

**WILD FIRE MANAGEMENT IN PROTECTED HABITATS:  
SANTA CLARA VALLEY, CALIFORNIA**

**Guidelines for Reducing Fire Hazard and Minimizing Environmental Impacts of  
Fuel Reduction Projects and Fire Suppression**

**EXECUTIVE SUMMARY**



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## EXECUTIVE SUMMARY

The Guidelines for Wildfire Management in Protected Habitats of the Santa Clara Valley has been prepared to assist the Habitat Agency and its partners in balancing needs for reducing fire hazard with conservation of covered habitats and species. Initially the guidelines will be applied to properties enrolled in the conservation reserve system. Since fuel treatments are a covered activity in several categories under the Habitat Plan, these guidelines may also be used to review proposed vegetation management associated with discretionary projects.

The guidelines describe the species and habitats protected by the plan and the fire hazard associated with the planning area. Habitats that have high levels of accumulated fuels, such as chaparral and mixed evergreen forest, pose the greatest inherent risk of wildfire. Risk is a site-specific issue however, and is determined by vegetation type, fuel loads and topography and weather at the time of ignition. Humans cause virtually all wildfire ignitions in the Santa Clara Valley. Consequently, fire prevention is a major emphasis of fire management agencies.

The Santa Clara Valley has an extensive "wildland-urban" interface wherein human assets are intermingled with hazardous vegetation conditions. Protection of human assets on and adjacent to conservation reserves must be a high priority. Fortunately, Santa Clara County has superior fire suppression capabilities and most fires are controlled before they get too large. That is not always the case however, and the Strategic Fire Plan for the Santa Clara CAL FIRE Unit cites several fires that caused losses of human assets and lives.

The goals of fuel treatments are: 1) to reduce the extent and severity of a fire in order to gain the ecological benefits of the fire without substantially damaging the ecosystem; 2) to minimize potential impacts on protected habitats and species; 3) to minimize potential losses of human assets; 4) reduce risks to human lives; and 5) to enhance suppression efforts. These principles are applied to projects involving defensible space around structures, boundaries between habitats, the interface of conservation properties and human assets and habitat restoration and fuel reduction within habitats with high fuel loads. Treatment methods may include mechanical or manual thinning and brush cutting, use of herbicides, prescribed fire and grazing/browsing. Methods must be adapted to fit environmental conditions in order to avoid unintended impacts such as soil disturbance.

The Habitat Plan advocates management within covered habitats and conservation reserves to reduce fire hazard. The state (CAL FIRE) and local jurisdictions have some regulatory authorities that may affect fuel treatments both within reserves and on other public and private land. Plan partners and others enrolling properties in the conservation reserve system have experience with fuel management particularly through the use of grazing animals. This experience and the policies and procedures of partners will be of great assistance to the Habitat Agency as it plans and implements vegetation management on its reserves.

The guidelines present recommendations for treatment methods and management approaches for habitats protected under the Habitat Plan. As an activity covered under the Habitat Plan, fuel treatments will be subject to the conditions to minimize and avoid impacts in Chapter 6 of the Habitat Plan. Condition 10 - Fuel Buffer, pertains to fuel management within conservation reserves and defensible space within reserves and on adjacent properties.

The guidelines provide best management practices that may be used to offset any impacts that may occur that are not specifically addressed in Chapter 6 of the Habitat Plan. These apply to prevention of soil erosion, protection of cultural resources and other potential effects. Recommendations for preventing adverse impacts during fire suppression actions within conservation reserves are also included.

Management plans for conservation reserves will address wildfire risk and methods to reduce risk both within the reserve and on adjacent properties. Wildfire risk may be assessed through a combination of modeling and professional judgment. An opportunity to coordinate planning efforts with the Community Wildfire Protection Plan that is now being prepared should be explored.