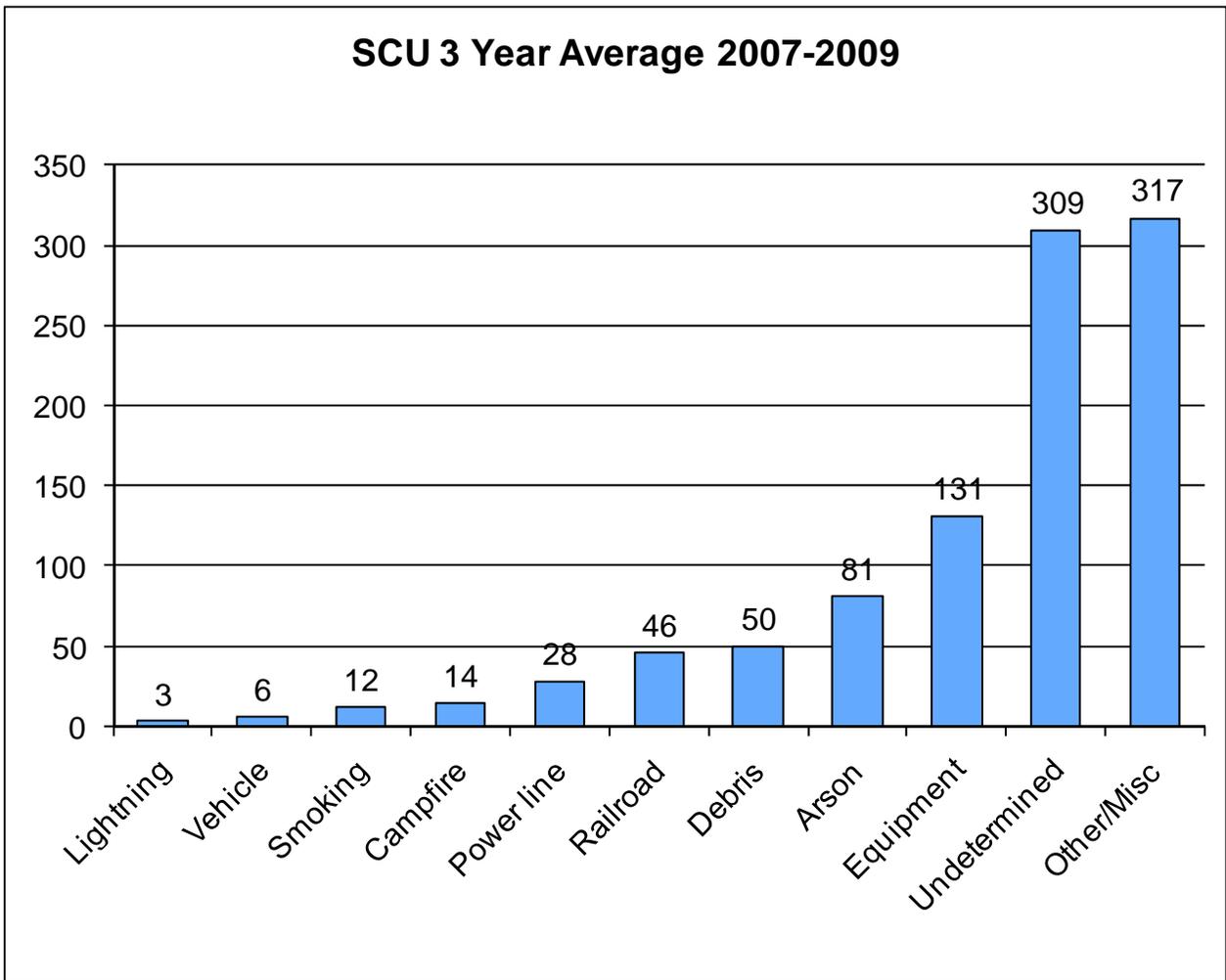
These accounted for 127 fires or 93% of all fires that occurred.

These were followed in order by: Arson (6 fires – 4%), Smoking (2 fires – 1%) Campfires (2 fires – 1%), Railroad (1 fire – 1%) and Lightning (0 fires – 0%).



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Fire activity for 2010 was down in the Unit as well as throughout the state. In order to better address ignition management for the Unit, a more detailed analysis of the fires in each major cause classification was attempted, but due to personnel changes in the Unit's Prevention Bureau accurate records for past years is not reliable and would be a major, time intensive task that will be rectified from this point forward.



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An analysis of the fire causes for 2010 was done and compiled below:

1) Control Burning (debris burning) accounted for 17 fires or 8% of the total fires in the Unit. 2009 statistics showed 20 fires for 6%. 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 for 33 fires or 24% of the total ignitions in the Unit. 2009 statistics showed 6 fires for 1%. 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 25 fires or 18% of the total ignitions in the Unit. 2009 statistics showed 10 fires for 3%. 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 11 fires or 8% of the total ignitions in the Unit. 2009 statistics showed 38 fires for 12%. 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 13 fires or 9% of the total ignitions in the Unit. 2009 statistics showed 96 fires for 30%. This classification includes causes such as spontaneous combustion; fireplace ashes deposited improperly, shooting and other causes.

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6) Playing with Fire accounted for 7 fires or 5% of the total ignitions in the Unit. This cause classification was not included in the 2009 statistics as a separate category. 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 4th of July period, in conjunction with our Volunteers in Prevention (VIPs) to reduce the use of illegal fireworks.

7) Undetermined accounted for 52 fires or 40% of the total ignitions in the Unit. 2009 statistics showed 100 fires for 31%. 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 6 fires or 4% of the total ignitions in the Unit. 2009 statistics showed 29 fires for 9%. 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 in 2010.

9) Lightning accounted for 0 fires or 0% of the total ignitions in the Unit. 2009 statistics showed one fire for less than 1%. 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 2 fires or 1%, of the total ignitions in the Unit. 2009 statistics showed one fire for less than 1%. The majority of these fires were carelessly discarded cigarettes along our roadways of the years prior.

11) Illegal campfires and campfire escapes accounted for 2 fires or 1% of the total ignitions in the Unit. 2009 statistics showed 4 fires for 1%. Both of these fires can be attributed to activity of illegal marijuana grows.

12) Railroad accounted for 1 or 1% of the fires in the Unit. 2009 statistic showed 12 fires for 4%. 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.

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- 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 (SRA), 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.

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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 SRA, 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 (SRA) 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.

In 2010, Unit staff and VIP's conducted in excess of 4,200 LE-100 inspections. In 2011, 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 in 2010 conducted 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.

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B: VEGETATION MANAGEMENT



Vegetation Management Program:

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 and California Department of Corrections (CDC) crews and equipment. This 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) in the Santa Clara Unit is

currently active but has many challenges in the way of budget, timing and environmental concerns. The unit currently has a variety of VMP projects in various stages of preparation, which focus on range, watershed and wildlife habitat improvement as the primary goals, i.e.: the Henry Coe Park, Grant Ranch Park, UC Research property and other eastern Santa Clara County burns. The PL 566 project has 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 focus their emphasis on:

- Research projects for invasive species removal
- 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.

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 Lomond and Delta Adult Conservation camps are the main labor forces available to perform project tasks. Ben Lomond camp is located just west of the Santa Cruz county line. Delta Camp is in Solano County on highway 113. Both camps provide a variety of emergency services including wildland fire suppression and rescue capabilities.

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While the crews are not involved with emergency activities, they are contracted to work on “reimbursable projects” to supplement their existence at the camp. 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.

Limiting Factors:

The VMP program at the Santa Clara Unit is carried out by a team consisting of a Division Chief, Battalion Chief and Fire Captain. All employees have other primary responsibilities in fire suppression and operations. VMP is conducted as a project but is not the primary responsibility of any one employee.

Preparation of the VMP is very time consuming and increasingly more expensive. A completed plan can take months to complete if there are not environmental concerns such as federally listed species. If environmental concerns do exist, a formal consultation may be required with either the Department of Fish and Game or the US Fish and Wildlife Service. These consultations may be necessary to mitigate a “take” as defined for any Threatened and Endangered Species and will add significant time and cost to the preparation of a VMP. Due to the existence of some threatened and endangered species such as the Alameda Whipsnake, prescribed fire as a vegetation management tool in parts of the Bay Area is not an option.

Our Unit is divided into two Air Resource Boards. One of the Boards assesses a fee per acre for any prescribed fire. These fees are not negotiable and therefore it is not cost effective to complete some projects. As a result, the Santa Clara Unit is focusing their efforts for prescribed fire projects in the Santa Clara County area.

Coordination of crews and overhead to carry out the project is challenging at times. Most vegetation management project burns are completed in the fall and a few in the early summer. During the summer months and early fall, CAL FIRE and the Santa Clara Unit is engaged in fire suppression of wildland fires throughout the state. Though a wildland fire may not be present in the Bay Area, the resources normally available in the Santa Clara Unit may be needed elsewhere in the state for assistance.

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Often a permissible burn day or window does not coincide with the availability of equipment or a permissible burn day may be too hot or dry to burn to meet the optimal prescription of the project. Alignment of these items is sometime challenging and reduces our abilities to carry out a project.

An approved VMP project can only be approved for 3 years. There are no extensions. For these reasons listed above, the Santa Clara Unit will maintain only 3 – 4 projects any given year and has attempted to stagger their approval dates so we are always able to have the ability to complete our vegetation management objectives when conditions are optimal.