

ANNEX 1

CHAPTER 5 NEW ALMADEN

The Village of New Almaden is nestled in a canyon 11 miles south of San Jose between the Pueblo Hills and the spurs of the Santa Cruz Mountains. New Almaden is the site of the world famous quicksilver mining community dating back to 1845 under the claim of Mexican Cavalry Officer Captain Andres Castillero. The area was rich in Cinnabar, an ore containing mercury, which was used to process silver. Today the New Almaden mining district—a National Historic Landmark—encompasses the hacienda, homes of the mining community families along the banks of the Alamos Creek, and the Cinnabar Hills where the mining operation took place. The hacienda included Casa Grande (located on Almaden Road), the manager’s imposing residence (Figure 1-5.1).



Figure 1-5.1. Casa Grande and the New Almaden Quicksilver Mining Museum.
Source: Santa Clara County Parks.

In 1973 Santa Clara County began the purchase of the hills area of New Almaden for development as a county park: Almaden Quicksilver County Park. At that time was the creation of the County Historic District Zoning Ordinance to assure preservation of the mining town. In 1997 the Casa Grande, a National Historic Site, was purchased by County Parks and the New Almaden Quicksilver Mining Museum was established.

ORGANIZATION AND JURISDICTION

The Village and historic district of New Almaden is in Santa Clara County Fire Department/CFPD jurisdiction, with first response fire protection, prevention and inspections contracted to the City of San Jose Fire Department. Responsibility for land use planning, building permits, policy, and ordinances rest with the County.

The New Almaden area is an SRA; therefore, wildland fire jurisdiction is joint with CAL FIRE.

PLANNING TEAM PARTICIPATION

The CWPP planning process engaged residents of New Almaden through community workshops that focused on the Lexington Basin and Almaden Valley. Representatives of the Santa Clara County Fire Department and CAL FIRE also represented the community on the Core Team.

SUMMARY

Wildfires present a significant danger to people and properties within the New Almaden community, particularly due to the unique historic nature and community value of structures in the area.

Mitigations can reduce the risk of injury and damage. Some mitigations are solely the responsibility of property owners, other mitigations require neighborhood level action, and some require municipal and county government action.

The CWPP establishes strategic goals for community-level fire planning efforts.

WUI AREA DESCRIPTION

WUI AREA DEFINED

The New Almaden community is identified in Figure 1-5.2. The whole community is considered WUI with multiple community values at risk.

First response for wildland fire protection is through the City of San Jose Fire Department and CAL FIRE. The City of San Jose Annex (Annex 10) of this CWPP is included by reference.

Fire History

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

Hazardous Fuel Characteristics

The New Almaden community is situated within a high FHSZs (Figure 1-5.2). For fuel model information, please refer to Section 4.6.3 and Figure 4.3 in Chapter 4 of the main countywide CWPP document.

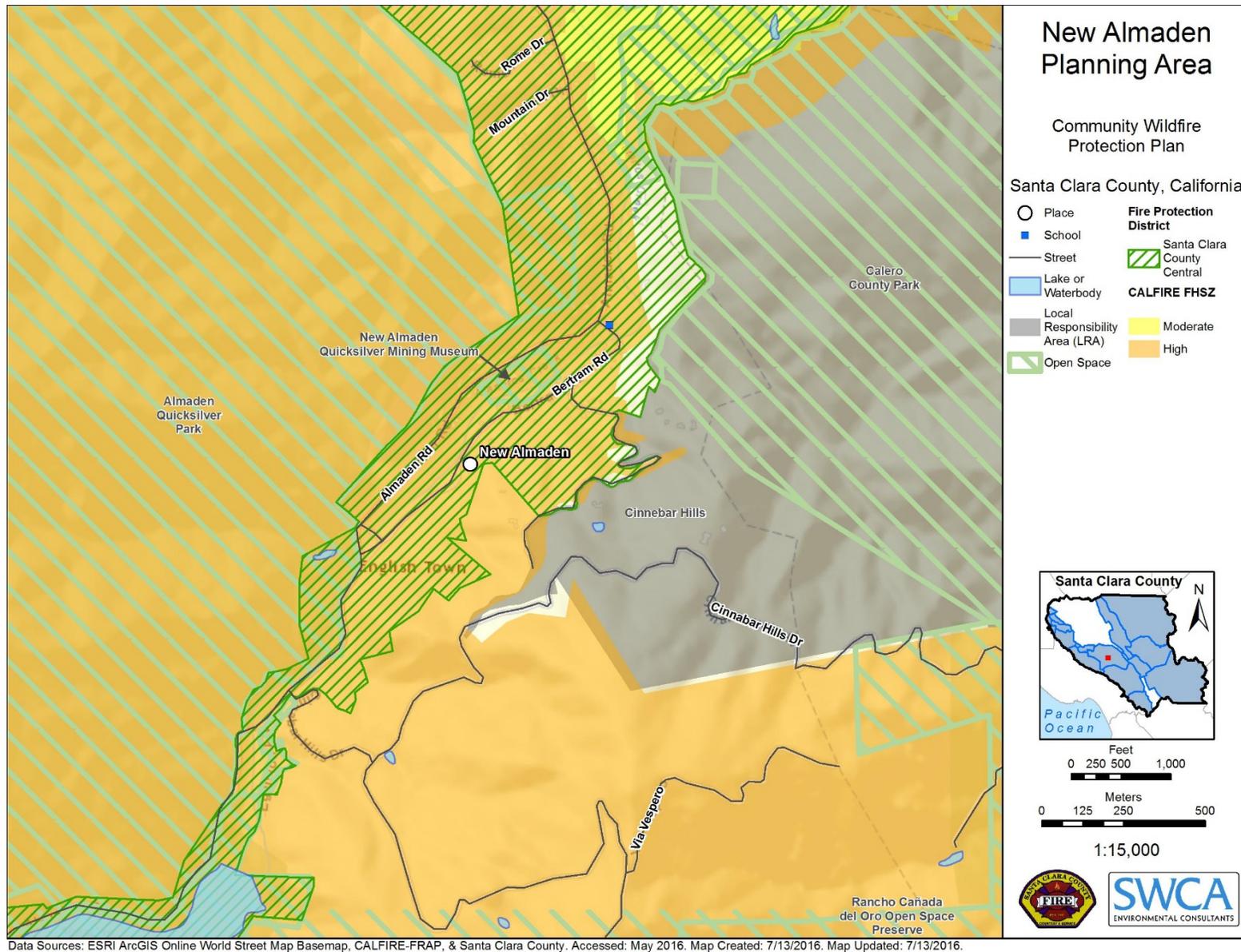


Figure 1-5.2. New Almaden planning area.

NEIGHBORHOOD AND STRUCTURAL CHARACTERISTICS

The New Almaden community is nestled in a small valley with two main roads, Almaden Road and Bertram Road, and homes located in the Cinnabar Hills. There are a number of historic buildings and Nationally Registered Landmarks within the village that represent irreplaceable community values at risk. Many homes have wooden shiplap siding and wooden fences and decks/porches which are prone to structural ignitability. Homes along Almaden Road and Bertram Road have limited separation (Figure 1-5.3) and in some cases insufficient defensible space. Although the area falls within the SRA and therefore has a mandated 100-foot defensible space requirement, structure separation makes the 100-foot defensible space difficult to implement. For homes adjacent to public lands, collaboration between private and public landowners could help to facilitate adequate defensible space provisions. Access is poor along Bertram Road due to narrow road width (Figure 1-5.4), which may impede navigation by large fire apparatus. The community is surrounded by open space and wildland fuels (e.g., Almaden Quicksilver County Park [Figure 1-5.5], Calero County Park and Santa Teresa County Park) and residents note the need for more vegetation management in open space areas to provide a buffer to the community. The Almaden-Callero Canal, backs to Bertram Road homes and could be considered for development of a shaded fuel break. The community is active in wildfire preparedness through activity on the FireSafe Council. They hold an annual chipping event through the FireSafe Council that is utilized by many community members. Water supply in the community is good, as is fire response from SJFD and CAL FIRE.



Figure 1-5.3. Historic homes with limited separation.



Figure 1-5.4. Narrow road width on Bertram Road.
Source: www.newalmden.org



Figure 1-5.5. Almaden Quicksilver County Park.
Source: www.newalmden.org

EMERGENCY RESPONSE CAPACITY

First response fire protection, prevention, and inspections are contracted by Santa Clara County Fire Department to the City of San Jose.

The closest San Jose Fire Station and CAL FIRE stations are adjacent to each other on McKean Road near Almaden Road. 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).

Responsibility for land use planning, building permits, policy, and ordinances continues to rest with the County.

PUBLIC EDUCATION AND OUTREACH PROGRAMS

The New Almaden community is served by a highly involved fire safety council, the Santa Clara County FireSafe 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.

POLICIES, REGULATIONS, ORDINANCES, AND CODES

Since New Almaden is unincorporated, structures within the planning area are covered under the County's WUI codes:

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

Due to the Historic District Zoning Ordinance, many of the historic buildings have restrictions on retrofits; for example, replacement of wooden shiplap siding or wood shake shingles. The greatest risk to these historic buildings is ignition from flying embers. Replacing the very flammable wood roof with non-combustible roofing will compromise the historical characteristics of the buildings, but reduces their vulnerability to fire loss. The County does consider safety hazards in their application of the ordinance so there may be an architectural compromise that can be reached for retrofits- i.e. composite siding that mimics the historic woodlap. There are also a number of tree ordinances protecting large historic trees, even those that may pose a wildfire hazard.

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.

A hazard assessment was completed for New Almaden. 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.

In addition to the on-the-ground hazard assessment, the CWPP also includes a Composite Fire Risk/Hazard Assessment which uses fire behavior modelling 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 1-5.6. For more information on the methodology for this assessment please refer to Section 4.6.1 in Chapter 4 of the CWPP.

Parameter	Condition	Rating
Access	One road in and out	+
	Narrow road width	-
	Surfaced roads	+
	Poor fire access, dead end spurs, lack turnaround	-
	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	Poor separation	-
Roofing assembly	Unrated flammable and Class B	+/-
Building construction	combustible siding, combustible deck	-
	Building set back <30 feet to slope	-
Available fire protection	Water available	+
	Response: Station <5 miles from structure	+
	Internal sprinklers: for new build properties	+/-
Utilities	Both above ground	-
Risk Rating - High (79)		

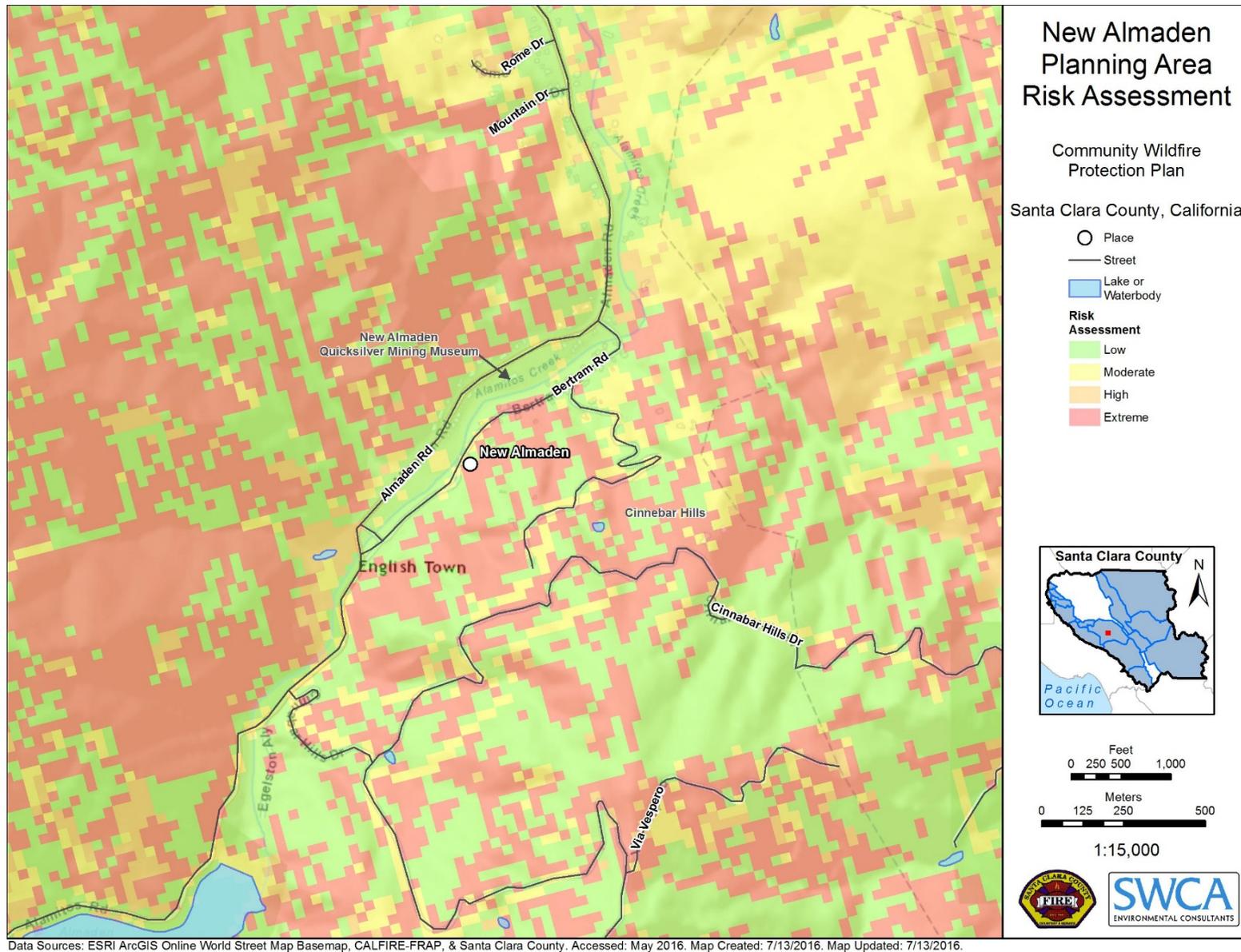


Figure 1-5.6. Composite Risk/Hazard Assessment for the New Almaden planning area.

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.

IDENTIFY CRITICAL INFRASTRUCTURE AND COMMUNITY VALUES AT RISK

Large parks and open space areas occur in this area, including Almaden Quicksilver County Park (Figure 1-5.6), Calero County Park, and Santa Teresa County Park. The area is heavily used for recreation.

As discussed previously the community is comprised of numerous buildings of historic importance and Nationally Registered Historic Properties that would be irreplaceable if destroyed by wildfire. Building contents and museum artifacts are also highly valuable and irreplaceable. The area is an important tourist destination valued by the wider population.

Important roads and transportation infrastructure include Almaden Road and Bertram Road. Both the electric lines and communication lines are generally overhead, rather than buried, and thus are both a potential source of wildfires, especially during windy conditions, as well as infrastructure which can be damaged by wildfires. Important San Jose Water Company distribution lines are also found throughout this area. These facilities feed the fire hydrants and maintain the water pressure for the area.

MITIGATION PROJECTS AND PRIORITIZATIONS

The following project matrices have been developed by the community and Core Team to direct specific project implementation for communities in New Almaden. The matrices below are tiered to the strategic goals presented in the body of the CWPP through project IDs in the first column of each matrix. The matrices are broken down into projects for addressing hazardous fuels, structural ignitability, public education and outreach, and fire response capability (Table 1-5.1–Table 1-5.4).

Table 1-5.1. Recommendations for Fuel Reduction Projects in New Almaden

ID NA- New Almaden	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic Goal: FR3: Encourage continued grazing in parks and open space for grass/light fuel maintenance								
NA-FR3.1	Encourage continued grazing in parks and open space for grass/light fuel maintenance	Adjacent County Park properties	Utilize browsing as fuel reduction and maintenance technique, in areas adjacent to New Almaden.	Reduce fuel loading of fine fuels that could increase wildfire spread to WUI areas.	Ongoing	2	Regular monitoring needed to ensure against environmental damage and invasive species.	Grants: SRA (only on SRA lands), CA FSC; CFIP; NRCS, FEMA, GHGRF
Strategic Goal: FR7: Develop roadside fuel treatment program, including suite of methods available and sustainability mechanism.								
NA-FR7.1	Install roadway buffers and cut grass earlier in the season.	County Parks access roads.	Limb trees and remove brush along roadways to at least reclaim full original width and height. Goal: minimum 20-foot clear width and 15-foot 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. Some residents already carryout annual herbicide treatments along roadsides on private land to reduce grass fuel loading.
NA- FR7.2	Develop conceptual fuel reduction projects for protection of New Almaden community. Pursue CEQA analysis for any proposed projects. Focus on roadside and strategic larger scale fuel breaks and treatments to reduce potential fire spread from public land to community.	County Parks, MROSD OSA and Private lands where applicable. Focus on wildland fuels adjacent to historic district- Casa Grande and Museum properties	Clear brush, limb trees, and remove dead woody materials, located within 10 feet of road edges. Investigate strategic placement of fuel treatments to reduce fire spread from County Park lands to New Almaden	Ensure the safe and rapid evacuation of residents during fire response and suppression activities. Reduce potential high intensity wildfire and ember cast that could impact vulnerable historic properties.	Spring 2017	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.

*Santa Clara County Community Wildfire Protection Plan
Annex 1. Santa Clara County Central Fire Protection District – Chapter 5*

ID NA- New Almaden	Project Description	Location and land ownership	Method	Serves to:	Timeline for Action	Priority (1,2,3)	Monitoring	Resources/funding sources available
Strategic Goal: FR11: Create Sustainable programs for creating Defensible Space at the parcel Level.								
NA-FR11.1	Build collaboration for creating Defensible Space at the parcel Level where structure separation limits implementation of 100-foot clearance.	Homeowner, FireSafe Councils, Homeowner Associations, Local fire Departments, Administrators for SRA fee distributions, etc.	Example projects – public-private partnerships for defensible space treatment- i.e. property owners to work with Santa Clara Valley Water District for development of fuel break and adequate defensible space for properties backing to Almaden –Calero Canal. Develop maintenance schedule.	Ensure that defensible space actions are implemented and 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

Table 1-5.2. Recommended Fire-Fighting Capability Projects in the New Almaden

ID NA- New Almaden	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.					
NA FC2.1	Formally identify and map staging areas at the Hacienda Overflow Parking Lot and Mockingbird Hill Lane. Consider installation of high capacity water tanks at staging areas.	County Parks- Almaden-Quicksilver County Park, CALFIRE, San Jose FD.	Provides pre-planned area for staging to expedite set-up in event of wildfire.	Spring 2017/1	Grants: SRA (only on SRA lands), FEMA, CA FSC, DHS
Strategic Goal: FC5: Develop WUI preplans and accompanying evacuation plans for all WUI areas in Santa Clara County using standardized format					
NA-FC5.1	Develop WUI preplans to identify poor access areas along Bertram Road. Evacuation route signage.	San Jose FD, CAL FIRE.	Improve fire response capability in event of wildfire by familiarizing response crews with potential access bottle necks to responders and evacuating public.	Spring 2017/1	
Strategic goal FC11: Investigate and potentially install Fire Detection Robots to alert departments of a fire start in remote areas.					
NA-FC 11.1	Install and monitor a series of fire-detecting cameras facing the County Park lands. Property owners could be approached for installation on private lands.	CAL FIRE, San Jose FD, County Parks.	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.	Fall 2017/1	Local community groups - donations and grant funding. HOAs.

Table 1-5.3. Recommended Public Education and Outreach Projects in the New Almaden

ID NA- New Almaden	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.						
NA-EO1.1	Encourage retrofit of roofs woodlap siding to “harden” properties to wildfire. Work with County planning department to identify acceptable work arounds of Historic District Ordinance.	FireSafe Councils, County Fire, CAL FIRE, New Almaden Community Group.	Within 2 years	1	Workshop expenses, personnel Workshop venues Demonstration site Strategize on avenues for engaging the public.	Increase compliance with County WUI code while adhering to historic district ordinance. Reduce fire risk level for individual parcels and community as a whole.
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 Fire Safe Council. Possibility to coordinate actual implementation of defensible space and slash clear-up with the local Eagle Scout group or high school volunteers.						
NA-EO3.1 Links to NA-FR11.1	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. Build partnerships with adjacent public land agencies to help implement defensible space where property boundaries limit implementation to 100ft clearance standard.	FireSafe Council, fire departments, local residents, Eagle Scouts, High School Community Volunteer Program	Within a year	1	Funding to help cover costs of materials (green waste removal or chipper) and participation. People trained in defensible space practices. Install a community mailbox to facilitate communication.	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. Address concerns raised by the public at the Morgan Hills Community Workshop that parcel sizes make implementation of a 100-foot defensible space difficult.
NA-EO3.2	Work with SCCFSC to develop a “one stop shop” for fire-preparedness information. Could be applied countywide.	SCCFSC.	Within 3 year	1	Funding to help cover research costs for compilation of data.	SRA fees
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.						
NA-EO12.1	Continue prescribed burning programs on County Park property. Encourage additional prescribed burning programs.	County Parks	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.
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.						
NA-EO13.1	Encourage the New Almaden Community to pursue Firewise certification.	Fire Safe Council, CAL FIRE, County Fire, New Almaden Community	Within 2 years	2	Firewise Communities educational materials.	Protect communities and infrastructure through increased awareness and defensible space.

Table 1-5.4. Recommendations for Structural Ignitability Projects in New Almaden

ID NA-New Almaden	Project	Presented by	Programs Available	Description	Contact	Date/Priority (1,2,3)
Strategic Goal- SI 1: Retrofit/eliminate flammable roofs						
NA-SI1.1 Links to NA-EO1.1	Retrofit/Eliminate flammable roofs and siding.	County Planning in conjunction with County Fire and municipalities.	FEMA grants.	Require elimination of all flammable roofs through attrition or time deadline. Work with County planning on measures that would be acceptable for Historic District Ordinance.	County Planning.	By 2030/1
NA-SI1.2	WUI Fire Protection Workshops.	SCCFSC, SCCFD. All residents would be encouraged to participate.	Firewise, agency outreach personnel, Ready-Set-Go. Tailor to specific risk/hazards in New Almaden- i.e., meeting ordinance.	Offer hands-on workshops to highlight individual home vulnerabilities and how-to techniques to reduce ignitability of common structural elements- i.e., Woodlap siding, minimal structure separation, wood roofs, historic and vulnerable buildings.	SCCFSC CAL FIRE, SCCFD	Spring 2017/1
Strategic Goal: SI 11- Implement spring community yard clean-up days. In combination with FireSafe Council chipper program and Strategic Goal: SI10- Public education program for embers and problems associated with embers, property hygiene, and defensible space.						
NA-SI11.1	Implement Community yard clean-up drive with signage throughout community. Coincide with a public outreach event to kick off the clean-up day. Workshop style event focusing on good Firewise landscaping, property hygiene and tailored literature appropriate to the New Almaden community.	SCCFSC	SCCFSC chipper program.	Encourage a "lead-by-example" type approach to yard maintenance to encourage residents with poor yard hygiene to carry out clean-up. Could be timed as a community preparation for the annual New Almaden Day Parade.	SCCFSC	Fall 2017/1