

ANNEX 5. SARATOGA FIRE PROTECTION DISTRICT

The Saratoga Fire Protection District is an independent special district on the western edge of the Santa Clara Valley and extends into the foothills of the Santa Cruz Mountains (Figure 5.1). The district encompasses approximately 12.15 square miles, comprising approximately half of the City of Saratoga and adjacent unincorporated lands west and southwest of the city. According to Santa Clara Local Area Formation Commission the population served is 14,300.

The district provides fire protection and emergency medical services through a contract with the Santa Clara County Central Fire Protection District (SCCFD). Under the contract, the Saratoga Fire Protection District maintains ownership of the single station and SCCFD staffs a type 1 engine, a type 3 engine, and a rescue with seven on duty firefighters.

ORGANIZATION AND JURISDICTION

Saratoga Fire Protection District is governed by a three-member publically elected Board of Directors. The Board of Directors has authority to adopt fire codes and other local ordinances related to fire protection delivery within the district boundaries.

The unincorporated portion of Saratoga Fire Protection District is designated State Responsibility Area (SRA) and California Department of Forestry and Fire Protection (CAL FIRE) shares jurisdiction for wildland fires. CAL FIRE classifies the SRA portions as high and very high fire hazard severity zones (FHSZs); portions of the incorporated city of Saratoga are designated very high FHSZs (see Figure 5.2).

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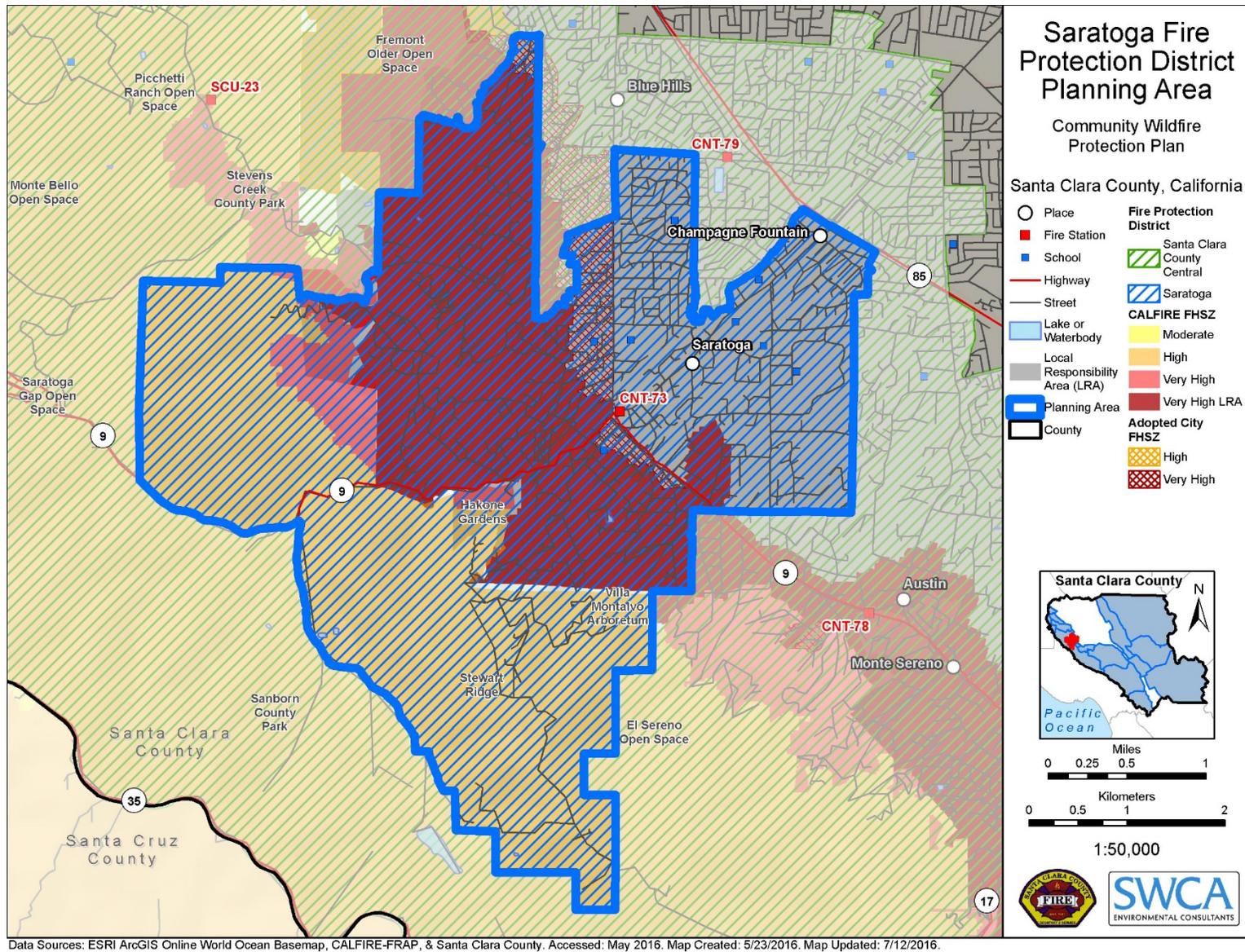


Figure 5.1. Saratoga Fire Protection District boundary.

State wildland fire and defensible space laws apply outside the city limits, but not within the city.

State law designates all lands within the city limits of Saratoga as Local Responsibility Area (LRA) for purposes of wildland fire protection (Figure 5.2). Most state fire prevention and defensible space laws do not apply within LRA. Recent legislation requires State review and input on General Plan Safety Element updates where wildland fire is a hazard (Government Code Section 65040.20).

The Saratoga Fire Protection District board has the authority to adopt local ordinances that level the wildland fire and defensible space regulations throughout the district.

Fire response services for Saratoga Fire Protection District are provided by the SCCFD. The Saratoga Fire Protection District is primarily served by its fire station in Saratoga, with additional response support from other SCCFD stations.

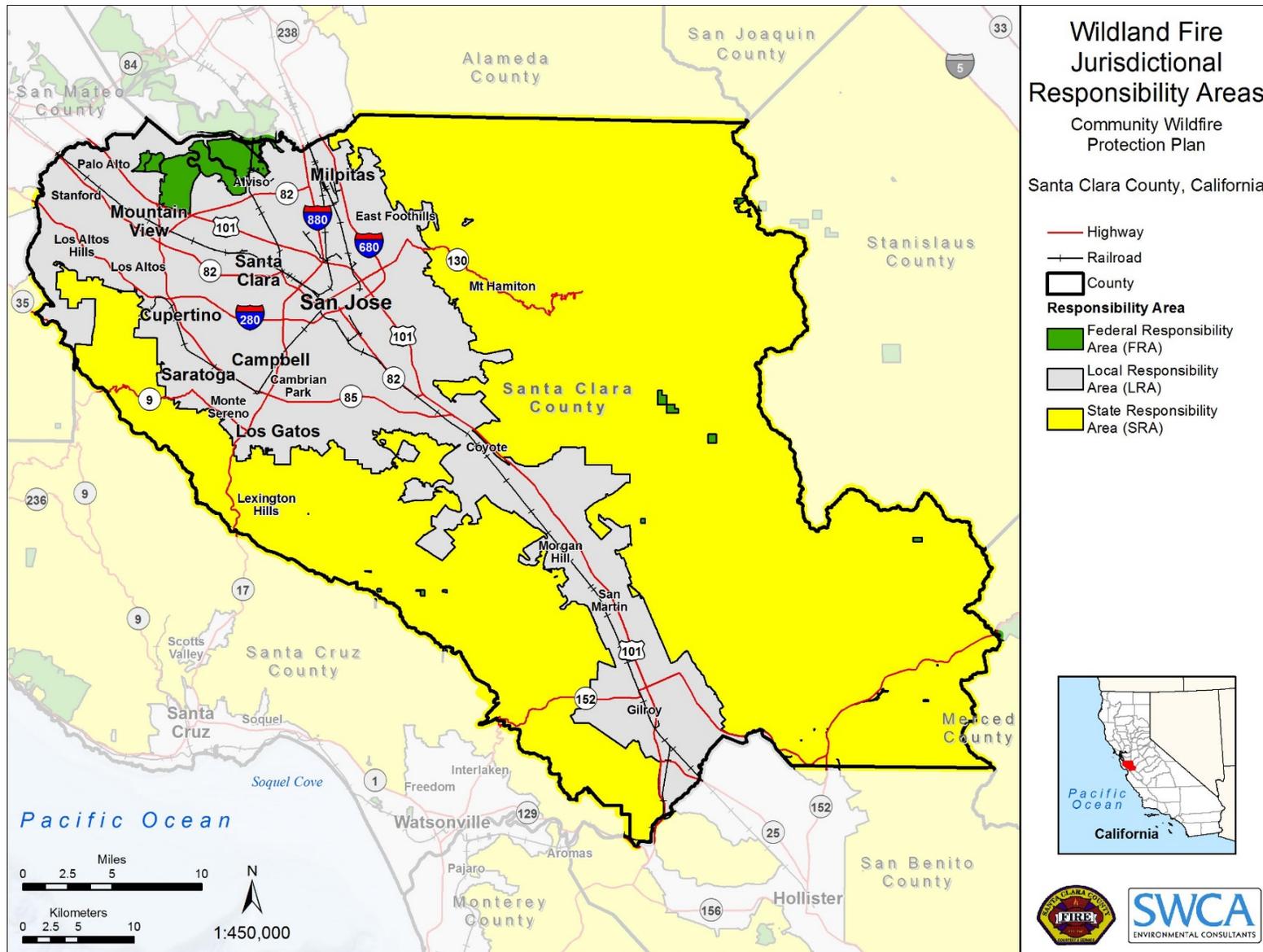


Figure 5.2. SRA and LRA boundaries.

To determine LRAs and SRAs of the community please visit:
http://www.firepreventionfee.org/srviewer_launch.php

For more information visit:
<https://www.sccgov.org/sites/dpd/DocsForms/Documents/WILDLAND-URBAN-INTERFACE-FAQ-PDF.pdf>

LAND USE PLANNING, GENERAL PLAN, BUILDING CODES, AND LOCAL HAZARD MITIGATION PLANS.

Authority and jurisdiction for approving the General Plan and elements, determining land use, community design and building code adoption rests with the Saratoga City Council. The Local Hazard Mitigation Plan (LHMP) identifies hazards that exist in Saratoga that create risk to citizens and properties in Saratoga. WUI fires are a real and present danger to the western portions of Saratoga. This CWPP identifies several goals related to functions the City of Saratoga has the authority to undertake.

This CWPP may serve as basis for the WUI fire component for LHMP, General Plan, or General Plan element updates.

PLANNING TEAM PARTICIPATION

The Saratoga Fire Protection District is represented on the Core Team by representatives of the SCCFD and the Santa Clara Unit of CAL FIRE. The Saratoga Fire Protection District Board of Directors members are engaged in the Community Wildlife Protection Plan (CWPP) planning process through two rounds of workshops that have been held in Cupertino and focus on Saratoga and surrounding wildland urban interface (WUI) communities.

SUMMARY

Saratoga is listed as a Community at Risk from wildfires on the federal and/or California Fire Alliance list of Communities at Risk in Santa Clara County. The western portion of the Fire Protection District is a very high FHSZ WUI area with a history of serious wildfires.

WILDLAND URBAN INTERFACE AREA DESCRIPTION

WILDLAND URBAN INTERFACE AREA DEFINED

The Saratoga Fire Protection District WUI area includes western portions of the City of Saratoga and unincorporated properties in the foothills of the Santa Cruz Mountains (Figure 5.3).

FIRE HISTORY

For fire history information, please see Figure 3.5 in the main Santa Clara County CWPP document.

HAZARDOUS FUEL CHARACTERISTICS

The Saratoga Fire Protection District WUI planning area comprises a range of vegetation communities that differ depending upon elevation, precipitation, and slope. Chaparral vegetation is often found on south-facing slopes, where winter precipitation is relatively high, but dry summers are common. The chaparral will have long flame lengths under either moderate or extreme weather scenarios. The nature of these fuels is to burn quickly and intensely. Oak woodlands, composed of a variety of oak species are also interspersed throughout, as well as mixed conifer comprising knob cone pine and gray pine. A fire in either the mixed conifer or hardwood would likely be a surface fire with patches of active behavior and fairly low rates of spread. However, active fire behavior is possible in this vegetation type under extreme weather conditions, especially where there is high surface loading. Coastal coniferous forest communities such as redwoods and Douglas-fir are located at lower elevations where precipitation is high, fog is common, and temperatures are moderate. Fire spread is generally limited in this fuel type, however, given the right combination of weather conditions, surface fire can be expected to burn uphill. Areas with increased fuel loading from dead and down materials may experience crowning under the right conditions. The varied vegetation composition result in the Saratoga Fire Protection District WUI comprising a range of wildfire hazard (Figure 5.3).



Figure 5.3. Saratoga Fire Protection District WUI intermix.

For fuel model information, please refer to Section 4.6.3 and Figure 4.3 in Chapter 4 of the main Santa Clara County CWPP document.

NEIGHBORHOOD AND STRUCTURAL CHARACTERISTICS

The foothills above Saratoga are characterized by steep, windy and narrow roads that pose potential ingress and egress problems for emergency response and evacuations (Figure 5.4). Some areas may be subject to slow response times for emergency response due to the distance from the nearest fire station and road conditions. Some homes have minimal turnaround space, posing a concern to emergency responders due to potential entrapment. There are a number of dead end roads and narrow driveways.



Figure 5.4. Steep, narrow, and windy roads with blind turns are common.

Defensible Space: CAL FIRE provides inspections of defensible space in the area, though largely in an information sense and not through enforcement. Legal enforcement is only utilized for egregious violators. Most homes have moderate defensible space (at least 30 feet), but some homes do not meet the necessary 70- to 100-foot space. Most newer homes have non-combustible siding, but the majority have combustible decks and fencing that comes into contact with wildland fuels. Some homes have wood shake roofs which put the property and neighborhood at risk. Many subdivisions are managed by homeowner associations (HOAs) that provide a conduit for fire prevention and public education and outreach messages regarding structural ignitability and defensible space. A number of Building Code Chapter 7A compliant new build properties are interspersed with older properties.

Many homes are landscaped by contracted landscape companies, outreach regarding defensible space and non-flammable landscape vegetation could be targeted at those companies.

Many homes are located upslope from thick scrub fuels, with continuous canopies (Figure 5.4). Homes are located on steep slopes with often minimal setback from the slope. The area bounded by Sanborn Road, Congress Springs (Highway 9 West), McGill Road, and Los Gatos Saratoga Road (Highway 9 South) is an area of high risk due to limited road network for evacuation and responder access. Topography is a concern due to the influence steep slopes have on potential fire behavior and many structures built at the top of the ridge.

Water supply: Water availability is a concern in areas higher in the foothills. The newer developments have community water systems with fire hydrants. There are no hydrants in some

areas and people are dependent upon water from wells and storage tanks, which may become depleted during periods of drought.

The fire department recommends and encourages the use of water storage tanks outside of service areas. Some “non-standard” hydrants were identified along Summit Road, which could be utilized by the fire department if the appropriate fittings are available.

EMERGENCY RESPONSE CAPACITY

Fire stations in Monte Sereno, Saratoga, Cupertino, and CAL FIRE stations at Stevens Creek, Saratoga Summit, and Alma serve the Saratoga Fire Protection District.

Fire suppression for the Saratoga Hills WUI area is provided by:

- Saratoga Fire Protection District Station, 14380 Saratoga Avenue
- Santa Clara County Central Fire Protection District (LRA)
 - West Valley Fire Station, 19800 Cox Avenue
 - Cupertino Fire Station, 20215 Stevens Creek Blvd.
 - Quito Fire Station, 18870 Saratoga/Los Gatos Road
 - Monte Vista Fire Station, 22620 Stevens Creek Blvd.
 - Seven Springs Fire Station (West Side of Cupertino), 21000 Seven Springs Pkwy
- CAL FIRE (SRA)
 - Stevens Creek Station, 13326 Stevens Canyon Road, Cupertino
 - Saratoga Summit Station, 12900 Skyline Blvd.
 - Alma Station, 19650 Santa Cruz Highway

PUBLIC EDUCATION AND OUTREACH PROGRAMS

The Saratoga Fire Protection District has a highly involved fire safety council, the Santa Clara County Fire Safe Council (<http://www.SCCFireSafe.org>). This organization provides information regarding chipping programs, defensible space mitigation, forest health issues, and much more. They also offer public meetings and forums to support wildfire awareness.

The Santa Clara County Fire Department Fire Prevention Division provides a comprehensive fire and life safety educational program within Saratoga Fire Protection District. More information can be found on their website:

<http://www.sccfd.org/community-outreach-safety-education/community-outreach-safety-education-overview>.

The Santa Clara Unit of CAL FIRE provides links to extensive public education materials for fire prevention in the WUI. More information can be found on the CAL FIRE website:

<http://www.calfire.ca.gov/>

POLICIES, REGULATIONS, ORDINANCES, AND CODES

LAND USE PLANNING

Land use and building permit processes inside the City of Saratoga are under the authority of the City of Saratoga. Similar processes in the unincorporated area are the authority of the County of Santa Clara.

FIRE CODES AND ORDINANCES

State wildland fire and defensible space laws apply outside the city limits, but not within the city.

The Saratoga Fire Protection District board has the authority to adopt local ordinances that level the wildland fire and defensible space regulations throughout the district.

<https://www.sccgov.org/sites/dpd/Iwantto/PropertyInfo/Pages/WUI.aspx>

HAZARD ASSESSMENT

The NFPA 1144 community risk assessment completed for the Saratoga Hills WUI community a risk rating of high with a score of 90 (<40 = low, >40 = moderate, >70 = high, >112 = extreme). Factors that contributed to the risk are illustrated below. Averages are taken across the community for each of these parameters.

Parameter	Condition	Rating
Access	Two or more roads in and out but access still concern	+/-
	Narrow road width	-
	Surfaced road with greater than 5% grade	+
	Poor fire access, dead end road spurs, lack of turnaround	-
	Street signs are present, some non-reflective	+/-
Vegetation	Adjacent fuels: Medium	+/-
	Defensible space: >30 feet to <70 feet around structure	+/-
Topography within 300 feet of structure	40%+	-
Topographic features	High concern	-
History of high fire occurrence	Low	+
Severe fire weather potential	Low	+
Separation of adjacent structures	Large lots, good separation	+
Roofing assembly	Class B	+/-
Building construction	Non-combustible siding/combustible deck	+/-
	Building set back < 30 feet to slope	-
Available fire protection	Water: available via hydrants, some pressure issues	+/-
	Response: Station >5 miles from structure	-
	Internal sprinklers: some new homes (7A compliant)	+/-
Utilities	One above, one below ground	+/-
Risk Rating - High (90)		

In addition to the on-the-ground hazard assessment, the CWPP also includes a Composite Fire Risk/Hazard Assessment that uses fire behavior modeling to determine potential fire behavior and is based on fuel characteristics, topography, weather, and fire history. The Composite Risk/Hazard Assessment for the planning area is shown in Figure 5.5. For more information on the methodology for this assessment, please refer to Section 4.6.1 in Chapter 4 of the Santa Clara County CWPP.

PARCEL LEVEL ASSESSMENT

A model for determining parcel level risk and effect of mitigations has been developed through this CWPP project. The model can use information available through public record for basic analysis but can be further refined with a site visit with property owner for a thorough analysis of risk score. The County will be seeking funding to fully implement this parcel level assessment in the future. The goal is for the property owner to be able to use this analysis to determine the most effective steps they can take to take to reduce their risk. For more information refer to Chapter 4 in the countywide CWPP document.

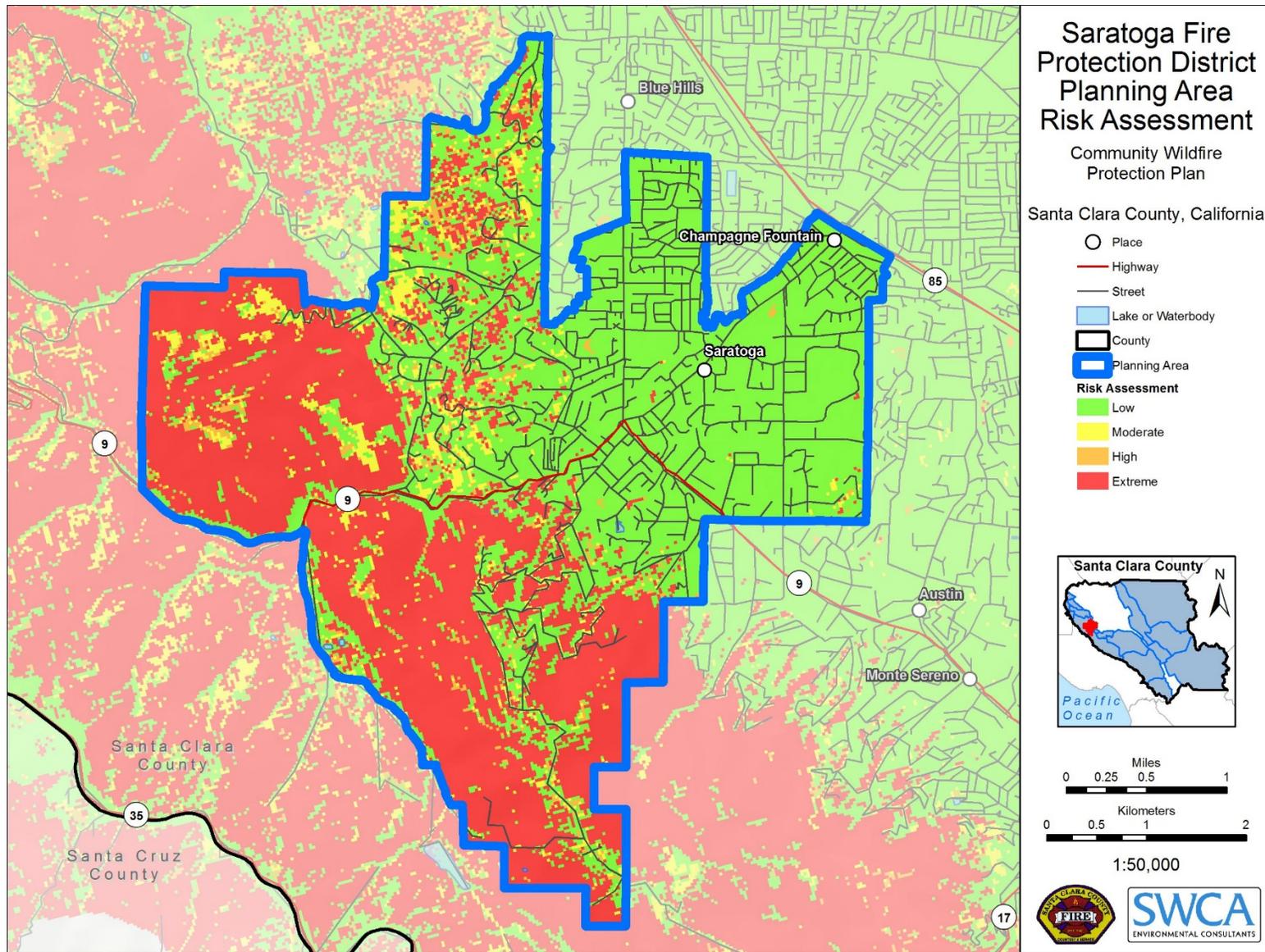


Figure 5.5. Composite Hazard and Risk Assessment for the Saratoga FPD.

IDENTIFY CRITICAL INFRASTRUCTURE AND COMMUNITY VALUES AT RISK

Critical utility infrastructure such as, electric power supply lines, substations, and natural gas lines are essential to supply residents and businesses with services that are in some cases critical to health and life safety. In many parts of the study area, electric power is needed to power pumps for the domestic water supply, and to provide heating and lighting. Wildfire is a significant threat to the electric utility supply.

The project area has several watersheds that are community values at risk. Watersheds need to be protected and maintained from catastrophic wildfire damage in order to prevent erosion, sedimentation and water contamination. Long-term issues resulting from damage to watersheds would be increased runoff, poor soil retention, and decreased water quality.

Much of the planning area is comprised of open space areas, including Stewart Ridge, and Villa Montalvo Arboretum. These open space areas are valued for recreational use and for their natural resources.

A number of commercial business are located within the planning area, including a number of wineries/vineyards located in the interface, such as the Mountain Winery (Figure 5.6). Many of these operations have good defensible space and are manicured and irrigated, however their location in the WUI is a concern for emergency responders due to the potential need for evacuating visitors during a wildfire event on the narrow windy roads that characterize the planning area. The Mountain Winery has been involved in fuel treatment projects along Pierce Road that would help mitigate wildfire along the roadway and facilitate more safe evacuation of visitors. In addition the winery has a large parking area that could be identified as a possible safety zone in the event of a wildfire or a staging area for suppression operations (Figure 5.6).

Other major attractions include Hakone Estate and Gardens and Montalvo Arts Center. Montalvo Arts Center is located in an area of poor egress at a dead end portion of Piedmont Road. The Center backs immediately to wildland fuels (Figure 5.7) and is therefore at significant risk from wildfire spreading from the west and southwest. The access roads are narrow and vegetated with overhanging trees that include highly flammable eucalyptus.



Figure 5.6. The Mountain Winery has a large parking lot that could provide a staging area or safety zone in the event of a wildfire



Figure 5.7. Villa Montalvo Arts Center adjacent to dense wildland fuels
Source: Wikimedia

MITIGATION PROJECTS AND PRIORITIZATIONS

The following project matrixes have been developed by the community and Core Team to direct specific project implementation for communities in the Saratoga Hills WUI (Table 5.1–Table 5.5). The matrixes below are tiered to the strategic goals presented in the body of the Santa Clara County CWPP through project IDs in the first column of each matrix. The matrixes are broken down into projects for addressing hazardous fuels, structural ignitability, public education and outreach and fire response capability. Due to the large area of land managed by Midpeninsula Regional Open Space (MROSD) within the planning area, the reader is directed to the MROSD agency annex (Annex 16).

Treatment maps have been developed by the Core Team for fuel treatments in the area (Figure 5.8 and Figure 5.9) Many of these projects have been part of ongoing planning by the Santa Clara County Fire Safe Council in conjunction with public and private stakeholders. These projects are conceptual in nature and therefore subject to change as this document undergoes future revisions.

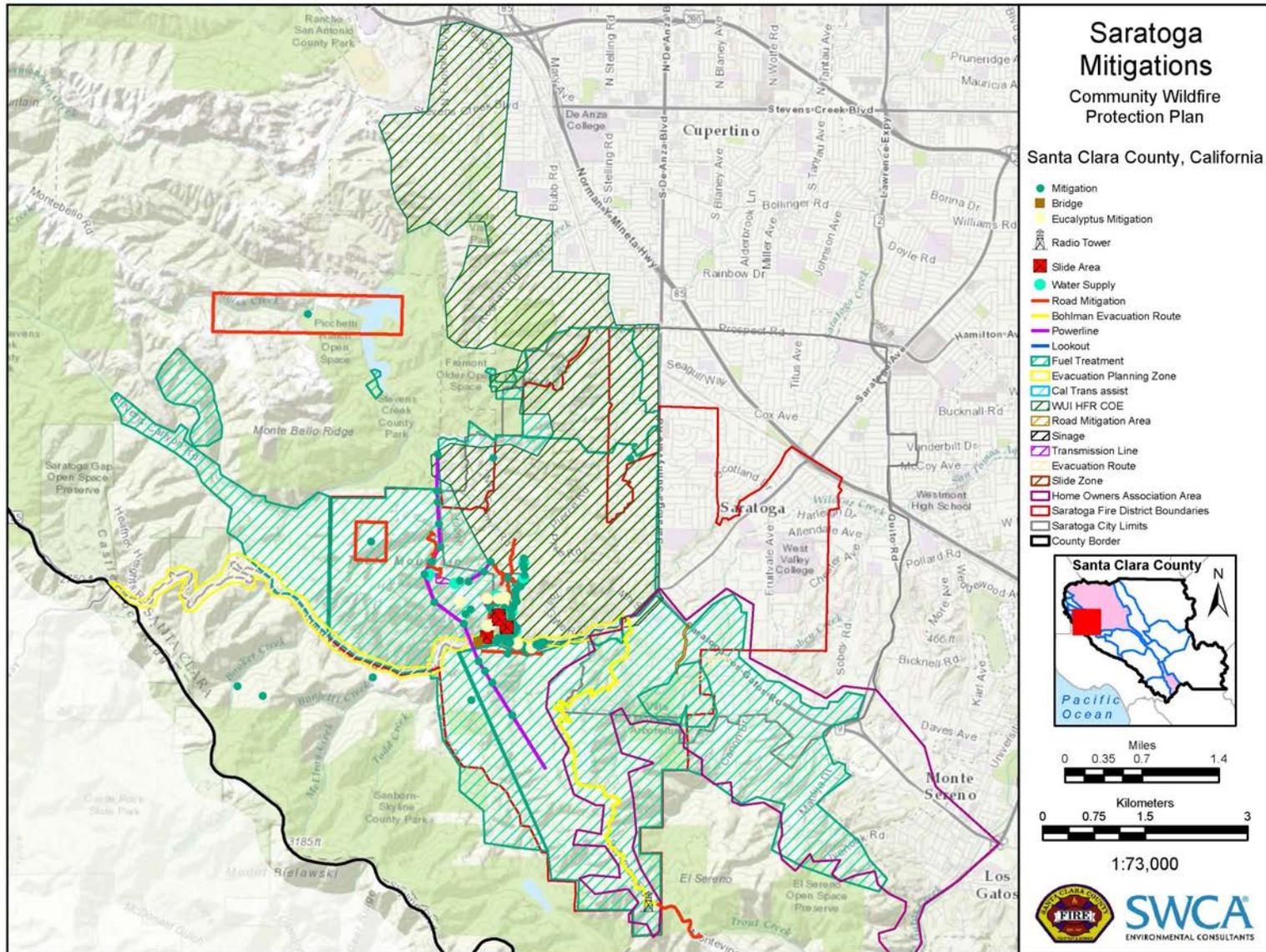


Figure 5.8. Mitigations for Saratoga area.

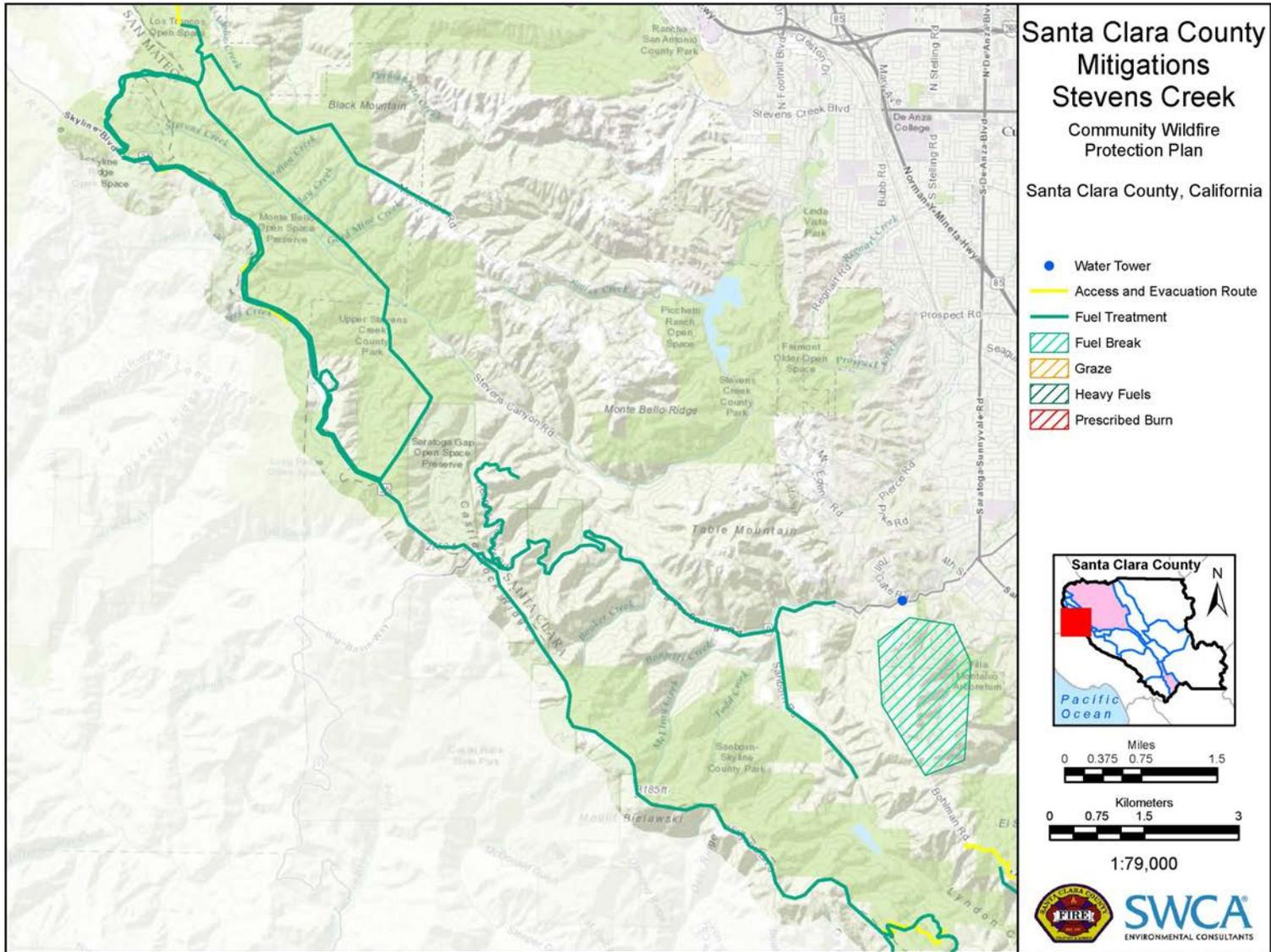


Figure 5.9. Mitigations for Stevens Creek area.

Table 5.1. Recommended Fuel Reduction Projects in Saratoga Fire Protection District WUI

ID Saratoga (SAR)	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic Goal: FR1: Incorporate single track trails into fire defense system where practical								
SAR-FR1.1	Incorporate single track trails into fire defense system where practical	MROSD; County Parks, County Open Space, and other municipal park agencies.	Strategic plan to incorporate fire defense improvements through trail management. Detailed analysis would be needed in development of treatment location to ensure protection of natural resources. Should incorporate a map component and use the Earthquake Clearinghouse exchange core to facilitate project development.	Provide access when fires occur to reduce spread Enhance Community fire defense	Ongoing-LONG RANGE	1	Regular monitoring to determine project success in reducing fuel loading and enhanced access.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF Fund sustainability efforts through the property owner/manager, or local/state agency that is the responsible party.
SAR-FR1.2	Form a community working group to work with Open space land managers to collaboratively develop fuel treatments plans on open space lands. Prioritize treatments along existing trails that could help to provide a more substantial fuel break and break up the continuity of fuels.	Open space lands: Trails that run adjacent to community	Detailed analysis would be needed in development of treatment location to ensure protection of natural resources.	Provide access when fires occur to reduce spread Enhance Community fire defense by breaking up fuel continuity.	Ongoing-LONG RANGE	1	Regular monitoring to determine project success in reducing fuel loading and enhanced access.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF
Strategic Goal: FR2: Work with Park and Open space to have some road width trails for better access								
SAR-FR2.1	Work with Park and Open space to have some road width trails for better access	MROSD, County Parks, other municipal parks that bound up to the WUI.	Maintain road width trails for fire and park patrol vehicles where possible to facilitate access Use trails as fuel breaks Should incorporate a map component and use the Earthquake Clearinghouse exchange core to facilitate project development.	Protect life and property by improving access for emergency vehicles to open space areas and WUI areas adjacent to open space.	Within 2 years	1	Regular maintenance schedule should be implemented to ensure clearance levels are maintained.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF Fund sustainability efforts through the property owner/manager, or local/state agency that is the responsible party.

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ID Saratoga (SAR)	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic Goal: FR4: Encourage use of prescribed fires where ecologically sound and feasible								
SAR-FR4.1	Encourage use of prescribed fires where ecologically sound and feasible	MROSD- to be directed by MROSD Board of Directors as a policy.	Utilize prescribed burn planning that follows agency and regulator protocols. Closely follow plan prescriptions	Reduce fuel loading of fine fuels and understory species to mitigate potential for intense fire behavior in the event of an unplanned ignition.	Ongoing	1	Regular monitoring needed to ensure against environmental damage and invasive species into burned areas. Monitoring to determine project success in reducing fuel loading.	Grants: CAL FIRE VMP program, SRA (only on SRA lands), CA FSC, CFIP, NRCS
Strategic Goal: FR7- Develop roadside fuel treatment program, including suite of methods available and sustainability mechanism								
S-FR7.1	Implement roadside brushing/mowing throughout community to increase buffer from wildfire ignitions and provide for safe evacuation. Community members to approach SCCFSC to identify road side fuel treatment priorities and seek funding to implement.	County and city road agencies; private road associations, PG&E, cable and phone companies. Led by SCCFSC.	Determine suite of treatment methods allowed and restriction for roadside hazard reduction including mowing, mastication, chemical, plantings, mulching, etc. Develop treatment plan and rotation schedule for roadside treatments, focusing of primary evacuation or access/egress corridors.	Reduce fuel loading around roads and highways to ensure safe passage of vehicles in event of evacuation and reduce unplanned ignitions from vehicles and highway users.	Within 2 years	1	Regular maintenance schedule should be implemented to ensure clearance levels are maintained. Develop standards for road crews.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF

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ID Saratoga (SAR)	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic Goal: FR9- Establish assistance program for hazardous fuel reduction for physically or fiscally challenged parcels								
S-FR9.1	Establish assistance program for hazardous fuel reduction and defensible space for elderly or physically challenged individuals within Saratoga	Saratoga neighborhood groups, HOAs.	Identify barriers to achieving parcel level defensible space and establish assistance program of resources: education, consulting, guidance, people, funding.	Ensure that individual properties with poor property hygiene do not put adjoining properties at risk in event of wildfire. For residents who are not capable of implementing good property hygiene.	Within 2 years	2	Establish levels of participation by assistance type	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF
Strategic Goal: FR10: Develop agency partnership to establish creation of hand crew for fire hazard reduction- need not be a fire crew								
SAR-FR10.1	Develop agency partnership to establish creation of hand crew for fire hazard reduction- need not be a fire crew	All agencies	Establish a local based crew for use in fire defense improvement work throughout the county Can be through private resources, contract with CCC, or Sheriff	Primary purpose is to carry out CWPP objectives	Within 3 years	2	Monitor cost effectiveness through benefit cost ratio approach	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF
Strategic Goal: FR 11: Create sustainable programs for creating defensible space at the parcel level								
SAR-FR11.1	Develop Defensible Space Programs: Community Chipping, Drive up Chipping, At Home Chipping and Fire Safe Neighborhoods	Private homes and structures throughout the County WUI	Use readily available Defensible Space Literature; Encourage home owners to have courtesy inspections by local fire agencies and PG&E.	Increases the likelihood that a structure will survive a major wildfire	Annual - Late Spring	1	Regular maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	Utilize local funding sources such as County Fire, local government, home owner association dues, and SRA Fees (only on SRA lands). Reuse successful programs from previous years, encourage local administration and volunteers from the community to reduce administrative overhead.

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ID Saratoga (SAR)	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
SAR-FR 11.2	Create Sustainable programs for creating Defensible Space at the parcel Level within Saratoga	Home Owner, Fire Safe Councils, Home Owner Associations, SCCFD, Administrators for SRA fee distributions.	Example projects -Curbside green waste pickup programs, community chipping piles, drive-up chipping, on site chipping.	Ensure that defensible space actions are sustained in all communities	Within 1 year	1	Regular maintenance schedule should be implemented to ensure clearance levels are maintained.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF
Saratoga Fire Protection District Non-Tiered Projects								
SAR-FR1	Develop Task Force to seek funding sources for homeowners to reduce hazard trees.	County Fire	Fire Prevention Division to investigate homeowner concerns regarding removal of dead hazard trees.	Reduce concerns voiced at community workshops regarding costs of tree removal for hazard reduction.	Spring 2017	3	NA	SRA funds (only on SRA lands), FEMA funds, Municipal/local funds, power line grants, California Tree Mortality Task Force, State Greenhouse Gas Reduction Grants.
SAR-FR 2	Establish fuel breaks around communities identified as at risk during workshops- would encourage implementation of an existing policy between MROSD and neighbors for creation of fuel breaks.	MROSD (allow shaded fuel breaks per District policy) lands adjacent to communities. Municipal/County property abutting subdivisions.	Shaded fuel break treatments.	Slow the spread of fire from open space lands Reduce the intensity of possible flame fronts.	Winter 2017	1	Regular maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	MROSD, CAL FIRE crews and dozers - Public Works budget. Local community groups - donations and grant funding.

Table 5.2. Recommended Public Education and Outreach Projects in the Saratoga Fire Protection District

ID (SAR)	Project	Presented by	Target Date	Priority (1,2,3)	Resources Needed	Serves to
Strategic Goal: EO1: Educate citizens on how to achieve contemporary WUI code compliance in retrofits/cost: benefit ratio. Provide workshops and/or demonstration site.						
SAR-EO1.1	Educate citizens on how to achieve contemporary WUI code compliance in retrofits/cost: benefit ratio. Provide Saratoga Fire Protection District focused workshops and/or demonstration site in Saratoga Hills WUI.	Fire Safe Councils, County Fire, CAL FIRE	Within 2 years	1	Workshop expenses, personnel Workshop venues Demonstration site Strategize on avenues for engaging the public. Be opportunistic- engage residents following a local wildfire or at existing well- attended events- i.e. annual BBQ, Pancake Breakfasts, Open days offered by Fire Departments.	Increase compliance with County code. Reduce fire risk level for individual parcels and community as a whole.
SAR-EO1.2	Wildfire Preparedness and WUI Code workshops	Fire Safe Councils, County Fire, CAL FIRE	Within 2 years	1	Workshop expenses, personnel Workshop venues Demonstration site Strategize on avenues for engaging the public.	Increase compliance with County code. Reduce fire risk level for individual parcels and community as a whole.
Strategic Goal: EO2: Analyze playing with fire ignitions and focus education programs at vicinity schools.						
SAR-EO2.1	Analyze playing with fire ignitions and fireworks safety and focus education programs at local schools or youth organizations. Focus at youth and children,	County Fire, CAL FIRE, municipal fire Departments, Fire Safe Council	Within 1 year	1	School liaison Materials for presentations Personnel Video processing, could utilize You Tube platform Could be a college student project	Adds to existing programs provided by County Fire and Fire Safe Council targeted at school age children. Reduces number of ignitions.
SAR-EO2.2	Implement firework bans and increase enforcement during high fire danger periods	Sheriff's Department in conjunction with County Fire	Within 1 year	1	Sheriff's Department resources	Reduce concerns voiced by community members regarding firework safety in the WUI.
Strategic goal EO3: Organize a community group made up of residents and agency personnel to develop materials and communicate relevant defensible space messages. Could coordinate with fire departments or FSC.						
SAR-EO3.1	Develop Homeowner guide for homes located in designated Saratoga WUI	Local Home Owner Association	Spring 2017	2	Funding to develop and print copies of the handbook. Volunteers to help distribute and explain the document	Give Residents detailed and locally specific tools that they can use to improve preparedness.
Strategic Goal: EO4- Media involvement. Develop a local newspaper column that provides fire safety information, promotional information for volunteer fire departments, fire announcements, and emergency planning.						
SAR-EO4.1	Develop a local newspaper column or community newsletter for the Monte Sereno community, that provides fire safety information, promotional information for fire departments, fire announcements, and emergency planning.	City of Saratoga	Within 1 year	1	Columns, information, and articles to be provided by fire departments, local residents, SCCFSC.	Protect communities and infrastructure through increasing public awareness and providing a channel for information regarding emergency fire response.

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ID (SAR)	Project	Presented by	Target Date	Priority (1,2,3)	Resources Needed	Serves to
Strategic Goal: E10- Insurance Service Office informational meetings						
SAR-EO10.1	Outreach to the community to schedule an Insurance Service Office informational meeting. Invite Insurance Services Office representatives to speak to groups regarding ways to improve insurance ratings in the community.	Insurance Services Office in conjunction with SCCFSC	Within 2 years	2	Resources provided by Insurance Services Office. Venue provided by SCCFD fire department.	Communities can learn how to improve their insurance ratings, which will reduce insurance costs in their community by implementing wildfire prevention measures.
Strategic Goal: EO 11: Increase signage/replace or augment existing signage.						
SAR-EO 11.1	Increase signage/replace or augment existing signage. Use existing signage to spread fire prevention message along highways and in public open space areas (trailheads, info kiosks) to reduce human ignitions. Promote the use of existing electronic signs at firehouses and other locales to display fire prevention information, safety messages, and fire danger rating linked to safety actions.	County Fire, Saratoga Fire Protection District	Within 2 years	2	Mostly existing signs and posting sites, people to post and update signs. Replace, or augment the existing Smokey Bear signs with electronic Fire Danger Warning Signs that are solar powered, LED displays (visible day & night), and accessible and programmable through an internet website.	Protect communities and infrastructure by raising awareness of local citizens and those traveling in the area about actions that can prevent fire.
Strategic Goal: EO12: Promote and increase the use of prescribed burning as a fuels reduction method. Gain public support for using prescribed burns to reduce fuel loads and to improve ecosystem health through a pilot burn project and demonstration site. Consider developing informational material for distribution at natural areas or via email distribution lists.						
SAR-EO 12.1	Implement a public outreach campaign regarding the use of prescribed fire for natural resource management and fuel reduction in open space areas.	CAL FIRE/ Mid-pen. County Open Space	Within 2 years	2	Prescribed burn prescription, type-6 engines, hand crews, equipment. Research and costs of producing, printing, and distributing paper informational flyer.	Protect communities and infrastructure by reducing fuel loads.

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Table 5.3. Recommended Firefighting Capability Projects in the Saratoga Fire Protection District

ID (SAR)	Project Description	Fire Department/ Agency	Benefits of the Project to the community	Timeline	Priority (1,2,3)	Resources/ funding sources available
Strategic Goal: FC2- Define Safe Refuge Areas and establish maintenance program in WUI areas where fire behavior and evacuation timing is problematic.						
SAR-FC2.1	Define and delineate spatially Safe Refuge Areas and establish maintenance program in WUI areas where fire behavior and evacuation timing is problematic. Example Mountain Winery.	County Fire/CAL FIRE/Fire Safe Councils	Provides safety measure for residents of rural areas in event that evacuation is limited. Provides for firefighter safety by creating escape route.	2 year	1	Grants: SRA (only on SRA lands), FEMA, CA FSC, DHS
Strategic Goal: FC5- Develop WUI preplans and accompanying Evac plans for all WUI areas in Santa Clara County using standardized format						
SAR-FC5.1	Develop WUI preplans and accompanying Evac plans for Saratoga WUI	County Fire/CAL FIRE/Fire Safe Councils	Helps fire response agencies pre-plan for evacuations. Helps identify areas where mitigation measures are needed to facilitate safe evacuation. Helps establish consistent model across all agencies.	1 year	1	Grants: SRA (only on SRA lands), FEMA, CA FSC, DHS
Strategic Goal: FC8: Where road systems are antiquated and do not provide for proper evacuation or two way flow, require removal of obstructions or upgrade to minimum 2 lanes road system over time						
SAR-FC 8.1	Address poor road access issues -develop long term plan for road improvements and prioritized routes for evacuation.	County Planning	Alleviates evacuation concerns of residents living in areas with poor ingress/egress. Provides for improved response capabilities and reduces risk that responding emergency vehicles will conflict with evacuation of residents.	2 years	1	Homeowner Associations, Road Associations, County Service Areas
SAR-FC 8.2	Address poor road access issues -develop long term plan for road improvements and prioritized routes for evacuation.	County Planning	Alleviates evacuation concerns of residents living in areas with poor ingress/egress. Provides for improved response capabilities and reduces risk that responding emergency vehicles will conflict with evacuation of residents.	2 years	1	Homeowner Associations, Road Associations, County Service Areas
Strategic Goal: FC11- Investigate and potentially install Fire Detection Robots to alert departments of a fire start in remote areas.						
SAR-FC11.1	Investigate installation of Fire Detection Robots on open space lands adjacent to Saratoga.	County Fire	Uses technology for single-tree wildfire detection solution that help forestry agencies and fire protection professionals manage the risks of fire damage cost-effectively.	Within 2 years	1	Private companies provide robotic technology i.e.:
SAR-FC11.1	Early Warning Wildfire Detection System on Mid-Pen property	Benefits all Fire Agencies	This benefits the areas covered by the cameras. Fire can be detected early, data is recorded and can be used for later analysis, and fires in progress can be monitored.	Within 2 years	1	There is currently about \$30,000 being held by the Santa Clara County Fire Safe Council to continue this phase of the project.

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ID (SAR)	Project Description	Fire Department/ Agency	Benefits of the Project to the community	Timeline	Priority (1,2,3)	Resources/ funding sources available
Strategic goal FC13: Develop a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.						
SAR-FC13.1	Develop a coordinated approach between fire jurisdictions and water supply agencies to identify needed improvements to the water distribution system, initially focusing on areas of highest wildfire hazard.	County Fire, CAL FIRE, Fire Safe Council,	Improve fire-fighting response if water is more readily available or closest locations could be identified on a GIS map on a tablet/computer.	Within 2 years	1	County Fire
Strategic Goal: FC14- Where possible encourage sharing of water sources in areas where residential water supplies may be low or non-existent during periods of drought or when wells/springs have run dry						
SAR-FC14.1	Address water shortage concerns- particularly at high elevations by following the model currently under way by Loma Prieta Fire Department. Example: Loma Prieta Fire Department is providing small grants to home owners to purchase and install additional water tanks on private residential lots where a reliable supply of water exists. These tanks then provide water for adjacent properties where a well or spring may be seasonal or dry	fire agencies, local community organizations, local water purveyors	Encouragement and assistance from Fire Safe Council can provide a catalyst for action.	1-5 years	1	County Fire
Strategic Goal: FC15- Where Open Space and Park Agencies establish trail head parking areas, operating facilities such as horse stables and camping areas that will increase public access add large capacity water tanks and hydrants for wildfire protection.						
SAR-FC15.1	Installation of water tanks on open space properties for fire suppression purposes.	All agencies. NOTE: MROSD will follow permitting agency requirements	Alleviates public and agency concern for limited water supply in remote areas.	Within 5 years	3	This could eventually be amended into the building code for Santa Clara County.

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Table 5.4. Recommendations for Structural Ignitability Projects in Saratoga Fire Protection District

ID (SAR)	Project	Presented by	Programs Available	Description	Contact	Priority (1,2,3) /Date
Strategic Goal- SI 1: Retrofit/eliminate flammable roofs						
SAR-SI 1.1	Retrofit/Eliminate flammable roofs	County Planning in conjunction with County Fire and municipalities	FEMA grants	Require elimination of all flammable roofs through attrition or time deadline	County Planning and City of Saratoga	1/By 2030
SAR-SI 1.2	WUI Fire Protection Workshops	SCCFSC All residents would be encouraged to participate.	Firewise, agency outreach personnel, Ready, Set, Go! Tailor to specific risk/hazards in each community	Offer hands-on workshops to highlight individual home vulnerabilities and how-to techniques to reduce ignitability of common structural elements.	SCCFSC Firewise personnel, CAL FIRE	1/Spring 2017
Strategic Goal- SI 4: Adopt common defensible space standards throughout the county and Strategic Goal- SI 19: Create a countywide defensible space ordinance for parcels below certain size acreage (parcel size: i.e. 2 acres?), if not cleared by owner then county will clear. Could be tied to County weed abatement program.						
SAR-SI 4.1 and SAR-SI 9.1	Stronger Defensible Space regulations.	Regional Fire Marshals. To be adopted locally in the 2016 CFC cycle.	Based on existing State laws and standards.	New emphasis on maintenance. Presented in plain language and a logical progression. Eliminate current jurisdictional limitations.	Regional Fire Marshals.	1/ Spring 2017
Strategic Goal SI7: Promote Firewise Community recognition program countywide; consider SCL amendments to Fire wise; partner with CERT and Neighborhood Watch.						
SAR-SI 7.1	Firewise Communities	Establish and support a new Firewise Communities Group	Firewise Communities USA	Give residents ownership of the fire problem, provide resources and information necessary to inform and prepare the community for fire.	SCFSC , CAL FIRE	2/Fall 2017
Strategic Goal: SI 5- Adopt landscape standards for recommended plant landscape materials						
SAR-SI5.1	Adopt landscape standards for recommended plant landscape materials	Fire Safe Councils to lead	Research Firewise plants suitable for the region. Develop plant list, poster materials and research demonstration site. Firewise Communities USA: www.firewise.org	Educate property owners, landscape firms and landscape architects in appropriate ornamental plantings, mulches, and landscape design/ maintenance in WUI areas.		3/Next 2 years

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ID (SAR)	Project	Presented by	Programs Available	Description	Contact	Priority (1,2,3) /Date
Strategic Goal: SI 6- Develop landscape contractor maintenance program for “Right Plant-- Right Place” and maintenance						
SAR-SI6.1	Develop landscape contractor non-flammable plant list.	Fire Safe Councils to lead in cooperation with local HOA	Firewise Communities USA: www.firewise.org	Educate property owners, landscape firms and landscape architects in appropriate ornamental plantings, mulches, and landscape design/ maintenance in WUI areas. Work with HOA.		2/Next 2 years
Strategic Goal: SI8- Interactive tool for citizens to use on line, ID their property and what hazard/risks exist and mitigations they can apply to improve their survivability						
SAR-SI8.1	Work with County Fire to develop parcel level application of CWPP risk assessment using Interra software.	Santa Clara County Fire Department with revised Interra contract	Interra	County Fire to pursue funding to increase contract provisions with Interra to provide public facing tool. Simplify tool and provide easy to follow instructions. Could develop You Tube informational video	1	Next 3 years
Strategic Goal: SI11- Implement spring community yard clean-up days. In combination with Fire Safe Council chipper program.						
SAR-SI11.1	Implement community work day to encourage yard clean-up and defensible space maintenance	County Fire, Municipal FDs, CAL FIRE, Fire Safe Councils	Fire Safe Council chipping program Ready, Set, Go! CAL FIRE	A community led day of yard clean-up with fire mitigation in mind would encourage large numbers within the community to carry-out mitigation measures and implementation of defensible space.	2	Next 2 years
Strategic Goal: SI12- Assess and improve accessibility to property Weekend program to inform homeowners about emergency response access						
SAR-SI12	Institute a weekend program to inform homeowners about emergency response access.	Fire departments, Fire Marshal	Firewise	Inform homeowners about the importance of keeping driveways accessible to fire trucks and emergency responders.	1	Within 1 year

Table 5.5. Recommendations for General Planning Projects in Saratoga Fire Protection District

ID	Project Description	Method	Timeline for Action	Priority (1,2,3)	Monitoring/Sustainability	Resources/Funding Sources Available
Strategic Goal GP1: Ensure Project Sustainability						
SAR-GP 1.1	The CWPP serves as the wildfire component of City of Saratoga Local Hazard Mitigation Plan and General Plan- Safety and other element amendments.	Work with city planning to identify timeline for incorporation in next LHMP update. Aim to have the Strategic Level CWPP incorporated into the Safety Element of the General Plan when the safety element is next revised. Getting it into the General Plan is equivalent to getting the CWPP adopted.	Next 5 years	2	The Core Group of stakeholders would need to ensure that the document is kept relevant in that time and position it for incorporation.	Internal funding
Strategic Goal GP3: Ensure Project Sustainability						
SAR-GP 3.1	Ensure project sustainability.	Have a target date for updating the datasets used in the risk assessment model and re-running the model. Establish trigger points for updating CWPP.	Annually	1	Establish annual oversight of the CWPP and project status. Get buy-in from Core Team members for long term commitment to CWPP review.	Internal funding
SAR-GP 3.2	Designate a member to the Countywide CWPP Core Team for CWPP updates.	Identify staff and convene a kick off of the working group and identify tasks and goals for CWPP updates.	Meet quarterly	1	Commit to attendance at one CWPP meeting annually.	Internal funding
SAR-GP 3.3	Develop methods for sustainability of hazardous fuel reduction.	Develop action for city council to adopt method to fund sustainable hazardous fuel maintenance (such Mello-Roos Community Facility Districts for new subdivisions)	As needed	2	Enactment of policy	Internal funding
Strategic Goal GP4: Parcel Level Defensible Space Inspection Task Force						
SAR-GP 4.1	Join countywide task force to do parcel level inspection work to enhance model; utilize portable data collection and ARC GIS as analysis tools.	Carryout parcel level assessments to enhance risk assessment model components at a finer scale. Add data to model and re-run as necessary.	2 years	1	Set target number of parcels to be assessed each year. Review number of parcels assessed each year at annual CWPP meeting.	Internal funding
Strategic Goal GP5: Develop countywide standard and method for continued data gathering and risk analysis.						
SAR-GP 5.1	Use a countywide standard and method for continued data gathering and risk analysis.	Conduct funding to purchase a commercial application such as Fulcrum © that provides a standard data collection platform that could be used on a smart phone/tablet.	2 years	1	Annual review of progress as part of Core Team.	CA FSC clearinghouse grants; Internal funding
Strategic Goal GP7: Add multi & hyperspectral and LiDAR imaging to periodic aerial photography flights.						
SAR GP 7.1	Seek LIDAR and Hyperspectral imagery for aerial photography of Morgan Hill.	Work in conjunction with the City Planning, County Assessor or others to add additional sensing cameras to aerial photo flights Hyperspectral and LiDAR can provide in depth identification and analysis of hazards and risks.	1–3 years	1	Periodic new flights to update data sets.	Grants: FEMA, Department of Homeland Security, SRA, Greenhouse Gas Reduction,