



# COMMUNITY WILDFIRE PROTECTION PLAN

For the Springs Area

DRAFT

## Development

This Community Wildfire Protection Plan (CWPP) was developed by The Springs Community with guidance and support from Fire Safe Sonoma, the County of Sonoma, and the California Department of Forestry and Fire Protection. This CWPP supplements the Sonoma County Community Wildfire Protection Plan.

## DISCLAIMER

This CWPP is a 'living document' and should continue to be evaluated. Projects included at Appendix B should be reevaluated and updated every year. Additionally, the CWPP document itself should be updated every five (5) years. This document should not be seen as the culminating project of a planning process, but a resource and the starting point from which to pursue future funding and organizing opportunities.

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view(s) of any governmental agency, organization, corporation or individual with which the authors may be affiliated.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. This Community Wildfire Prevention Plan (the Plan) is a work in progress. Various changes are anticipated throughout the Plan over the next several years.

Readers are urged to consult with their own agencies having jurisdiction regarding the use or implementation of this Plan, as well as their own legal counsel on matters of concern.

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This CWPP is not to be construed as indicative of project "activity" as defined under the "Community Guide to the California Environmental Quality Act, Chapter Three, Projects Subject to CEQA." Any actual project activities undertaken that meet this definition of project activity and are undertaken by the CWPP participants or agencies listed shall meet with local, state and federal environmental compliance requirements.

Because the Springs CWPP does not legally commit any public agency to a specific course of action or conduct and thus, is not a project subject to CEQA or NEPA. However, if and once grant funding is received from state or federal agencies and prior to work performed pursuant to the Sonoma County CWPP or a local CWPP, or prior to issuance of discretionary permits or other entitlements by any public agencies to which CEQA or NEPA may apply, the lead agency must consider whether the proposed activity is a project under CEQA or NEPA. If the lead agency makes a determination that the proposed activity is a project subject to CEQA or NEPA, the lead agency must perform environmental review pursuant to CEQA or NEPA.

## SIGNATORIES

The following entities attest that the standards listed above are proposed to be met and mutually accept the content of this Community Wildfire Protection Plan:

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**COUNTY OF SONOMA**

**District One Supervisor**

*Susan Gorin, County Supervisor*

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**Date**

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**LOCAL FIRE**

**Sonoma Valley Fire District**

*Steve Akre, Fire Chief*

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**Date**

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**STATE AGENCY** (authorizing entity — required for finalization)

**California Department of Forestry and Fire Protection (CAL FIRE)**

*Mike Marcucci, LNU Unit Chief*

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**Date**

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**COUNTYWIDE FIRE SAFE COUNCIL**

**Fire Safe Sonoma**

*Roberta MacIntyre, President/CEO*

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**Date**

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**SPRINGS COMMUNITY REPRESENTATIVE**

*Hannah Perot*

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**Date**

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## Acknowledgements

This document is made possible by a grant from the California Fire Safe Council, and with support from WRA Environmental Consultants.

The Springs Fire Safe Council would like to start by thanking the tremendous work done by Fire Safe Sonoma, and in particular, Roberta MacIntyre. The entire team has gone above and beyond to support us, and we'd like to thank Cailin Notch with WRA for her project management skills, Marika Ramsden for jumping right in without missing a beat, and Mason Innumerable for being our tech guru.

We'd like to thank Lucas Patzek and Sarah Szewczyk for getting us off the ground and procuring grants for Spanish language translation. Your expertise is missed.

We'd like to thank After the Fire for funding our grant, with it we are able to provide Spanish language translation as well as translation of our CWPP. We would also like to thank Jordi Vidales, co-owner of J.A.V. Language Solutions, for his translation services which allowed us to run a hybrid, fully bilingual Community Stakeholders Meeting.

Thanks to the Springs MAC for initiating the Fire Safe Council project. We would also like to thank Sonoma County District 1 Supervisor Susan Gorin, Captain Gary Johnson and Chief Steve Akre with Sonoma Valley Fire District for their support, and Laurie Salmas, School Office Manager at El Verano Elementary, for her help getting our first community meeting set up.

Sincerely,

Springs Fire Safe Council

## EXECUTIVE SUMMARY

*Write this section last. Assign the writing of this section to the team leader. Assign the writing of the balance of sections to team members as appropriate.*

## COMMUNITY PROFILE

Summary of section

## RISK REDUCTION PRIORITIES

Summary of section

## CONCLUSIONS

Summary of section

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## SECTION I: DEVELOPMENT

### COLLABORATION

This Community Wildfire Protection Plan (CWPP) provides a general overview and assessment of wildfire risks to the communities of the Springs, an unincorporated community in Eastern Sonoma County within Sonoma Valley. Using input from local government, fire agencies, landowners, and other interested community stakeholders a set of priority tasks were developed to increase fire resiliency (Appendix B).

### IMAGE OF MEETING

The purpose of the activities and projects listed herein is to reduce the potential loss of human life, property, and natural and cultural resources due to wildfire.

This CWPP as developed for The Springs:

- Was collaboratively developed and is intended to meet the intent of the Healthy Forest Restoration Act (HFRA) in emphasizing the need for agencies to work collaboratively with communities in developing wildland fire reduction projects
- Interested parties and governmental agencies in the vicinity of this CWPP have been consulted as part of the collaborative process.
- Identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect areas within this CWPP.
- Identifies and prioritizes measures to reduce ignitability of structures throughout the area addressed by the plan.
- Identifies and prioritizes educational and outreach priorities throughout the area addressed by the plan.
- Identifies and prioritizes personal preparedness and evacuation priorities throughout the area addressed by the plan.
- Is intended for use as a planning and assessment tool only, utilizing a compilation of community issues/goals and projected fire mitigation strategies and is not to be construed as indicative of project “activity” as defined under the “Community Guide to the California Environmental Quality Act, Chapter Three, Projects Subject to CEQA.” Per the Community Guide, Section 3.1.1, “CEQA only applies to public agency decisions to approve, or actions to carry out, a discretionary project.” Any actual project activities meeting this definition of project activity and undertaken by the CWPP participants or agencies listed shall meet with local, state and federal environmental compliance requirements.

### Collaborators

Representatives directly involved in the development of this CWPP are included in the following tables.

CWPP Development Team		
Name	Organization	Roles
Hannah Perot	Springs Fire Safe Council	Team Leader
Ray Willet	Springs Fire Safe Council	Team Leader
Roberta MacIntyre	Fire Safe Sonoma	Project development & management
Marika Ramsden	Fire Safe Sonoma	Project development & management



Mason Innumerable	Fire Safe Sonoma	Project development & management
Cailin Notch	Fire Safe Sonoma, WRA Environmental Consultants	Project oversight & facilitation

### COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives directly involved in the development of the Springs CWPP are included in the following table. Each team member had a specific role and is identified in the table. Many team members contributed significantly throughout the development process.

<b>CWPP Governmental Stakeholders</b>			
<b>Name</b>	<b>Organization</b>	<b>Position</b>	<b>Role</b>
Ben Nicholls	CAL FIRE, Sonoma-Lake-Napa Unit	Division Chief	Concepts feedback, review, feedback & approve
Justin Benguerel	CAL FIRE Sonoma-Lake-Napa Unit	Division Chief	Concepts feedback, review, feedback & approve
Susan Gorin	County of Sonoma	County Supervisor (District 1)	Concepts feedback, review, & approve
Arielle Kube-Jones	County of Sonoma	District 1 County Supervisor Aid	Concepts feedback & review
Gary Johnson	Sonoma Valley Fire District	Fire Captain	Concepts feedback & review
Steve Akre	Sonoma Valley Fire District	Fire Chief	Concepts feedback & review
Misti Harris	Sonoma County Sheriff's Office	Community Engagement Liaison	Concepts feedback & information
Nancy Brown, PhD	Sonoma County Emergency Management	Community Preparedness Manager	Concepts feedback & Information
Caerleon Safford	County of Sonoma Permit Sonoma	Wildland Fire Safety Specialist	Concepts feedback & Information
Johannes Hoevertsz	Permit Sonoma, Transportation and Public Works	Director	Concepts feedback & Information
Kim Batchelder	County of Sonoma Ag & Open Space	Vegetation Management Coordinator	Concepts feedback & Information
Robynn Swan	California Fish and Wildlife	Senior Environmental Scientist	Concepts feedback & Information

## SECTION II: COMMUNITY PROFILE

### COMMUNITY OVERVIEW

#### Sonoma County

The combination of highly flammable fuel, long dry summers and steep slopes creates a significant natural hazard of large wildland fires in many areas of Sonoma County. Wildland fire season in Sonoma County spans the months after the last spring rains have fallen and until the first fall or winter rains occur. The months of August, September and October have the greatest potential for wildland fires as vegetation dries out, humidity levels fall, and offshore winds blow. However, as a result of climate change, fire season is longer and fires can occur at any time of year in the county.

#### The Springs Community

The Springs Fire Safe Council covers Boyes Hot Springs, Fetters Hot Springs, Agua Caliente, and El Verano, as well as the Donald Street neighborhood within the Sonoma Valley. It mirrors the area represented by the Springs Municipal Advisory Council (MAC), covering 2,366 acres. The Springs Plan Area (Plan Area) includes three CAL FIRE designated Communities at Risk, which are state-designated communities that are identified within the wildland-urban interface, and which are at high-risk of damage from wildfire ("Communities at Risk"). These communities are Agua Caliente, Boyes Hot Springs, and El Verano.

#### History

This area was originally settled by indigenous people who came here for the hot springs. Then, under Mexican rule in 1840, 50,000 acres of this area was sold off as "Rancho Agua Caliente." In 1895, Henry Ernest Boyes discovered the hot springs in the area, and built the Boyes Hot Springs Hotel (which later became the Fairmont). The hotel and springs became popular with tourists, with 70,000 people coming each year. There was a train that serviced the area. The depression stopped tourism, but after the 1930s, tourism yet again was the area's main driver, as it is today.

#### IMAGE?

Because many of the homes in the area were built as second homes for blue collar workers from the city, they were built in a very modest, cottage style, often from odds and ends. Most of the area does not have sidewalks or curb cuts. The homes in El Verano are on larger lots, but the homes in Boyes Hot Springs are on smaller lots.

#### Access and Evacuation

Highway 12 is the major thoroughfare, and four roads roughly define the boundaries of the Springs Fire Safe Council area - Highway 12 to the east (although there are a number of homes included in the Council that are east of 12), Arnold Drive to the west, Agua Caliente Road to the North, and Verano Avenue to the south. To the east of Highway 12, there is a network of streets and homes in the foothills, and this area is a particular concern for fire danger. It is called "The Maze" and the Sonoma Valley Fire District has a program to make this area safer by enforcing brush standards. The rest of the Fire Safe Council is on the floor of Sonoma Valley, and is much more flat and open.

## Vegetation

With the exception of residences on the hillsides east of Highway 12, the Springs plan area is largely urban. The majority of the 2,366 acres in the Springs Fire Safe Council area is developed (64%). The largest vegetation type is 'Hardwood Forest' (15%), which is primarily located at the northwest corner of the plan area near the crossing of Arnold Drive and Agua Caliente Road, as well as on the eastern side of the plan area boundary in the hills.

The next most prevalent vegetation type is 'Herbaceous' (11%), which is interspersed around the Plan Area, but is predominantly located in the southwest corner. The third most prevalent vegetation type is 'Agriculture' (4%), which is scattered in different sized parcels around the Plan Area. Both 'Riparian Forest' and 'Non-native Forest' amount to two percent (2%) of the Plan Area each for a total of four percent (4%). All other vegetation types are less or equal to one percent.

INSERT VEG MAP

## Topography

The topography of the Plan Area is a narrow valley that runs north / northwest. The foothills on the east side of Highway 12 eventually become the Mayacamas Mountains. To the west is Sonoma Mountain. The valley is less than three miles wide at its widest spots to the south, and gradually narrows as it moves north.

There is a considerable change in elevation from the valley floor to the mountainous area on the east side of the plan area. The lowest elevation is around 80 feet on the southeast corner of the plan area. The highest portions of the area are approximately 400 feet in certain areas of the plan area's eastern boundary. This equates to an approximate elevation change of 320 feet.

INSERT TOPO MAP

## Fire History

Fires have come over the ridge into the Springs area over the Maycamas multiple times. There were fires in 1923 and 1964, and then in 2017 and 2020. The 1964 fire was stopped directly behind Sonoma Cinemas, which is in the Springs Fire Safe Council area. The 2017 fire was also stopped in a similar area. History proves that focusing our efforts on preventative measures in this area is our best bet for preventing spread into the homes in the foothills and the valley floor.

## Demographics

Using the three available Census Designated Places (CDP) for the Springs FSC area (Fetters and Agua Caliente are combined as one and the Donald Street neighborhood doesn't have a CDP), the table below shows Census 2020 data. The totals shown are weighted based on population size of each CDP. There are distinct differences between the three CDPs - the Boyes Hot Springs CDP is the most Latino, youngest, earns the least per household, and has a substantially higher poverty rate than the other two tracts. It also has the lowest rate of homeownership, and the highest percentage of language other than English spoken at home.

CDP	Population	Median Household Income	% Hispanic or Latino	Language other than English Spoken @ Home	Employment Rate	Bachelor's Degree or Higher	Median Age	Population Over 65	Poverty	Homeownership Rate
Boyes Hot Springs	6,215	\$62,261	48%	50.9%	63.8%	26.7%	35.8	13.9%	9.3%	48.1%
Fetters / Agua Caliente	4,233	\$82,260	52%	43.6%	66.2%	30%	42.5	14.4%	2.8%	57.8%
El Verano	3,867	\$101,813	40%	13.7%	58.1%	28.9%	50.7	17.3%	2.4%	56.3%
Totals (weighted)	14,315	\$78,600	47%	38.48%	62.70%	28.16%	41.7	14.9%	5.5%	53%
California Median		\$84,907	39%	43.9%	57.6%	36.2%	37.6	15.2%	12.3%	55.9%

The following table includes population statistics taken from the Sonoma County CWPP Hubsite for the Springs Plan Area.

<b>Springs Plan Area Population Statistics</b>	
2021 Total Population	19,102
2021 Senior Population Ave.	20.37%
2021 Ave Diversity Index	56.3%
2021 Hispanic Population Ave.	31.36%
2019 Below Poverty Ave.	4.14%

Today, there are many businesses along Highway 12, including many independent Mexican markets and taquerias. We also have multiple schools in our area - El Verano and Flower elementary, a charter K-8 school, Woodland Star (a Waldorf-based elementary school), and Altimira Middle School. We are a small town with a population that largely services the wealthier parts of Sonoma Valley and surrounding areas. Because of low income levels and the high number of rentals, a primary concern will be home hardening as well as fuel reduction work.

## Weather

The Springs enjoys a hot-summer Mediterranean climate. July brings the highest average temperature of 89 degrees (with an average low of 52 degrees). The weather patterns for Sonoma, California, which is the closest jurisdiction and a good proxy for the Springs Plan area, include historically mild winters, moderately hot summers, and warm autumns. Summers are long, warm, dry, and mostly clear and the winters are short, cold, wet, and partly cloudy.

Over the course of the year, the temperature typically varies from an average low of 41.4°F in winter to an average high of 82.9°F in summer. Historically, rain falls for 73.3 days out of the year and collects up to 15.47 inches of precipitation. The month with the most rainfall is February, which brings an average of

3.23 inches of precipitation. The driest months are July and August, which experience an average precipitation of 0.04 inches each.

Spring and early summer experience the fastest average wind speeds. May is the windiest month on average with an average wind speed of 6.2 miles per hour (mph). The month with the lowest average wind speed is November at an average of 4.4 mph (*Weather-US.com*). However, September and October bring Diablo winds (dry, hot, high-speed easterly winds) that have contributed to numerous fires in the area.

### FIREFIGHTING CAPABILITY

Fire protection services in the Springs Plan Area are provided by CAL FIRE and the Sonoma Valley Fire Protection District (SVFD).

#### Sonoma Valley Fire District

The Springs is served by the Sonoma Valley Fire District. SVFD is an all-risk combination fire department including career and volunteer firefighters. There are two (2) fire stations within The Springs CWPP Plan Area: one in El Verano (SVFD #2) and one in Agua Caliente (SVFD Station #3). SVFD is a combination Fire Department including career and volunteer firefighters. SVFD conducts residential inspections to determine compliance with local and state fire safe regulations related to structural hardening and defensible space. SVFD firefighters receive Wildland Basic (Firefighter 1-C) training.

SVFD response capabilities and equipment include one (1) Type-1 engine with four (4) personnel, one (1) Type-2 engine with one (1) personnel, one (1) Battalion Chief (BC), and three (3) Type-3 engines with two (2) personnel. The minimum number of apparatuses that will respond to the Springs Area as part of a first alarm wildland fire (vegetation) assignment is one (1) auto aid water tender. Regarding response capabilities for an initial alarm assignment for a vegetation fire within the base map area, the SVFD's response meets the National Fire Protection Association (NFPA)'s 1720 criteria for an urban response as they will respond with 13 personnel within 10 minutes, with water tenders arriving shortly thereafter staffed with four additional personnel.

Regarding water supply, over 80% of the Springs Study Area has water supply available that can supply responding forces with 500 gallons per minute (gpm) or more. SVFD is capable of delivering an uninterrupted fire flow of 200 gpm for 20 minutes within 5 minutes of the first arriving engine company. Additionally, SVFD is capable of providing 500 gpm of uninterrupted follow for a period of two (2) hours using hydrants, tender/tanker shuttle operations and/or large diameter hose relays.

#### CAL FIRE

The Springs is also served by CAL FIRE's Sonoma-Lake-Napa (LNU) Unit, which includes Colusa, Lake, Napa, Solano, Sonoma, and Yolo counties. The plan area is within the Unit's West Division, which is defined by the boundaries of Sonoma County and consists of four field battalions.

During peak fire season, LNU suppression resources include approximately 260 permanent personnel and 250 seasonal personnel, staffing 21 fire stations, 31 engines, six (6) bulldozers, two conservation camps, one (1) fuel reduction crew, one (1) Firefighter Hand crew, one (1) Helicopter, one (1) air attack base and many other support staff positions. A typical fire station will house between three to twelve personnel on a given day. As part of a first alarm assignment to a wildland fire incident in the plan area,

CAL FIRE will send a minimum of four (4) Type 3 engines, one (1) battalion chief (BC), one (1) dozer, one (1) hand crew, two (2) air tankers, one (1) copter, and one (1) air attack supervisor.

In January 2020, LNU administratively took over a CAL FIRE Region Fuels Reduction Crew. This resource is Unit-funded and staffed to help with vegetation management and fuel reduction projects in support of the Unit Fire Plan. The fuels restoration crew reduces fuel loading in the project areas by prescribed burning, hand and mechanical fuel reduction, fire planning and fire prevention education, with an emphasis on improving public health and safety, while reducing wildfire potential to California communities and forests (“Sonoma-Lake-Napa Unit 2021 Strategic Fire Plan”).

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## SECTION III: OBSERVATIONS

### Project Methodology

The methodology used to craft this CWPP included team meetings, site evaluations, historical research, community meetings, wildfire risk mapping, objective risk assessments and community surveys to establish risk priorities and reduction treatments. The development team made a significant effort to reduce subjective bias to a minimum. The following text describes each data source which went into the analysis behind this CWPP.

### Surveys

#### Community Survey

The Community Survey was developed jointly by Fire Safe Sonoma, WRA, and the Springs Fire Safe Council. The survey, which was distributed in English and Spanish, was developed using generally accepted standards of measurements of wildfire risk. The survey was distributed digitally via email as a Google Forms survey through email listservs, flyers, and other outreach.

To encourage participation, all survey respondents were entered into a drawing to win a \$100 Visa gift card. As a result, over 100 survey responses were received. However, upon review of the entries, some of the responses were clearly erroneous and illogical, including entries with incomplete words and/or addresses that did not exist. In order to not corrupt the data, survey responses that included erroneous responses were removed. As a result, there were a remaining 31 responses in English and 12 responses in Spanish for a total of 43 responses.

#### The Fire Department Capabilities Survey

The Fire Department Capabilities Survey was developed by Fire Safe Sonoma and was based on the National Fire Protection Association (NFPA) Standard 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments. This questionnaire was sent via a Google Forms survey sent directly to Chief Steve Akre of the Sonoma Valley Fire District, which provides initial attack response to the plan area.

### Community Wildfire Risk Mapping

Additionally, a series of wildfire risk maps were prepared by WRA GIS Analysts. Prior to creating these maps, the Springs Fire Safe Council, in collaboration with Fire Safe Sonoma and WRA, created a 'Study Area' to evaluate, which is the Springs MAC boundary. From there, WRA created the following maps, which are available at **Appendix C**.

- Basemap Aerial
- Basemap Topography
- Fire Hazard Severity Zones (FHSZs)
- California Public Utility Commission (CPUC) Fire Threat Tier
- Vegetation Types
- Roads, Parcels and Building Footprints
- Topography and Watersheds

- Modeled Fuel Break Treatment Areas
- Fire History
- Sonoma County WRI Statistics
- Infrastructure

**CAL FIRE’s Fire and Resource Assessment Program (FRAP)**

CAL FIRE's Fire and Resource Assessment Program (FRAP) assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. This plan analysis considers the FRAP Fire Hazard Severity Zones and Fire Threats within the plan area.

**Sonoma County Wildfire Risk Index (WRI)**

To further quantify and assess the hazard and risk posed by wildfire, newer data sources available through the Sonoma County Wildfire Hazard Index (WHI) and Wildfire Risk Index (WRI) were integrated into the overall assessment. The WRI statistics for the Springs Plan Area are included in the table below. The WHI quantifies the relative wildfire hazard, which is the inherent wildfire hazard on the landscape due to available fuels, weather patterns, potential ignition sources, and suppression difficulty. The WRI adds to the WHI three additional components:

1. The likely areas embers will accumulate in the event of a wildfire,
2. The presence of structural assets,
3. And the relative usability of the road network in Sonoma County.

<b>Springs WRI Area Statistics</b>		
Average WRI (risk)	4	Very High
Average WRI (1-mile buffer)	4	Very High
Average WRI (hazard)	3	High
Average Ember Load Index	1	Low
Number of Structures	7,351	-
Average Road Rank	4	Very High
<b>FHSZ in SRA Stats</b>		
Average CAL FIRE Hazard	2	High
For all Sonoma County indices reported, 1= Low; 2= Moderate; 3 = High; 4 = Very High and 5 = Extreme. For the CAL FIRE Hazard IFHSZ): 1= Moderate, 2 = High, and 3 = Very High.		

**IDENTIFICATION OF COMMUNITY VALUES AT RISK**

**Community Meetings and Values at Risk Exercise**

As part of the CWPP planning process, a hybrid community meeting was held on May 21, 2022 at the El Verano Elementary School Multipurpose Building. The meeting drew at least 20 in person attendees and 12 virtual attendees. This meeting was translated into Spanish live both in person and virtually over Zoom by Jordi Vidales of J.A.V. Language Solutions.

During the meeting Springs residents were asked to share what they considered community values at risk from wildfire. These assets were recorded live by Fire Safe Sonoma Staff and are tabulated below.

**IMAGE?**



CWPP Community Values at Risk		
Community Asset	Type of Community Asset	Impact
Grange Hall	Property	Community Value/Economic
Residents' Lives	Life	Community Value
Shopping Centers	Property	Community Value/Economic
Schools	Property	Community Value/Economic
Fire Department Stations	Property	Essential Infrastructure
Health Center	Property	Essential Infrastructure
<a href="#">La Luz Center</a>	Property	Community Value/Economic
Retirement Community (next to Fetter Springs)	Life	Community Value
<a href="#">Hanna Boys Center</a>	Property	Community Value/Economic
Sonoma Greens FSC	Life	Community Value/Environment
Restaurants	Property	Community Value/Economic
<a href="#">Valley of the Moon Water District</a>	Property	Essential Infrastructure
Emergency Food Infrastructure	Property	Essential Infrastructure
Bridges and Roads	Property	Essential Infrastructure
Water Center Tanks	Property	Essential Infrastructure
Churches	Property	Community Value/Economic
Low Income Housing	Property	Essential Infrastructure
Mobile Home Parks	Property	Essential Infrastructure
Cell Towers	Property	Essential Infrastructure
Wildlife	Life	Community Value/Environment
Small Businesses	Property	Community Value/Economic
Watershed and Pumps	Property	Essential Infrastructure
Power Substation	Property	Essential Infrastructure
Parks (in addition to Maxwell)	Property	Community Value/Environment
Springs Fire Safe Council	Life	Community Value/Environment
<a href="#">Friends In Sonoma Helping (FISH)</a>	Life	Community Value/Economic
"Rich" Colorful History	Life	Community Value
Bus Depot	Property	Essential Infrastructure
<a href="#">Sonoma Valley Unified School District (SVUSD)</a> Headquarters	Property	Essential Infrastructure
Connex Container at Altamira (Emergency medical supplies)	Life	Essential Infrastructure
Projects under development	Property	Community Value/Economic
Sheriff Substation	Property	Essential Infrastructure
Work Trucks	Property	Community Value/Economic

## Community Wildfire Risk Assessment

As a means objectively to rank wildfire risks in the Springs Area, Springs Fire Safe Council members completed a Wildfire Risk Assessment. The community Wildfire Risk Assessment instrument was developed in 2015 by Fire Safe Sonoma with funding from CAL FIRE and is based on wildland fire risk elements contained in the National Fire Protection Association (NFPA) Standard 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire. This instrument is used to receive and interpret the other datasets and render an overall assessment of wildfire risks in the plan area with a focus on an evaluation of the following:

- Fire Department access
- Public egress (i.e., the ability of citizens to evacuate)
- Structural ignition potential
- Fire Department capabilities (including firefighting water supply)
- Weather influences
- Wildland fire history
- Other risk factors.

The data collected was synthesized by the core team, collaborating with Fire Safe Sonoma, WRA staff, fire service professionals, and other subject matter experts. The purpose of this assessment is to provide a framework and basis for prioritizing a range of wildfire mitigation strategies across the plan area.

The risk assessment was based on a combination of wildfire research analytical tools and information and maps available to the team including a Community Survey, a Fire Department Capabilities Survey, CAL FIRE's Fire and Resource Assessment Program (FRAP) data, Wildfire Risk Index (WRI) analytical tools available through the County of Sonoma's Community Wildfire Protection Plan Hub Site, a public meeting communities at risk exercise, and a Community Wildfire Risk Assessment tool developed by Fire Safe Sonoma.

## THE SPRINGS COMMUNITY ASSESSMENT

The following text synthesizes data collected from the various sources described above, including the Wildfire Risk Maps, Community Survey and the Risk Assessment for the Springs Plan Area. The data is organized by The Springs Community, Access and Evacuation, Structural Ignitability, and Defensible Space and Fuel Reduction.

### **The Springs Community**

The Springs area has a predominantly southwestern aspect, with approximately twelve (12%) of the area in a 'High Fire Hazard Severity Zone' (FHSZ) and eight (8%) in a Moderate FHSZ. Less than one percent (<1%) is within the 'Very High' FHSZ. The majority of the Springs Plan area (79%) does not have a CAL FIRE FHZA designation as a large percentage of the Plan Area is within the Local Responsibility Area (LRA)

The area is largely urban, especially along the Highway 12 corridor and contains many small parcels with buildings that are fairly close to each other. For example, 72.5% of all survey-respondents indicated that they live on parcels that are smaller than one-acre. Regarding the potential fire behavior situation, the Plan Area experiences moderate slopes, broken moderate fuels including some ladder fuels. The

composition of fuels is conducive to torching and spotting. Conditions may lead to moderate suppression success. This area has at least some fire history and/or moderate fire occurrence.

The overall risk ranking for the Springs Plan Area is 90, a “Very High Hazard”, according to the Fire Safe Sonoma Risk Analysis tool. (Low Hazard = 41 or less; Moderate = 41 to 60, High = 61 to 75, Very High = 76 or greater.) **Fire behavior in this area is likely to be extreme.**

### **Access/Evacuation**

Secondary access and evacuation routes in this area are primarily narrow, feature roadside vegetation with limited turn-arounds. Six (6) English-speaking respondents indicated that they only have one way out in case of an emergency. All Spanish-speaking respondents indicated that they live on a public street. Moreover, 20 English-speaking respondents (64.5%) and 6 Spanish-speaking respondents (50%) stated that they have not identified a secondary evacuation route for their neighborhood. Two (2) 6.5% of English-speaking residents have identified temporary refuge areas. No Spanish-speaking residents responded affirmatively to the same question.

Responding to the prompt “If a motorhome and fire engine were traveling on my road in opposite directions,” 13 English-speaking respondents (41.9%) indicated that they would have difficulty passing each other, and eight (8) (25.8%) indicated that they could not pass at all. Conversely, 10 (83.3%) Spanish-speaking respondents indicated that they could pass easily, and 2 (16.7%) respondents indicated that they would have difficulty passing.

Of those surveyed, 26 English-speaking respondents (83.9%) and six (6) Spanish-speaking respondents (50%) would evacuate with at least one pet. In response to the question, “Are there disabled or elderly people on your property who will need assistance during a community emergency (including those registered with PG&E as Medical Baseline Customers)?,” five (5) (16.1%) of English-speakers and one (1) (8.3%) of Spanish-speakers answered yes.

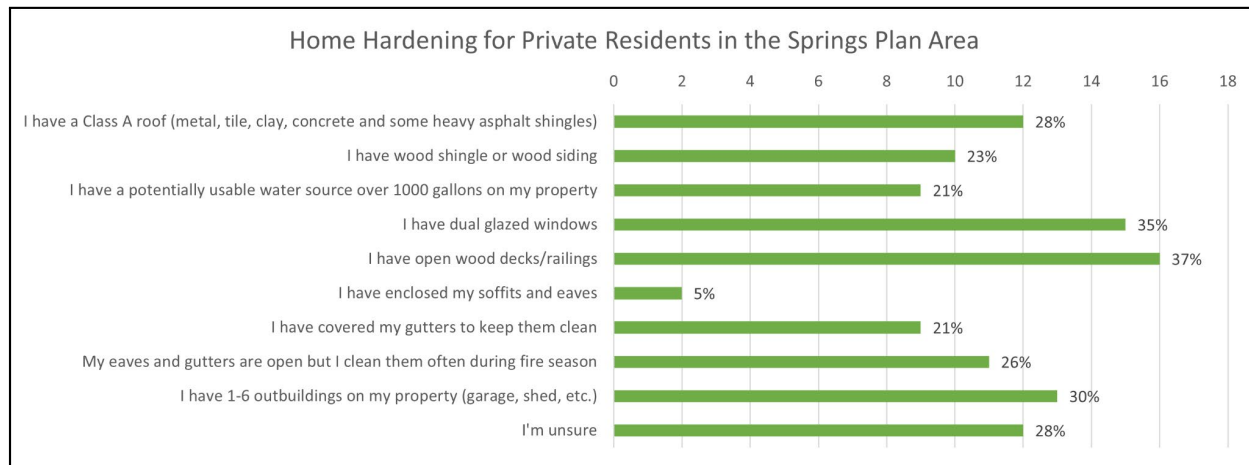
For English-speaking residents In response to the question: “What is true regarding signage for your property and neighborhood?” Seven (7) (22.6%) responded that they have County-approved address numbers, 18 (58.1%) responded that there are street signs at both ends of the street, and six (6) responded that none of those questions apply. For Spanish-speaking residents, each question received four (4) (33.3%) responses each.

### **Structural Ignitability**

A considerable percentage of buildings in this area were constructed prior to 2008 and do not meet modern construction standards for buildings built in wildland-urban interface areas. In general, a considerable amount of buildings in this area have open wood decks, wood shingles or wood siding, and lack fire-safe roofs, siding, and enclosed features such as enclosed under-deck areas. Also, 13 English-speaking respondents (41.9%) indicated that they have outbuildings near their residence.

All utility lines are above ground in the Plan Area. Several comments from survey respondents indicated issues with utility power lines running through trees and branches etc.

The chart below shows the breakdown of how all respondents (including English and Spanish speakers) answered specific home hardening-related questions.



### Defensible Space/Fuel Reduction

Responses pertaining to defensible space around structures in this area show mixed results. Overall, less than 30% of properties have adequate defensible space. This is consistent with SVFD Captain Gary Johnson's data from the home inspection initiative through the SoCo Adapts program which indicated 70% of properties are not in compliance with Sonoma County defensible space requirements. However, 20 English-speaking respondents (64.5%) and eight (8) (66.7%) Spanish-speaking respondents indicated that they have defensible space in the area within five feet of their home, and only 10 English-speaking respondents (32.3%) and four (4) Spanish-speaking (33.3%) respondents indicated that they have defensible space out in the five (5) to 30 foot zone. Last, only one English-speaking respondent (3.2%) and no Spanish-speakers indicated they have adequate defensible space up to or beyond the 100 feet or more. This is likely due to the fact that most lots in the Springs Plan Area are small, (less than one acre).

Regarding defensible space along the roadside, Nine (9) English-speaking respondents (29%) indicated that tall grass, brush and trees border and overhang the roadways, and 16 (51.6%) answered that it is mostly maintained but some areas require improvement. Three (33.3%) Spanish-speaking respondents answered "yes" to both of those questions.

## SECTION IV: SUMMARY & CONCLUSIONS

### ACCESS AND EVACUATION

The access and evacuation scenario is very different for Springs residents living on the eastern slopes as compared to the residents in the urbanized centers in Sonoma Valley. Some residences, primarily those east of Highway 12 which are located along long one-way roads into the Mayacamas Mountains and only have one way in or out. Conversely, properties in Sonoma Valley are generally within planning developments that are connected to more than one road in or out.

Another feature of the Springs Plan Area is the wide prevalence of narrow streets. In total, 53.5% of all survey respondents indicated that a motorhome and fire engine would have difficulty passing, or could not pass on their street. Additionally, according to survey respondents, street signage in the Plan Area could be improved as only approximately a quarter of all respondents replied that they have County-approved address numbers.

A majority of residents would evacuate with pets. While most parcels in the Springs Plan Area are less than one acre, a small percentage of residents own livestock and/or large animals that would need to be evacuated during an emergency.

Last, about 14 percent of all respondents indicated that someone on their property would need help evacuating during an emergency. Additionally, very few responses to the community survey indicated that they have identified a temporary refuge area.

### STRUCTURAL IGNITABILITY/HOME HARDENING

Regarding home hardening and structural ignitability, the survey results also show a mixed picture. Many residences in the Plan Area lack fire-resilient building features such as a Class A roof, non-combustible siding, dual pane windows, enclosed soffits and eaves, and covered decks and gutters, etc. Additionally, utility lines in the Plan Area are above ground.

### DEFENSIBLE SPACE / FUEL REDUCTION

From the survey results, defensible space for residents in the Springs Plan Area can also be improved substantially. Survey results indicated that less than 30% of properties have adequate defensible space, which is consistent with Sonoma Valley Fire District's data from their SoCo Adapts home inspection program.

Because the majority of the Springs Plan Area consists of private lots that are smaller than one acre, defensible space should be considered at the community-scale in addition to the private-property level. According to the CAL FIRE Fuel Break map prepared by WRA, CAL FIRE has recommended at least two community fuel breaks in this area and several throughout neighboring areas, which would support this effort.

### EXISTING PROJECTS

One project in the Springs Plan Area that has already been identified by the Springs Fire Safe Council is roadside fuels reduction. There has been an established need for this project prior to the writing of this CWPP. The Sonoma Valley Fire District has indicated financial support for this project. The next step to begin this project would be to identify locations for fuels reduction.

## SECTION V: RECOMMENDATIONS

### GENERAL RECOMMENDATIONS

The partnership that exists between the Springs Fire Safe Council and the citizens in the plan area will help the Springs community to reduce hazardous vegetative fuels that could ignite residences and commercial facilities during a wildfire, reduce the risk of structural ignition, supply evacuation planning, and improve wildfire preparedness through education and outreach in all these areas.

The recommended actions to reduce the risk from wildfire in the plan area are based on the findings from the risk analysis observations. Prioritized recommendations focus on the home first to reduce structural ignitability and work their way out into the three home ignition zones based on the potential fire threat to homes, and/or threats to natural resources from a fire occurring from an individual parcel.

### FOCUS AREAS

Areas identified as immediate concerns are the ability for vehicles to simultaneously pass on roadways; roadside vegetation (especially vegetation encroaching on utility lines), unidentified secondary access roads for evacuation, narrow streets; inadequate defensible space, the lack of fire safe roofs and siding; unenclosed features, such as decks; and roadside vegetation.

The Springs is a diverse community, with a large Spanish-speaking population, a variety of age groups, income levels, and a mix of homeowners and renters. For all of the projects listed below, any educational or outreach materials should cater to the Springs' many diverse audiences, this includes materials that are available in both English and Spanish, wildfire prevention education that is targeted to both homeowners and renters, and outreach strategies that are culturally competent and appropriate for different populations (i.e., radio ads in addition to press releases in print, etc.).

#### Access/Evacuation

Projects in this area should include roadside vegetation removal, improved address signage, and general education about evacuations, including early notifications, evacuating with pets, and projects to assist those requiring assistance evacuating.

#### Structural Hardening

Projects in this topical area should include structural hardening and retrofit resources, particularly for low income and at-risk populations as well as funding incentives. Because the Springs Plan Area includes a large number of both homeowners and renters, structural hardening information should take into account options that are available to both populations. In cooperation with Fire Safe Sonoma, the Springs Fire Safe Council supports and promotes fire safe activities including public education on ways to reduce structure ignitability, especially through meeting the requirements of the Sonoma County Building Codes, Fire Codes and Fire Safe Standards.

#### Defensible Space/Fuels Reduction

Based on the information gathered, projects in this topical area should include roadside fuel reduction projects, community fuel breaks, fuels reduction information around power lines, and defensible space resources, especially for low income and at-risk populations as well as funding incentives.

### Education and Outreach

Projects in this topical area should include outreach and education projects focusing on wildfire preparedness and evacuations, information to community residents about what home improvements or modifications they should make to structures to reduce ignitability, and information about defensible space and resilient landscaping. Information should be targeted to both homeowners and renters.

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## **SECTION VII: APPENDICES**

- Appendix A: Risk Assessment Worksheet
- Appendix B: Priority Projects
- Appendix C: Community Maps
- Appendix D: Sonoma County Wildfire Risk Index (WRI)

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