



LOCAL HAZARD MITIGATION PLAN ANNEX COMMUNITY WILDFIRE PROTECTION PLAN

City Council Meeting
August 18, 2020

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CWPP Minimum Requirements

The *minimum requirements* for a CWPP as described in the HFRA are:

- (1) **Collaboration:** A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.
- (2) **Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- (3) **Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

Source: Preparing a Community Wildfire Protection Plan – A Handbook for Wildland-Urban Interface Communities

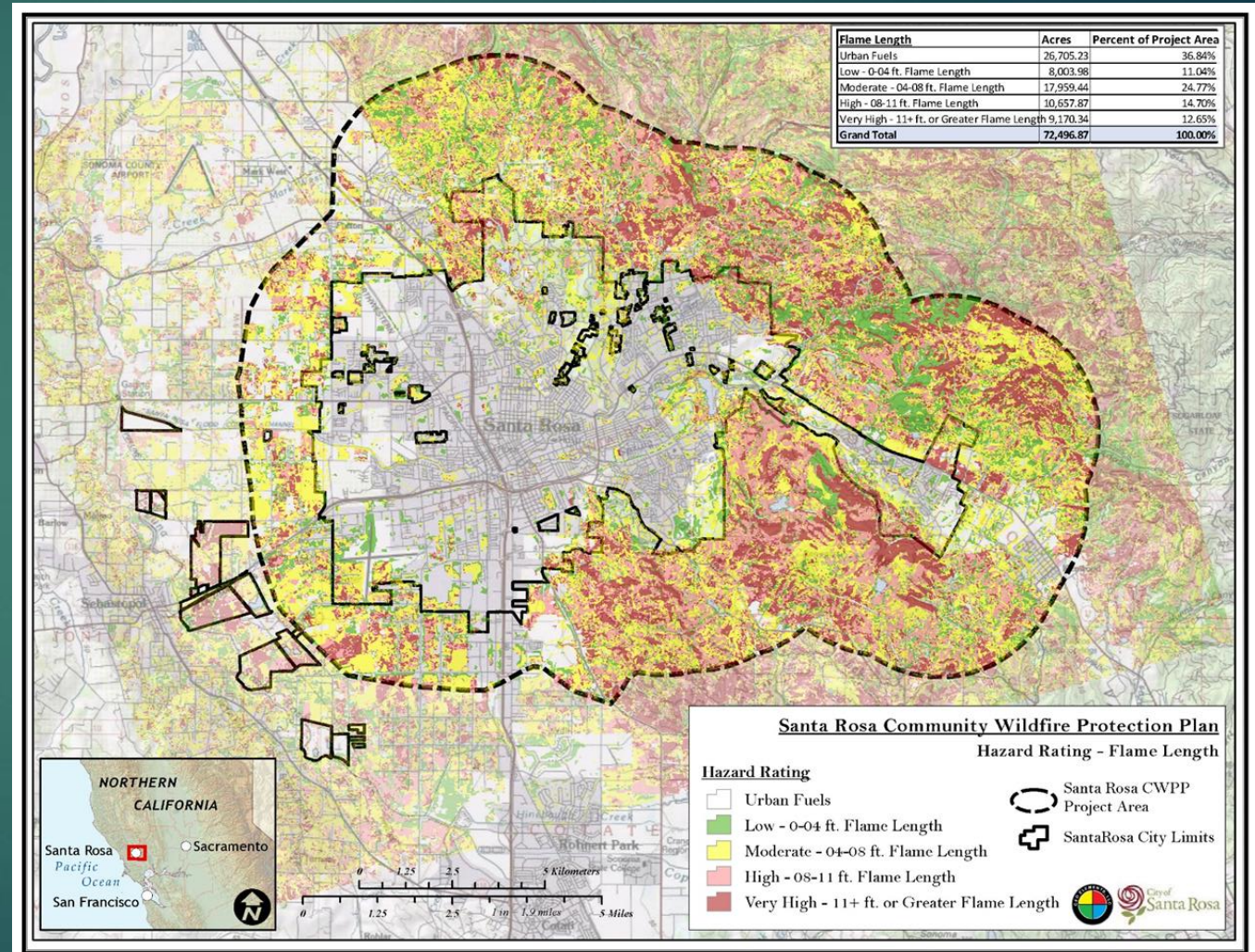
Collaboration

- ▶ **Three public workshops**
 - ▶ July 22 and 25, 2019
 - ▶ August 14, 2019
- ▶ **Two Steering Committee meetings**
- ▶ **A stakeholder's meeting**
- ▶ **Community Survey**
 - ▶ 511 respondents
- ▶ **Additional Outreach**
 - ▶ California State Parks
 - ▶ Fountaingrove II Open Space Management Association
 - ▶ Fountaingrove Ranch Association
 - ▶ Oakmont Village Association
 - ▶ Sonoma County Ag + Open Space

Significant Wildfire Assessment

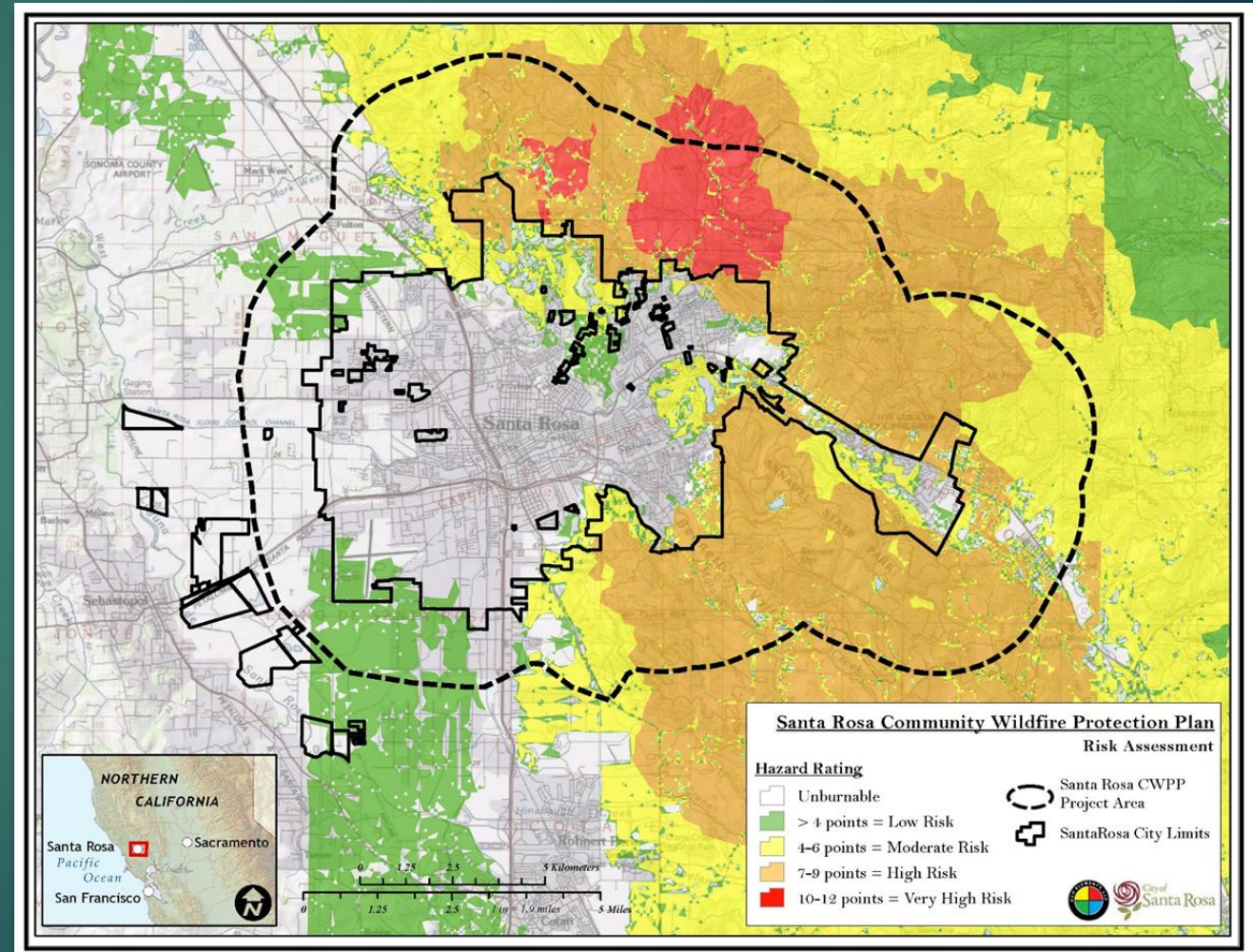
► Wildfire Hazard Assessment

Flame Length	Interpretations	Acres	Percent of Project Area
0 – 4 feet	Fire can generally be attacked at the head or the flanks by persons using hand tools. Handline should hold the fire.	8,004	11%
4 – 8 feet	Fires are too intense for direct attack on the head by persons using hand tools. Equipment such as bulldozers, engines and retardant aircraft can be effective	17,960	25%
8 – 11 feet	Fires may present serious control problems. Control efforts at the head of the fire will probably be ineffective.	11,190	15%
12+ feet or greater	Crowning, spotting and major runs are common. Control efforts at the head are ineffective.	8,673	12%
Urban	Fire can spread readily through urban areas under conditions of high wind and low relative humidity.	26,705	37%
Total		72,532	100%



Significant Wildfire Assessment

- ▶ Wildfire Risk Assessment
 - ▶ Based on burn probabilities

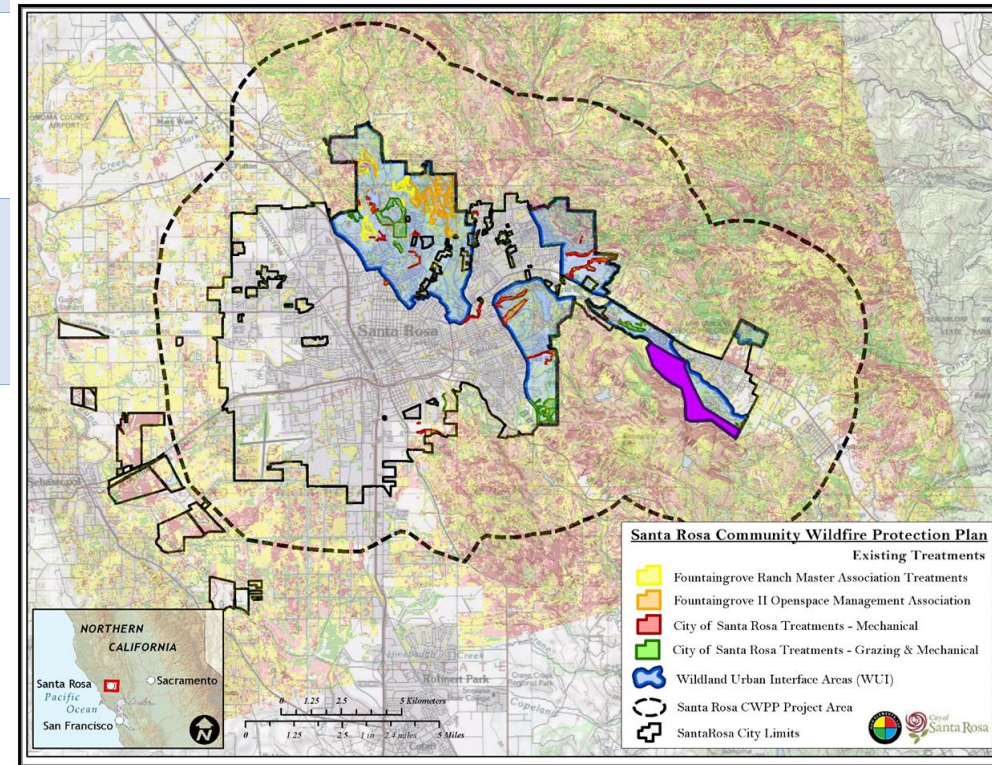


Vegetation Management Activities

- ▶ **Weed Abatement**
- ▶ **Defensible Space – Public Resource Code 4291**
- ▶ **Roadways**
- ▶ **Existing Treatments**
- ▶ **Proposed Treatments**

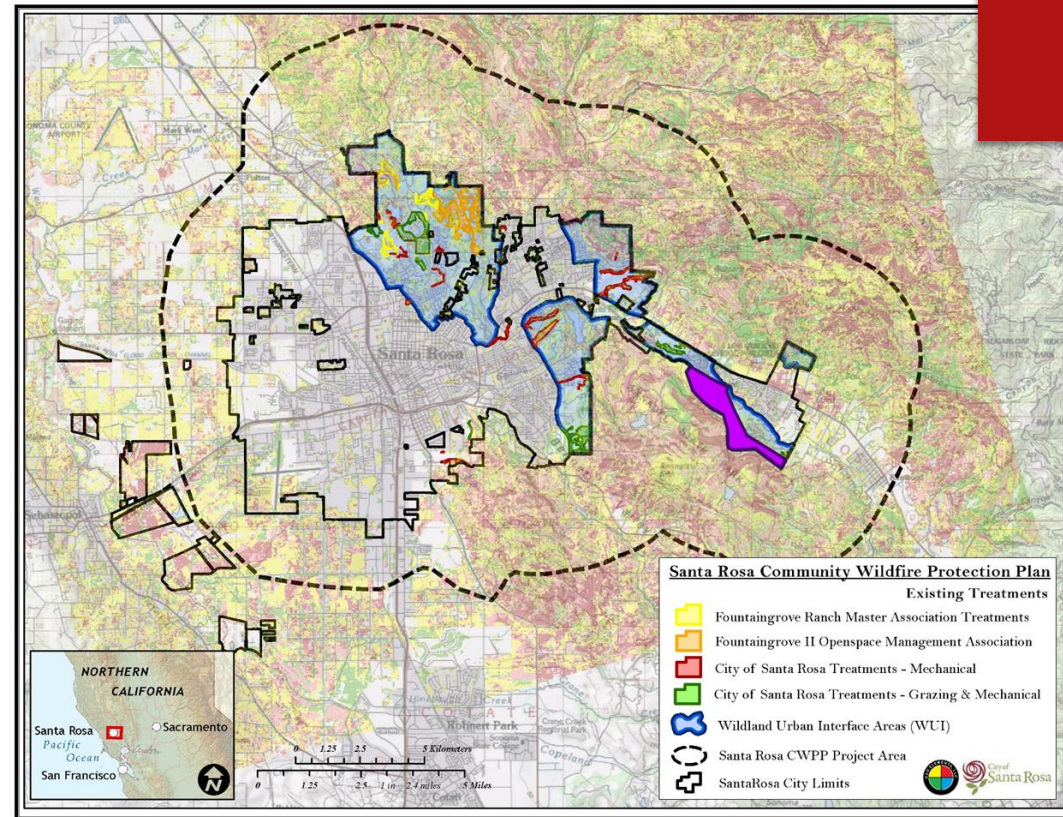
Prioritized Fuel Treatments

Skyhawk Compartments	Acres	Priority
Compartment 39	25.04	1
Very High - 11+ ft.	19.54	
High - 08-11 ft.	2.89	
Moderate - 04-08 ft.	1.06	
Urban Fuels	1.55	
Compartment 37	16.20	2
Very High - 11+ ft.	9.15	
High - 08-11 ft.	2.79	
Moderate - 04-08 ft.	3.23	
Low - 0-04 ft.	0.35	
Compartment 35	14.53	3
Very High - 11+ ft.	7.64	
High - 08-11 ft.	2.55	
Moderate - 04-08 ft.	4.25	
Low - 0-04 ft.	0.00	
Compartment 33	14.90	4
Very High - 11+ ft.	4.67	
High - 08-11 ft.	0.59	
Moderate - 04-08 ft.	0.53	
Low - 0-04 ft.	2.82	
Compartment 36	16.03	5
Very High - 11+ ft.	4.16	
High - 08-11 ft.	6.95	
Moderate - 04-08 ft.	3.43	
Low - 0-04 ft.	1.15	
Urban Fuels	0.34	



Existing Treatments

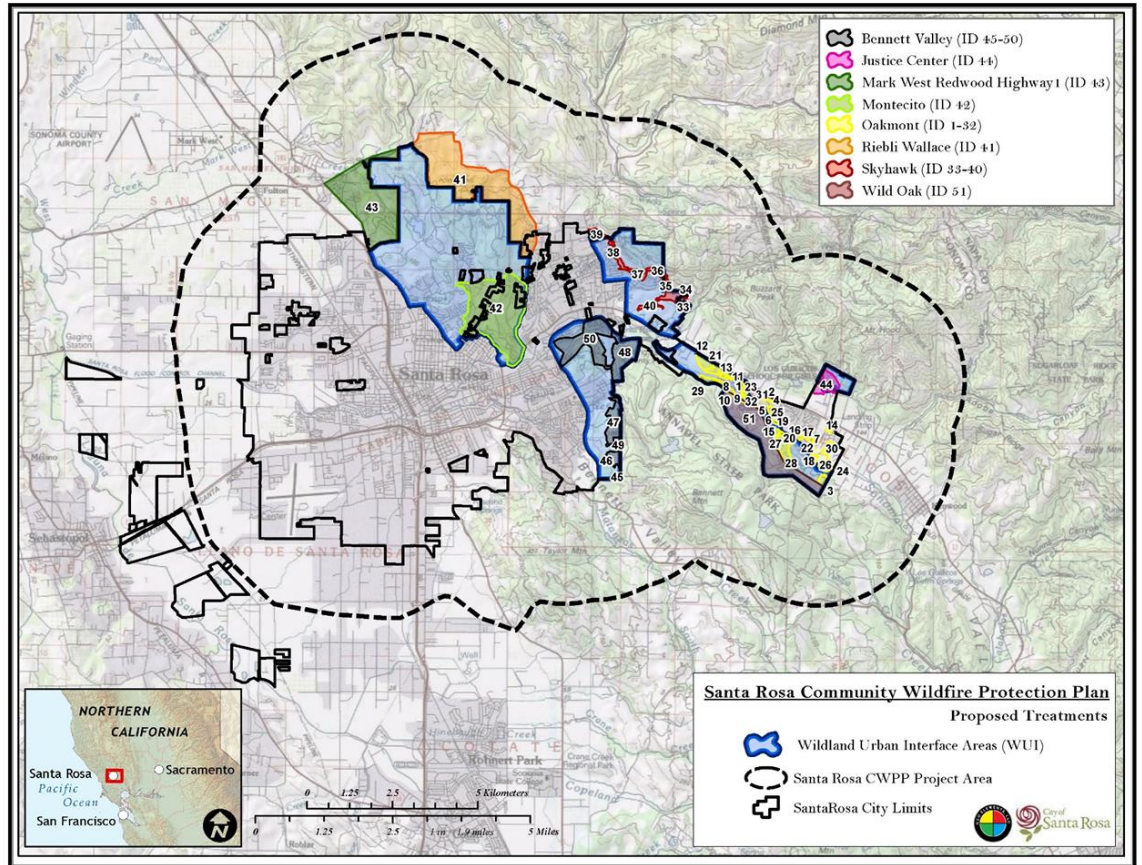
- ▶ A significant effort was made to identify as many existing vegetation management activities as possible.
- ▶ Additional activities may exist which were not captured in this effort.
- ▶ Development of the geodatabase of existing treatments exceeded contractual requirements.



Responsible Management Authority	Acres
Fountaingrove II Open Space Maintenance Association	287.38
City of Santa Rosa Grazing and Mechanical Treatments	246.74
City of Santa Rosa Mechanical Treatments	158.93
Fountaingrove Ranch Management Association	140.34
County of Sonoma – Chanate Campus	4.72
Total	838.10

Proposed Treatments

- ▶ Used the existing compartment organization for the Oakmont Unit
- ▶ All other proposed compartments proposed by Geo Elements staff
- ▶ Priority setting done at the Unit level
- ▶ 51 total compartments identified



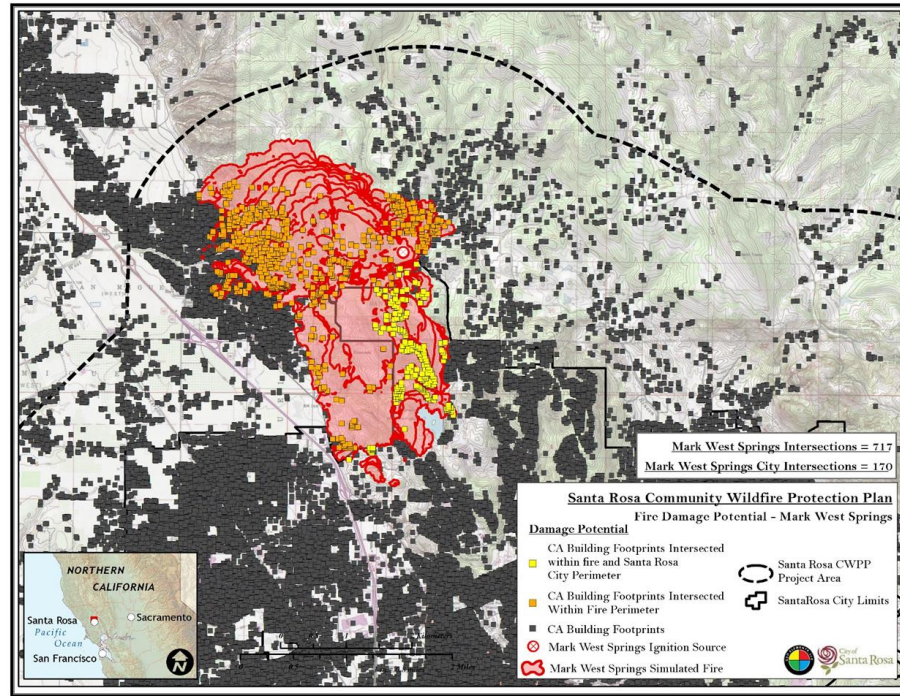
Fuel Treatment Prescriptive Guidelines

- ▶ Guidelines developed for both evacuation routes and vegetation units
- ▶ Best management practices leverage work previously completed by Fountaingrove II OSMA
- ▶ Treatment standards vetted by North Coast Regional Water Quality Control Board

6.6.1.2 Vegetation/Fuel Treatment Prescriptive Guidelines, Implementation Guidelines, and Best Management Practices

Location →	Primary Defense Zone (A) (0 – 30' from a structure)	Fuel Reduction Zone (B) (30' – 100' from a structure)	Fuel Reduction Zone (C) (100' and greater from a structure)
Fuel Type ↓	<i>Based on California Public Resources Code 4291 and HIZ Recommendations</i>		<i>Based on Firefighter Safety</i>
Grass/ Forbs	Reduce fuel depth to no more than 4-inches.	Reduce grass height to 4" or less. Longer grass in discontinuous open areas is acceptable.	Treatment may not be needed.
Surface Dead/Down Material	Remove all dead/down materials.	Reduce dead/down flammable material to < 3" depth; and < 5 tons/acre, non-contiguous isolated logs acceptable.	Reduce heavier pockets of dead/down flammable material to < 5" depth; < 5-7 tons/acre in isolated logs acceptable.
Chaparral/ Shrub	Remove all but individual specimen chaparral plants. Individual ornamental/native shrubs should be spaced at a minimum 2x shrub height.	Remove up to 75 percent of chaparral/shrub vegetation. Allow for intermittent small pockets or clumps of chaparral/shrub vegetation. Pockets and clumps of chaparral/shrub remaining should be healthy young-growth stage and limbed to 1/3 height of chaparral/shrub crown.	Less intensive chaparral/shrub vegetation removal with up to 30 foot for spacing of pockets and clumps of chaparral and shrubs. The remaining pockets and clumps of chaparral should be healthy and at the young-growth stage; and limbed to 1/3 height of chaparral/shrub crown.
Trees Overstory (without chaparral/shrub understory)	Thin smaller trees leaving larger trees (>than 6-inches DBH) at 10-20-foot crown spacing (based on slope, tree size and type); limb/prune lower branches 6-feet above grade level, or lower 1/3 of tree height on smaller trees. Remove dead standing snags.	Thin smaller trees leaving larger trees (> than 6-inches DBH) at approximately 10 foot crown spacing (based on slope, tree size and type); limb/prune lower branches 6-feet up, or lower 1/3 of tree height on smaller trees and remove all broken limbs and dead material. Remove dead standing snags.	Limb and prune lower branches of larger trees up to 6-feet and remove all broken limbs and dead material. Remove dead standing snags, which increase the volume of fuel and may threaten an improvement should it fall, clear all vegetation around the base of retained snags.
Trees Overstory (with chaparral/shrub understory)	Thinning specifications are the same as Trees Overstory without Chaparral/shrub understory in Zone A. Understory: remove chaparral; limb/prune ornamental shrubs to 1/3 of shrub height.	Thinning specifications are the same as Trees Overstory without Chaparral/shrub understory (Zone B). Understory: occasional small, less dense chaparral/ shrub vegetation and small tree clumps and pockets in openings without canopy and small trees in openings (non-canopy) are acceptable.	Thinning specifications are the same as Trees Overstory without chaparral/shrub understory in Zone C. Understory specifications are the same as Chaparral/shrub in Zone C except the pockets and clumps are limited to tree openings (non-canopy).

Identified Treatments to Reduce Structure Ignitability



Structure Components	Mitigation Actions and City Codes
Defensible Space	<p>The City requires defensible space to be maintained around all buildings and structures within the WUI Fire Areas for a distance of 100 feet from all sides of any structure, but not beyond the property line, except when adverse conditions exist. Ready for Wildfire and HIZ recommendations and guidelines should be used to develop defensible space.</p> <p>As of 2020, the City also requires that an Ignition Free Zone (IFZ) be provided around buildings or structures within the WUI Fire Area. Buildings or structure protected by an automatic fire sprinkler system require an IFZ for a distance of 3-feet from the structure. Buildings or structures not having an automatic fire sprinkler system require an IFZ for a distance of 5-feet from the structure. Within the IFZ the area should be free of combustible storage material, any vegetation, tree limbs and maintained free of leaves, needles, or other dead vegetative growth, regularly. Only inorganic, non-combustible ground covers, mulch, etc. (i.e. stone or gravel) shall be used.</p> <p>In areas surrounding WUI designated areas property-owners should evaluate their hazard and create defensible space as needed.</p>
Addressing	<p>The City requires that addresses on one- and two-family homes have a minimum of 4-inch lettering, be affixed to the structure, be illuminated during hours of darkness, have a contrasting background, and be plainly visible and legible from the road. All other buildings should be a minimum of 12-inch lettering. Specific address requirements exist for complexes and buildings that cannot be viewed from the public street. Address identification shall be maintained.</p>
Roof	<p>As of January 2020, the City requires all new and existing (if remodeled) buildings to have a minimum Class A roof to help protect structures within and outside the WUI Fire Areas from cast-off burning embers.</p> <p>The replacement of non-Class A roof assembly to meet Class A standards is highly recommended to reduce extreme fire exposure. In addition, plug any openings in roofing materials, such as the open ends of barrel tiles, to prevent ember entry and debris accumulation. Regardless of the type of roof, keep it free of bird's nests, fallen leaves, needles and branches.</p>
Roof Gutters	<p>Roof gutters should always be free of bird's nests, leaves, needles and other debris. Santa Rosa City Codes (SRCC) requires that roof gutters have a means to prevent the accumulation of leaves, needles, and debris. Check and clean them several times during the year.</p>
Garages	<p>SRCC requires that exterior garage door resist the intrusion of embers from entering the area by ensuring that all gaps surrounding the garage door do not exceed 1/8 inch.</p> <p>Garage openings can be retrofitted by using fire tested weather-stripping, providing door overlaps onto the door jambs and headers, or covering door jambs with metal flashing.</p>

Action Plan

Nine Objectives Forty-six Actionable Items



Key Actionable Items

- ▶ A-1, A-2 – Develop a single point of contact to maintaining a GIS-based fuel treatment tracking program
- ▶ B-1 - Identify parcel-owners along primary evacuation routes and establish agreements with landowners to perform fuel reduction.
- ▶ D-5 - Develop a program to identify and address evacuation of vulnerable populations in the City.
- ▶ E-2, E-3 - Determine if the City's WUI Fire Areas are eligible for PACE program financing to help property-owners retrofit existing non-conforming structures to current WUI building construction requirements

Key Actionable Items

- ▶ F-3 -Outreach to additional homeowner associations and individuals within designated WUI Fire Areas to identify existing vegetation treatments. Assist in planning and prioritizing where treatments would be effective but currently do not exist.
- ▶ F-4 - Establish permitting protocols for the use of prescribed fire pile burning.
- ▶ G-4 - Utilize Senate Bill 190 to support the development of the defensible space enforcement program.
- ▶ H-1 - Create a new fulltime position within the Fire Department to focus on building community relations, coordinating with resident groups, and implementing actionable items in this Plan.

Questions?

