ANNEX 2

CHAPTER 1 CASA LOMA-UVAS

WILDLAND URBAN INTERFACE AREA DEFINED

The WUI planning area for Casa Loma-Uvas is in Figure 2-1.1.

NEIGHBORHOOD AND STRUCTURAL CHARACTERISTICS

These two areas are characterized by rural development with older small cabin-like homes, mobile homes, and newer ranchette properties with large homes in SRAs in very high FHSZs. Sveadal is a summer retreat property that has permanent residents and short-term visitors. Roads are narrow, often only one lane, and in many cases, such as Croy Road, dead end roads with no practical alternate evacuation route. Defensible space maintenance and improving access present the greatest needs for this planning area. Close coordination with open space agencies, water purveyors, and other large landowners with a community approach to emergency egress while simultaneously discouraging trespassing by non-residents is important.

A community-level CWPP, the Croy Fire Area CWPP, was developed for this area in 2008: <u>http://www.sccfiresafe.org/community-wildfire-protection-plans/croy-area.</u>

The countywide CWPP establishes strategic goals for these more detailed community-level fire planning efforts. The Croy Fire Area CWPP is incorporated into this county planning process through reference, but remains the most detailed level plan for WUI communities within the Casa Loma-Uvas planning area.

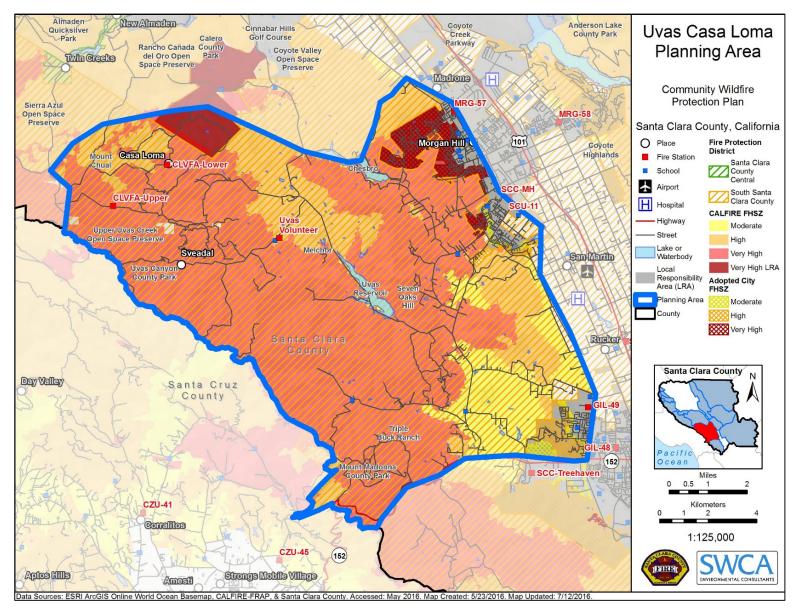
The south-, southwest-, and west-facing slopes in this area provide a good example of where the existence of small, flashy fuels beneath shrubs and trees, especially in the interface areas, also increases the potential for vertical fire spread. The presence of highly flammable contiguous vegetation (Figure 2-1.2), specifically peppers, eucalyptus, pines, palm trees, and other non-native trees near interface and intermix residential structures, increases the potential for canopy fire and structural ignition.

The 2008 Croy Fire Area CWPP provides detailed analysis of the fuels that comprise the Croy Fire Area. In summary, these fuels include:

- Annual grassland, native and non-native grasses < 4 feet tall: high rates of spread.
- California mixed chaparral, >6 feet tall shrubs: intense fire behavior and fast rates of spread.
- Coast live oak, grasslands, and coast redwood, fire carried by understory fuels: slowburning fire with low flame lengths.
- Coastal sage scrub and buckwheat, shrub vegetation, less than 3 feet in height: potential explosive fire behavior particular in areas of contiguous fuels and during periods of low fuel moisture.

Based on existing vegetation, topography, and typical weather conditions for the Santa Cruz Mountains, the area is considered vulnerable to wildfire. While the biggest increases in fire escapes is anticipated in low-population density zones, the increases of fast-spreading fires, primarily in grass and brush fuels, has implications for parts of the planning area near open areas, particularly where grazing has decreased and light, flashy fuels (grasses) have increased.

Critical infrastructure telecommunication site at Loma Prieta Peak is also in this planning area.



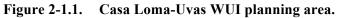




Figure 2-1.2. Uvas Canyon County Park showing continuous fuels.

Building Characteristics: Many homes in the Uvas-Casa Loma WUI planning area have good fire resistant roofs, protected eaves and more or less adequate defensible space around the homes. Conversely, many homes were also observed in fire prone areas with old, wood shake roofs, unprotected eaves, fire prone trees and little or no defensible space around the homes.

Water Supply: As described in the Croy Fire CWPP, there are little to no fire hydrants in this area and water supplies are very limited except for the reservoirs in the area. However, many property owners recognize this danger and have private water tanks with fittings that can be used by the fire engines. The reservoirs are used by the CAL FIRE helicopters as a source of water to fight fires in this area.

Road Access: Homes in this planning area are remote and not easy to access resulting in slow response times for emergency vehicles and evacuation concerns for residents. There are many private roads that are narrow, windy and unsurfaced and are prone to damage from rainfall, landslides and erosion. Many are already in need of extensive maintenance (Figure 2-1.3 and Figure 2-1.4). There is also a lack of appropriate escape routes and many locked gates that would prevent egress in an emergency.

Primary concern is to improve access/egress for public to safely evacuate and firefighters to respond in this planning area.



Figure 2-1.3. Narrow roads such as Croy Road leading to Sveadal and Uvas Canyon County Park.



Figure 2-1.4. Poor road conditions along Loma Chiquita Road.

Emergency Response Capacity

The SCCFPD/CAL FIRE response to the planning area would be primarily from the Casa Loma volunteers, Uvas volunteers and staffed stations at Morgan Hill, Masten, Treehaven, Coyote, and Almaden stations. The area is an SRA and receives a full wildland fire response from CAL FIRE during fire season. Normal CAL FIRE wildland response includes chief officers, fire engines, air tankers (Hollister Air Attack Base), helicopter (Alma Heli Base), fire dozers, and hand crews (Ben Lomond Camp).

The Casa Loma Volunteer Fire Association (CLVFA) is a non-profit organization dedicated to providing fire, medical, and other emergency services to the Casa Loma, Loma Chiquita, and Twin Falls Roads areas. Their response area covers 5,551 acres and approximately 175 structures. The CLVFA works closely with the SSCFPD/CAL FIRE to fight fires in this area.

The Uvas Volunteer Fire Department (UVFD) was established in 2002 following the Croy Fire. The UVFD response area is in the southern portion of the planning area and covers three county parks and about 250 structures. The UVFD works closely with the SSCFPD/CAL FIRE to fight fires in this area.

PUBLIC EDUCATION AND OUTREACH PROGRAMS

SCCFPD/CAL FIRE and the volunteer fire departments offer public meetings and forums to support wildfire awareness. The CLVFA is also engaged in fire prevention in the community and offer fire prevention information and evacuation planning tips on its website: http://karmenrose.wix.com/wildlandfirefighters

The UVFD has been an instrumental player to adjoining departments and other agencies in projects such as fire prevention education, land and vegetation management (control burning) and community outreach. More information can be found on the UVFD website: http://www.uvasfire.org/

RISK/HAZARD ASSESSMENT

Community hazard assessments include ratings of community conditions compared to best practices for WUI fire mitigation. Community Hazard ratings include consideration of applicable state codes, local ordinances, and recognized best practices guidelines.

The National Fire Protection Association Standard 1144 (NFPA 1144) defines WUI hazards and risks at the community and parcel level. This plan utilizes components of NFPA 1144, California laws and local ordinances to evaluate neighborhood WUI hazard and risk. CA PRC 4290 and 4291 sections address WUI community design and defensible space standards.

An on-the-ground hazard assessment was completed for Uvas Casa Loma. The following ratings are based on the NFPA 1144 structural hazard assessment form. Scores are rated as follows: (<40 = low, >40 = moderate, >70 = High, >112 = Extreme). Factors that contributed to the assessment are illustrated in tabular format below. Averages are taken across the community to give a rating for each parameters (individual parameter numerical ratings are not shown here, but instead are shown as a +, - or +/-). For more information on the methodology for the hazard assessment please see Section 4.6.6 in Chapter 4 of the countywide CWPP.

Parameter	Condition	Rating				
Access	One road in and out	-				
	Narrow road width poor fire access, dead end spurs, lack					
	turnaround					
	Unsurfaced road with greater than 5% grade	-				
	Street signs are present, some are non-reflective	+/-				
Vegetation	Adjacent fuels: Moderate with high flammability	-				
	Defensible space: >30 feet and < 70 feet around structure	+/-				
Topography within 300 feet of structure	41%	-				
Topographic features	High concern					
History of high fire occurrence	Moderate					
Severe fire weather potential	Moderate					
Separation of adjacent structures	Good separation					
Roofing assembly	Unrated combustible and Class B					
Building construction	Non-combustible siding, combustible deck					
	Building set back <30 feet to slope	-				
Available fire protection	Water unavailable					
	Response: Station >5 miles from structure	-				
	Internal sprinklers: for new build properties	+/-				
Utilities	Both above ground					

In addition to the on-the-ground hazard assessment, the CWPP also includes a Composite Fire Risk/Hazard Assessment which 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 2-1.5. For more information on the methodology for this assessment please refer to Section 4.6.1 in Chapter 4 of the CWPP.

PARCEL LEVEL RISK 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.

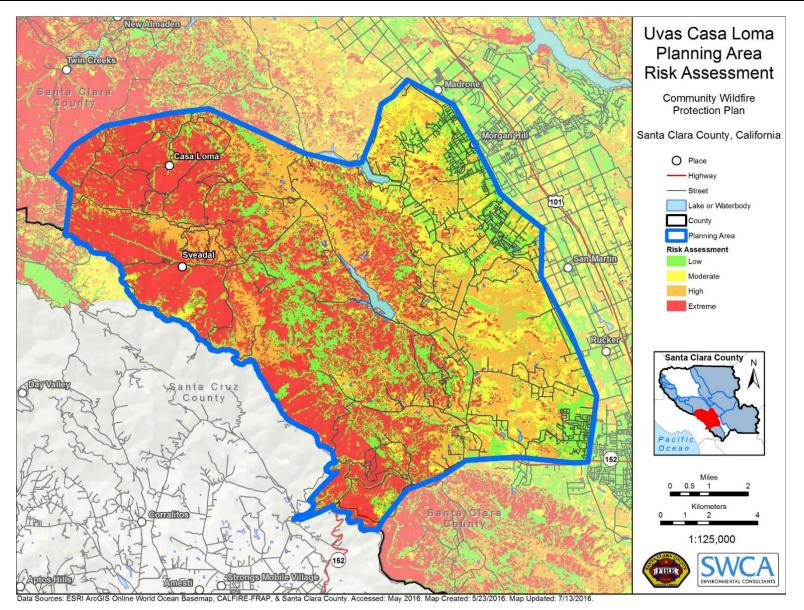


Figure 2-1.5. Composite Risk Assessment for Casa Loma-Uvas.

MITIGATION PROJECTS AND PRIORITIZATIONS

The following project matrixes have been developed by the community and Core Team to direct specific project implementation for SCCFPD (Table 2-1.1–Table 2-1.4). 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 to address:

- Hazardous Fuel Reduction
- Firefighting Capability
- Public Education and Outreach
- Structural Ignitability

A treatment map has been developed by the Core Team for fuel treatments in the area (Figure 2-1.6). Many of these projects have been developed by community members in an effort to improve wildfire preparedness and protect life and property. These projects are conceptual in nature and therefore subject to change as this document is revised.

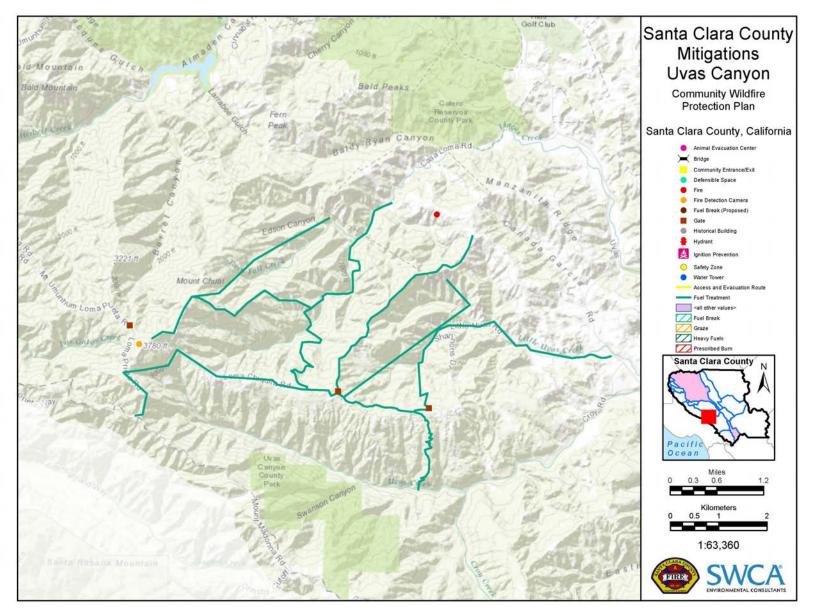


Figure 2-1.6. Mitigation measures for the Case Loma/Uvas area

Table 2-1.1. Recommendations for Fuel Reduction Projects in Casa Loma-Uvas

ID	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic	Goal: FR7: Develo	op roadside fuel treatment prog	ram, including suite	of methods availabl	le and sustainab	oility mech	anism	
SCC- FR7.1	Improve ingress/egress capabilities through installation of fuel breaks and brushing.	SCC WUI areas. Public and privately owned/maintained road systems. Croy Road; Loma Chiquita; Casa Loma to enhance safe evacuation.	Limb trees and remove brush along roadways to at least reclaim full original width and height. Goal: minimum 20' clear width and 15' clear height.	Ensure the safe and rapid evacuation of residents during fire response and suppression activities.	Fall 2016	1	Regular maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	County General Fund Budget. CAL FIRE crews – County Public Works budget. Local community groups - donations and grant funding. USDA-NRCS
SCC- FR7.2	Install roadway buffers and cut grass earlier in the season	All WUI areas, Public and privately owned/maintained road systems. Priority areas from 2008 CWPP (Annex C in 2008 CWPP): -Uvas Canyon County Park: Limb up and trim back large, overhanging trees, remove hazardous small trees, fire prone underbrush and weeds and maintain this shaded fuel break along the road that connects to Summit Road. -Uvas Canyon Road: Limb up and trim back large, overhanging trees, remove hazardous small trees, fire prone underbrush and weeds along Uvas Canyon Road. -Casa Loma Road: Limb up and trim back large, overhanging trees, remove hazardous small trees, fire prone underbrush and weeds along Casa Loma Road -Loma Chiquita Road: Limb up and trim back large, overhanging trees, remove hazardous small trees, fire prone underbrush and weeds along Casa Loma Road -Loma Chiquita Road: Limb up and trim back large, overhanging trees, remove hazardous small trees, fire prone underbrush and weeds	Limb trees and remove brush along roadways to at least reclaim full original width and height. Goal: minimum 20' clear width and 15' clear height. Cut grass earlier.	Ensure the safe and rapid evacuation of residents during fire response and suppression activities and reduce potential for fire spread across roadways.	Fall 2016	1	Regular maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	CAL FIRE crews - Public Works budget. Local community groups - donations and grant funding.

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ID	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
SCC- FR7.3	Improve man- made fuel breaks around individual structures or groups of residences	All WUI areas. Public and privately owned/maintained road systems.	Clear brush, limb trees, and remove dead woody materials, located within 10' of road edges.	Ensure the safe and rapid evacuation of residents during fire response and suppression activities.	Spring 2017	Н	Regular maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	CAL FIRE crews - Public Works budget. Local community groups - donations and grant funding.
		rage use of prescribed fires wh			1	r		
SCC- FR4.1	Encourage use of prescribed fires where ecologically sound and feasible	County Parks, State Parks, CAL FIRE, private lands	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, CA FSC, CFIP, NRCS
		Specific Projects- non tiered						
SCC 3	Establish fuel breaks and maintain existing fuel breaks	WUI private property and County Parks and Open Space Authority.	Create minimum 100ft fuel modifications from top slope structures.	Slow the spread of fire up slope to help address concerns with minimal set-back. Reduce the intensity of possible flame fronts.	Spring 2017	н	Annual maintenance needed to ensure the fuel break remains clear of vegetation. Monitor for erosion and invasive species.	Public Works budget. Local community groups - donations and grant funding.
SCC 4	Utility line clearance projects	Open space properties.	Enforcement of utility clearances will be crucial for minimizing the likelihood that fires are ignited from this potential source.	Reduce potential of ignition from utility lines and reduce potential impact to utility lines in event of wildfire	Spring 2017	Н	Annual maintenance needed to ensure the ROW remains clear of vegetation. Monitor for erosion and invasive species.	Utility company funds.

Table 2-1.2. Recommended Firefighting Capability Projects in Casa Loma-Uvas

ID	Project Description	Fire Department/Agency	Benefits of the Project to the community	Timeline/ Priority (1,2,3)	Resources/funding sources available
	oal: FC13: Develop a coordin ally focusing on areas of hig		ire jurisdictions and water supply agencies to identify needed	improvements to	the water distribution
SCC- FC13.1	Improve firefighting water supplies in rural areas.	SCC FPD	Increase available fire flow in these neighborhoods. Provide redundancy in water supply infrastructure Increase capacity of gravity fed water supplies	Fall 2018	General Fund
SCC- FC13.2	Improve firefighting water supplies in areas with inadequate supplies and limited hydrants. UVFD, CLVSA, SCFSC CAL FIRE Increase available fire flow in these neighborhoods. Add fire hydrants to areas dependent of private wells. Provide redundancy in water supply infrastructure Increase capacity of gravity fed water supplies		Fall 2016/1	General Fund	
SCC- FC13.3	Mapping of available private water supplies	UVFD, CLVSA, SCFSC , CAL FIRE	Increase knowledge of available water sources prior to a wildfire event to improve fire response capability.	Fall 2016/1	
Strategic Go	oal: FC8: Where road system		not provide for proper evacuation or two way flow, require rem	oval of obstructio	ons or upgrade to
	lanes road system over time	-			
SCC-FC8.1	Improve ingress/egress capabilities. All areas in SCC FPD	SCC FPD and CAL FIRE	Establish secondary access roads in current single access areas	Fall 2018/ 2	County General Fund Public Works budget.
			Ensure the safe and rapid evacuation of residents during fire response and suppression activities		Local community groups - donations and grant funding
Strategic Go	oal: Implement County wide	program to replace existing	ng house number markers with reflective markers that meet co	onsistent standar	d.
SCC- FC12.1	Improve road, street, and address, identification.	WUI areas. Privately owned/maintained road systems.	Repaint, re-letter, or replace road/street signs that do not meet existing standards, install additional road/street signs to ensure identification from either direction of travel. Post community address signs to identify unmarked residences. Ensure the rapid identification of streets, roads, and addresses, during an emergency.	Spring 2017/2	General Fund Budget. Local community groups - donations and grant funding. HOAs - annual d
Casa Loma	-Uvas Specific Project- non t	iered	· · · · · ·	•	•
SCC-FC1	Add hand crew capabilities	CAL FIRE, Santa Clara County Juvenile Justice System	Utilize juveniles in corrections setting for public service Form hand crews from available inmates for rapid response and increased firefighting capacity.	Summer 2018/2	Undetermined
SCC-FC2	Casa Loma Landing Zones and Staging Area (Croy Fire Area CWPP Project)	WUI private property and County Parks and Open Space Authority.	Identify and clear areas where large groups of fire response equipment or aerial firefighting equipment could occupy during a fire emergency without being in danger from an advancing fire front.	Provide a defensible area for residents to stay in place during wildfire and for staging of fire responders and equipment	Fall 2017

ID	Project Description	Fire Department/Agency	Benefits of the Project to the community	Timeline/ Priority (1,2,3)	Resources/funding sources available
SCC-FC 3	Loma Chiquita Landing Zones and Staging Area (Croy Fire Area CWPP Project)	WUI private property and County Parks and Open Space Authority.	Identify and clear areas where large groups of fire response equipment or aerial firefighting equipment could occupy during a fire emergency without being in danger from an advancing fire front.	Provide a defensible area for residents to stay in place during wildfire and for staging of fire responders and equipment	Loma Chiquita Landing Zones and Staging Area (Croy Fire Area CWPP Project)
SCC-FC4	Uvas Canyon Landing Zones and Staging Area (Croy Fire Area CWPP Project)	WUI private property and County Parks and Open Space Authority.	Identify and clear areas where large groups of fire response equipment or aerial firefighting equipment could occupy during a fire emergency without being in danger from an advancing fire front.	Provide a defensible area for residents to stay in place during wildfire and for staging of fire responders and equipment	Uvas Canyon Landing Zones and Staging Area (Croy Fire Area CWPP Project)
SCC-FC 5	Escape Route Projects*	See Figure 2-1.7 below: Priority 1- Loma Chiquita Priority 2- Open Space Road Priority 3- Casa Loma Road Priority 4- Little Uvas Road Priority 5- Croy Cut-off Priority 6- South Fuel Break	Road maintenance and brushing needed to create useable evacuation routes: -Grading -Draining/culverts -Brush/tree cutting to reduce overhanging vegetation and provide buffer -heli-pad maintenance	Address the communities concerns regarding emergency evacuation on un-passable poorly maintained roads.	Spring 2017



Figure 2-1.7. Potential escape route treatment projects in the Casa Loma area- provided by residents.

Table 2-1.3. Recommended Public Education and Outreach Projects in Casa Loma-Uvas

ID SCC	Project	Presented by	Target Date	Priority (1,2,3)	Resources Needed	Serves to
messages	Goal: EO3: Organize a community gr . Could coordinate with fire department to coordinate actual implementation	ents or Fire Safe Counci	l.	-		
SCC- EO3.1	Encourage retrofit of roofs and measures to "harden" property to wildfire	FireSafe Councils, SCC 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.
SCC- EO3.2	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 Fire Safe Council.	FireSafe Council, fire departments, local residents, Eagle Scouts, High School Community Volunteer Program	Spring 2017	1	Funding to help cover costs of materials (green waste removal or chipper) and participation. People trained in defensible space practices.	Engage diverse stakeholders in reaching out to community members and encourage defensible space practices. Empower homeowners to make affordable and effective changes to reduce the vulnerability of individual homes.
SCC- EO3.3	Homeowner's Guide Provide copies of an existing guide for homeowners in the WUI to inform them and encourage them to prepare.	SCC FPD/CAL FIRE	Spring 2017	2	Funding to purchase and distribute 5000 copies of the guide.	Give Residents detailed and locally specific tools that they can use to improve preparedness
SCC- EO3.4	Defensible Space Education and outreach	SCC FPD, CLVFD, UVFD, CAL FIRE, Fire Safe Council	Within a year	1	Funding to help cover costs of materials (green waste removal or chipper) and participation. People trained in defensible space practices.	Engage diverse stakeholders in reaching out to community members and encourage defensible space practices. Empower homeowners to make affordable and effective changes to reduce the vulnerability of individual homes.

ID SCC	Project	Presented by	Target Date	Priority (1,2,3)	Resources Needed	Serves to				
Strategic G	Strategic Goal: EO12: Promote and increase the use of prescribed burning as a fuels reduction method.									
SCC- EO12.1	Where appropriate implement Prescribed burning programs at Calero, Chesbro Reservoir, Mt. Madonna, Uvas Canyon and Uvas Reservoir County Parks and the Santa Clara County Open Space Authority properties	County Parks, County Open Space Authority	Within 2 years	2	Prescribed burn prescription, Research and costs of producing	Protect communities and infrastructure by reducing fuel loads.				
	Soal: EO7: Plan livestock evacuation emergency management officials to			ock and then	hold community meetings to	disseminate to the public.				
SCC- EO7.1	Address density of livestock in planning area and provide plan in event of wildfire	Emergency management officials, livestock agencies/ civic groups	Fall 2018	2	GIS software or maps- coordinate with EQ Clearing House- GIS sharing.	Protect communities, livestock and infrastructure through increased awareness.				
Work with	Strategic Goal: EO13: Implement Firewise Communities programs. Work with communities to participate in Firewise Communities and prepare for fire events. Hold Firewise booths at local events for example during the October Fire Awareness Week each year.									
SCC- EO13.1	Encourage the SCCFPD neighborhoods to become certified under Firewise	FireSafe Council, CAL FIRE, SCC FPD	Fall 2018	2	Firewise Communities educational materials.	Protect communities and infrastructure through increased awareness and defensible space.				

Table 2-1.4. Recommendations for Structural Ignitability Projects in Casa Loma-Uvas

ID	Project	Presented by	Programs Available	Description	Contact	Priority (1,2,3) /Date
Strategic G	oal: SI 1: Retrofit/eliminate flammabl					
SCC- 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	1/ By 2030
Strategic G	oal- SI 10: Public education program	for embers and problem	s associated with ember	s, property hygiene, defe	nsible space	
SCC- SI10.1	WUI Fire Protection Workshops	Local Fire Marshals- 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.	Fire Marshal, Firewise personnel, CAL FIRE	High/Spring 2017
and Strategic G	oal- SI4: Adopt common defensible oal- SI 19: Create a countywide defe clear. Could be tied to County weed	nsible space ordinance fo		size acreage (parcel size:	i.e. 2 acres?), if not clea	red by owner then
SCC-SI4.1	Stronger defensible space regulations.	Regional Fire Marshals. To be	Based on existing State laws and	New emphasis on maintenance.	Regional Fire Marshals.	Spring 2017
and		adopted locally in the 2016 CFC cycle.	standards.	Presented in plain language and a logical		
SCC-SI9.1				progression. Eliminate current jurisdictional limitations.		
Strategic G Watch.	oal SI7: Promote Firewise Commun	ity recognition program c	ountywide; consider SC	L amendments to Fire wis	se; partner with CERT ar	nd Neighborhood
SCC-SI7.1	Firewise Communities certification	Fire Safe Council, CAL FIRE, SCC FPD	Firewise Communities USA	Fire risk analysis of SCC FPD	SCC FPD/CAL FIRE.	1/ Fall 2018
Links to SCC-EO- 13.1	Establish and support a new Firewise Communities Group			neighborhoods. Staff hours to facilitate and support.		
				Give residents ownership of the fire problem, provide resources and		
				information necessary to inform and prepare the community for fire.		