



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Fire Department

Prepared by: Christopher Gray,  
Fire Chief

City Manager Approval: 

**TOPIC: WILDFIRE PREVENTION AND PROTECTION ACTION PLAN**

**SUBJECT: WILDFIRE PREVENTION AND PROTECTION ACTION PLAN REPORT**

**RECOMMENDATION:**

Adopt resolution accepting the San Rafael Wildfire Prevention and Protection Action Plan as a master plan/framework for wildfire mitigation moving forward.

**EXECUTIVE SUMMARY:**

The attached Wildfire Prevention and Protection Action Plan (the "Plan") outlines various goals relating to wildfire prevention, which includes, but is not limited to, the following: recommended future changes to the City's municipal code, defined projects, and a series of programs, all of which are designed to help San Rafael proactively and aggressively address the growing risks associated with wildfire. The first draft of the Plan was presented to City Council on January 22<sup>nd</sup>, 2019 for input and public comment. The Plan was created per City Council direction at the August 20, 2018 meeting, following [an informational report that was presented to the City Council](#) relating to wildfire prevention efforts. Following the January 22, 2019 City Council meeting, staff compiled and integrated feedback from the City Council and the public to produce the Wildfire Prevention and Protection Action Plan. At this time, City staff seeks to present the Plan to the City Council for formal adoption via a resolution. Updates to the plan, ordinance changes and other items requiring City Council action will be brought forward at future dates as they are developed.

**BACKGROUND:**

Climate change and growing hazardous fuel loads are creating an increased wildfire risk across California. In the past few years, wildfires have shattered notorious records, including size, property damage, and loss of life. These devastating fires have also provided new insight into how fires behave in the changing environment and expanding wildland urban interface. Recently, in June 2018, 11.6 acres on San Rafael Hill burned. The fire was quickly contained by a strong response, including over 80 personnel and air support, and favorable fuel and weather conditions.

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**FOR CITY CLERK ONLY**

File No.: \_\_\_\_\_

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

In 2007, the City Council adopted a model ordinance, entitled Wildland-Urban Interface—Vegetation Management Standards, for vegetation management to proactively reduce the risk of wildfires ([S.R.M.C. 4.12](#)). This ordinance specifically codifies required vegetation management standards for parcels located in designated Wildland-Urban Interface (“WUI”) areas, with the goal of creating defensible space around structures that will minimize the spread of fires from wildlands to structures, from structures to wildlands, and from structures to structures. Also, the Marin County Fire Chiefs continue to discuss and review ways to better address the growing risk and public concern posed by wildfire risk in our communities. In November 2017, the Marin County Board of Supervisors created a sub-committee to study lessons learned from recent wildfires. In response, on September 11, 2018, the Marin County Fire Department presented [a report to the Board of Supervisors relating to the sub-committee’s findings](#), which includes a list of proposed areas for improvement in managing local wildfire risk. This report includes recommendations to fire, law enforcement, and land management agencies, in addition to emergency services and cities and towns.

Annually, San Rafael proactively addresses wildfire risk in numerous ways. These measures include actions such as:

- Providing free vegetation inspections for residents
- Supporting and coordinating free community chipper days
- Engaging and supporting communities seeking Firewise certification
- Regularly patrolling the open space with two Police Department Rangers
- Providing ongoing public outreach and education at community events, homeowners associations meetings, and City events.

In August 2018, staff presented an [informational report to the City Council relating to the City’s wildfire prevention efforts](#). As part of the presentation, the City Council provided direction to staff to draft a bold and comprehensive plan to further address wildfire risk in San Rafael. In response to direction from the City Council, along with public comment, staff developed a draft Plan. Many of the recommendations set forth in the [September 11, 2018 Lesson’s Learned report](#) from the Marin County Board of Supervisors sub-committee were incorporated into the Plan. In addition, the City is working in collaboration with the County, the Marin County Fire Chief’s Association, and all cities in Marin on countywide coordination regarding wildfire prevention and protection efforts.

The first draft of the Plan was presented to City Council on January 22<sup>nd</sup>, 2019 for input and public comment. In response to stakeholder feedback in the following several weeks, the Plan was revised and reorganized (see section below “Plan Updates”).

**ANALYSIS:**

Lessons learned from recent fires, as well as new research relating to fire safety and a changing climate, have prompted San Rafael to take additional steps to prevent a wildfire tragedy. The Plan lists a series of prescriptions, programs, and proposed ordinance changes needed to make San Rafael more fire and disaster-resistant. These action items reflect the need for a comprehensive approach to reducing wildfire risk. Removing dangerous vegetation, using fire-resistant building materials, and avoiding risky activities all are vital for protecting the community.

To be consistent with the Marin County Fire Department’s “Lessons Learned from the 2017 North Bay Fire Siege” and other reports, the Plan is organized into three overarching areas: 1) Vegetation Management, 2) Wildfire Prevention and Protection, and 3) Emergency Notifications and Evacuations.

The Plan contains 38 objectives, followed by a proposed action to take in order to meet each objective. The Plan proposes numerous future changes to the City’s municipal code. Most significantly, staff

recommends updating the City's municipal code to apply existing vegetation standards citywide, instead of only within the WUI, areas where homes are built near lands that are prone to wildland fire. Staff believes that these changes to the City's municipal code are essential to reducing the wildfire risk in San Rafael. These expanded standards are directly reflected in items 1, 2, 3, 13, 28, and 33, in addition to being components of other ongoing and planned projects. If the Plan is approved by the City Council, staff will prepare draft ordinances which will propose amending the City's municipal code to create citywide vegetation standards and codify those regulations in Chapter 4 of the Municipal Code to accompany the existing vegetation management standards. Chapter 4.12 of the City's municipal code, which establishes the vegetation management standards for the WUI, will be updated to include only standards unique to the WUI. Extensive community engagement will occur as the ordinances are drafted and there will be many opportunities for feedback and input in the coming months.

If approved, City staff will work to achieve the objectives outlined in the Plan. New and expanded programs identified in the Plan will require additional staff time and funding before they can be implemented. Staff will provide bi-annual update reports to City Council on the status of the 38 objectives.

The Plan includes the following 38 objectives:

1. Eliminate highly flammable vegetation near structures and roadways throughout San Rafael
2. Apply vegetation management and defensible space standards citywide
3. Reduce ember ignitions within immediate zones to prevent structure ignitions through enhanced standards and support
4. Expand goat grazing for vegetation maintenance
5. Establish additional fuel interruption zones
6. Improve public education regarding fire-safe landscaping and living with wildfire
7. Establish more Firewise communities in San Rafael
8. Reduce hazardous fuels through an abatement process on privately owned unimproved lots and within 200 feet of a structure or 20 feet of roadway
9. Effectively coordinate the removal of vegetative debris from public and private property
10. Engage Community Emergency Response Team (CERT) members, Neighborhood Response Groups (NRGs) and other volunteers in fire prevention
11. Reengage volunteer "Broom Pull Days"
12. Review and update WUI map
13. Consider adoption of Public Resource Code 4290 and 4291
14. Develop new efforts, solutions, and resources dedicated to wildfire prevention and protection
15. Immediately seize ignition sources at encampments and remove encampments as quickly as possible
16. Reduce likelihood of ignition in undeveloped land
17. Explore opportunities in Fire and Building Code updates to increase use of fire-resistant materials and application of CA Fire Code 7A
18. Eliminate fire hazard associated with shake and wooden roofs
19. Develop comprehensive San Rafael hazardous vegetation study and mitigation measures
20. Complete an analysis of fire roads and strategic fuel breaks
21. Increase the number of hardened homes in San Rafael
22. Improve development and implementation of Vegetation Management Plans (VMPs) and create new Resilient Landscape Templates (RLTs)
23. Increase the number of completed Vegetation Management Plans (VMPs) and Resilient Landscape Templates (RLTs)
24. Improve the public's fire risk awareness with sign improvements and installation
25. Reduce fire risk and keep visitors using short-term rentals safe

26. Hire additional staff dedicated to vegetation management and disaster mitigation
27. Increase Police Ranger staffing
28. Reduce fuels along roadways
29. Establish a residential hillside “parking box” program
30. Improve public emergency alerting capabilities and policies
31. Increase capability for early fire warnings and detection
32. Review and expand evacuation plans, incorporating areas of refuge, and support neighborhood evacuation drills
33. Assure safe and resilient critical infrastructure
34. Assure that appropriate staff can send and receive emergency alerts
35. Assure that City staff can communicate during an emergency
36. Assure that residents can evacuate through garage doors if power is out
37. Prevent potential entrapments by requiring 2 gates in any fence in designated areas
38. Maintain and expand coordination of wildfire prevention and response planning with Marin County, other Marin jurisdictions, Marin County Fire, FIRESafe MARIN, and neighboring landowning partners

### Plan Updates

Following the City Council meeting on January 22, 2019, staff conducted a series of community meetings to solicit feedback. As a result, the Plan has been revised and a summary of the updates made to the Plan are listed below:

- Updates to the Plan introduction to include the addition of an executive summary, intent, and methodology sections, in addition to additional information about fire science
- Numerous updates to Plan organization and format. Plan now includes sections dedicated to 1) vegetation management, 2) wildfire prevention and protection, and 3) emergency notification and evacuation. A crosswalk listing the final numbering with the draft numbers is provided.
- Adds ‘outcome’ section to each item to clarify intent and goal
- Includes total estimated cost ranges for each item when applicable/possible
- Increased inclusion and acknowledgement of unique needs of renters, low-income property owners, and people with access and functional needs
- Clarification on next steps, including the intent of the plan to serve as a master document and requirement for ordinance changes to follow separately
- Removal of property resale and transfer for implementing new regulations for all items except wooden or shake roof replacement
- Includes additional public-private cost share opportunities, including NOAA weather radios
- RLT- Resilient Landscape Template concept introduced and incorporated as a tool for residents
- Clarifications on the collaboration and connection with other plans, including the Local Hazard Mitigation Plan, Marin County Wildfire Protection Plan, and Climate Change Action Plan
- Includes maintenance and fuel reduction in open space parking lots
- Coordination with and outreach to plant nurseries and landscapers is included
- Expanded information on potential partnership with Downtown Streets Team
- Numerous updates to the stakeholders listed on multiple items to include Marin County, FIRESafe MARIN, nurseries, landscapers, and other groups
- Additional considerations to equitable application of public safety goals and regulations
- Support of neighborhood evacuation drills and associated staffing needs
- Efforts to incorporate technology providers into education and planning efforts including Waze, Google, Airbnb, VRBO, and others

- Clarification of intent to apply vegetation standards within distances of structures and roadways with exemption and individual prescriptions established to achieve beautiful defensible space
- Additional information on the intent to manage Eucalyptus groves
- Recognition of challenges in outreach and education to reach absent property owners who either rent property or live in the area part time
- Additional language expressing the connection between wildfire and climate change and the recognition that fuel reduction efforts must consider environmental impacts
- Includes possibility of using on duty engine staff for inspections with concerns about response time and fatigue
- Acknowledges need to deconflict existing hill side ordinance limiting impacts to natural state and need for defensible space
- Replaces draft item #27, which would have required VMPs for resale, with an objective specific to helping residents harden their homes
- Addition of item #38 to clarify the intent to coordinate and collaborate with Marin County, FIRESafe MARIN, and other engaged parties

For more information, including the proposed actions to accomplish each objective, as well as detailed analysis and cost estimates, please see the attached Wildfire Prevention and Protection Action Plan.

**COMMUNITY OUTREACH:** Feedback from the public has been incorporated into the proposed Plan, including the proposed changes to the City's municipal code. Feedback will continue to be welcomed and considered throughout the ordinance drafting, public hearing, and adoption process.

Since presenting the draft Plan on January 22<sup>nd</sup> staff has gathered public feedback and additional input from many community partners. These efforts included but were not limited to a community meeting at City Hall on February 11<sup>th</sup>, and meetings with the Marin County Fire Chiefs, Marin Association of Realtors, Marin County Fire Prevention Officers, San Rafael Fire Commission, San Rafael Neighborhoods Association, and Friends of China Camp. Presentations, including time for questions and feedback, were made to the Gerstle Park Neighborhood Association, Lincoln-San Rafael Hill Neighborhood Association, Rotary Club of San Rafael, San Pedro Road Coalition, Villa Real HOA and Marinwood Community Services District. In addition, the Plan was presented, and feedback received at meetings with San Rafael CERT, attendees of 1 Hour 2 Get Ready, and the County Public Disaster Education and Preparedness Committee (PDEP).

Additional outreach has been conducted using various online tools, including social media and the City of San Rafael website. The City website was updated shortly after the January 22<sup>nd</sup> meeting to include a copy of the draft Plan, supporting documentation, and an online feedback form. Short videos describing aspects of the Plan and encouraging feedback later were added to the website. As of March 8<sup>th</sup>, the dedicated webpage and feedback form had 3,736 views and 84 submissions, many with multiple comments, representing a conversion rate of 2.2%. Two Nextdoor poll questions had over 325 total responses.

Staff will continue to host community workshops, meetings and continue social media outreach and digital updates to engage and inform the public. Following adoption of the Plan, staff will prepare a selection of draft ordinance updates for public review and input. Coordination will be ongoing between staff, management, and elected officials of the City of San Rafael and our partners from the County and other jurisdictions. This will include ongoing efforts in working groups, associations, and committees to better protect from and prepare for wildfire in Marin County.

**FISCAL IMPACT:**

Multiple items in the Plan will require additional staff, resources, and funding to complete. Staff will continue wildfire mitigation efforts with existing resources and continually work to identify cost-saving measures, partnerships, and new sources of funding. Adoption of the Plan does not obligate the City to spend any specific additional dollar amount on wildfire prevention and protection activities. The estimated costs listed below to fully implement the Wildfire Action Plan will require additional funding sources which have not yet been established. Until additional funding sources are established, staff will focus on objectives supported with existing funding.

The cost estimates included in the Plan and below are based on previous work completed and current bids, and do not account for inflation. To remove heavy fuel loads and support residents' fuel reduction efforts, the initial cost of implementation will be greater than sustainment costs. Once safe levels of fuels are achieved, efforts will shift to maintenance and costs will be reduced. However, the nature of vegetation regrowth requires ongoing efforts to prevent additional hazardous fuel build up in the future.

Estimated costs to the City to fully implement the Wildfire Action Plan and effectively mitigate against wildfire are below:

- Public Property Fuel Reduction: \$900,000 (3 years annually and then decreasing)
- Private Property Fuel Reduction: \$125,000 (2 years annually and then decreasing)
- Outreach and Education: \$50,000 annually
- Additional Staff: \$500,000-\$750,000 annually
- Planning and Equipment: \$100,000 initial, decreasing to \$5,000 annually
- Evacuation and Notification: \$40,000 initial, decreasing to \$10,000 annually
- Fire road grading and vegetation clearance: \$750,000-\$1 million every 5 years

**OPTIONS:**

The City Council has the following options to consider on this matter:

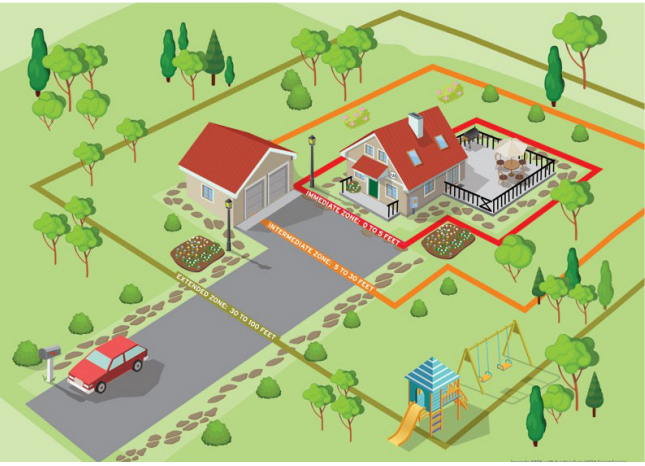
1. Adopt the resolution approving the Wildfire Prevention and Protection Action Plan
2. Adopt the resolution pending minor edits to the Plan
3. Direct staff to make extensive changes and return at a later date
4. Do not adopt the resolution

**RECOMMENDED ACTION:**

Adopt the resolution approving the Wildfire Prevention and Protection Action Plan as a framework for Wildfire mitigation, prevention and protection in San Rafael.

**ATTACHMENT:**

1. San Rafael Wildfire Prevention and Protection Action Plan
2. Communications and Public Feedback
3. Resolution of the San Rafael City Council Approving the Wildfire Prevention and Protection Action Plan



# Wildfire Prevention and Protection Action Plan

DRAFTED MARCH 2019



**SAN RAFAEL**  
THE CITY WITH A MISSION



# San Rafael Wildfire Prevention and Protection Action Plan



## **Executive Summary:**

At the direction of the San Rafael City Council, staff have produced the San Rafael Wildfire Prevention and Protection Action Plan. This document is intended as a master planning document to guide continual efforts to reduce the wildfire risk in San Rafael. It does not provide specific program details for every objective. All items that require additional detail will return to the City Council at a subsequent date for consideration either by Resolution or Ordinance, following a community engagement process. This master plan incorporates lessons learned from recent wildfires, ongoing local and County efforts, existing plans, and public input. This document is intended as a guide to overall approach and lays out the City of San Rafael's plans for Wildfire Prevention and Preparedness. The plan will be executed in partnership with other city, county and community efforts.





## **Background:**

In 2007, the City of San Rafael adopted a model ordinance for vegetation management. As we experience continued fire risk and activity associated with climate change, the City of San Rafael has been actively evaluating methods to further reduce our community's susceptibility to devastating wildfires. Wildfire risks will persist under extreme conditions; however, we can significantly mitigate those risk factors through enhanced regulations, education and enforcement. Public policy and programs provide a framework for a more resilient San Rafael but will require public support, compliance, effective implementation, and individual effort.

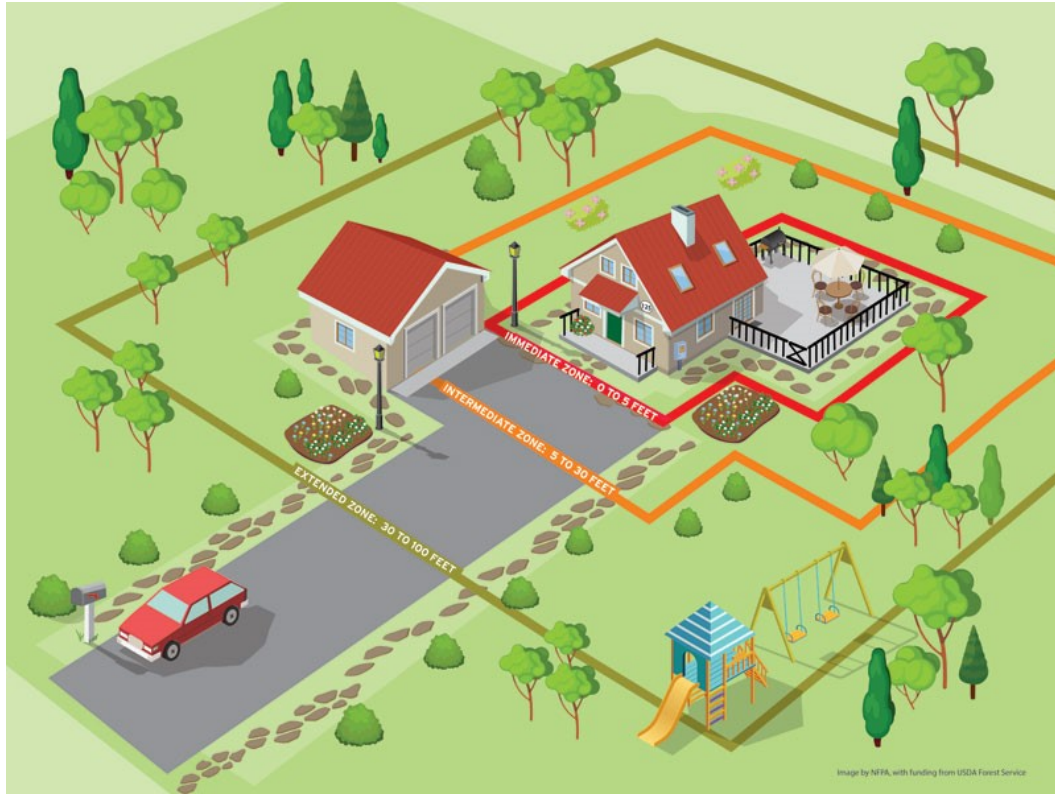
Currently, the City's wildfire prevention efforts focus on our Wildland Urban Interface (WUI) areas, which were established to identify areas thought to be most at risk for being impacted by a wildfire. Specific vegetation standards, including those adopted by San Rafael in 2007, apply only to property in the WUI. However, as climate change and increased fuel build-up contribute to more devastating fires, these boundaries no longer are sufficient or effective. Ember storms, explained in more detail below, can spread fire miles ahead of the flame front, regardless of WUI or jurisdictional boundaries. To adequately protect communities, more universal standards and approaches are necessary. Each structure burned in a fire is a risk to life, a personal and communal loss, and contributes to additional fire spread.

The Fire Department has one full-time, fixed-term Vegetation Management Specialist position and one part-time Vegetation Management Inspector. Together, the Department conducted more than 1,200 WUI home inspections in the first half of Fiscal Year 2018/19 and assisted the Department of Public Works with removal of flammable vegetation on approximately 125 acres of City-owned

public space. Monthly chipper days – providing residents with free juniper and bamboo chipping services – are also overseen by the Fire Department. Altogether, more than 1,500 tons of vegetation has been removed this fiscal year as a result of the Fire Department’s vegetation management efforts. The City also works closely with Marin County Fire, FIRESafe MARIN, and other local and regional agencies on wildfire prevention and fuel reduction strategies.

Additionally, the Police Department employs two part-time open-space rangers who patrol City open space for fire hazards and violations of City ordinances during the fire season (generally considered to be May through November). These rangers are empowered to remove dangerous items from encampments if they pose an immediate fire risk, and assist in removing abandoned campsites, garbage and other fire risks from the area. Note, enforcement of anti-camping ordinances is limited by the law and a recent U.S. 9<sup>th</sup> Circuit court ruling and the City is currently working to update its ordinances to be in compliance with the law.

Despite the City’s ongoing efforts, wildfire risk and community concern require more action. Continual and expanded efforts to address wildfire prevention and safety will protect lives, property, businesses, as well as our natural resources, including forests, watersheds, and endangered species habitats.



## Fire Science:

A basic understanding of fire science and behavior is needed to best understand how the items proposed in this plan will reduce the wildfire risk in San Rafael. Fire requires heat, oxygen, and fuel to burn. Wildfire behavior is impacted by weather, topography, and fuel. Fuel is the consistent feature in fire ignition and behavior that we can do the most to control.

Wildfire prevention focuses on reducing ignition sources, such as heat and easily ignitable fuel. Wildfire mitigation focuses on reducing fuel to reduce the ability of a wildfire to spread and impact lives and property. Types of fuel are generally defined by the time it takes to respond to changing weather conditions or dry out. 1 hour, or flash fuels, like tall grass, ignite and burn very quickly. 10, 100, and 1,000-hour fuels take increasingly more heat and time to ignite but burn for longer. Similar to the way one would build a camp fire, fire mitigation work should start with the easily ignitable fuels and progressively remove the others from areas of protection.

When referring to fuel structures, or the way the fuels exist in the environment, the three common in San Rafael are surface, ladder, and aerial fuel. Surface fuel includes dead and dying vegetation material on the ground's surface. Fire that only impacts ground fuels is much easier to contain and extinguish. Ladder fuels connect separate fuel sources and contribute to fire spread. Reducing ladder fuels helps keep fire on the ground and reduces the rate of spread. Ladder fuels allow

ground fire to spread into canopies and aerial fuels. Aerial fuels exist above the ground, and include the tree canopy, branches and high brush. Fires consuming large amounts of aerial fuels are difficult to contain.

The three primary methods of wildfire spread are described below:

*Embers:* According to recent research, embers are the most prolific cause of home ignition at a rate of two out of every three homes destroyed. Embers are glowing or burning pieces of vegetation or construction debris that are lofted during the wildfire. Embers can move up to a mile ahead of a firestorm. These small embers or sparks may fall on the vegetation near your home – on dry leaves, needles or twigs on the roof– and then subsequently ignite and burn down the home. The concentration of embers that land on the roof and roll off makes the removal of all flammable materials close to the house critical. Ember storms place all structures without fire resistant landscaping and construction within miles of the fire at potential risk.

*Direct flame contact:* Direct flame impingement refers to the transfer of heat by direct flame exposure. Direct contact will heat the building materials of the home; if the time and intensity of exposure is severe enough, windows will break, and materials will ignite.

*Radiant heat:* A house can catch on fire from the heat that is transferred to it from nearby burning objects, even in the absence of direct flames or embers. By creating defensible space around homes, we can significantly reduce the risk from radiant heat. A home with 100 feet of clearance from forest or shrubs will usually have minimal impact from radiant heat or direct flame.

Establishing strong guidelines for defensible space and fire-resistant building materials helps prevent ignition from radiant heat and embers. Limiting fuel and available vegetation reduces the possibility of direct flame contact igniting structures or other vegetation. Conditions are increasingly making ember storms, created by winds and highly combustible vegetation, the primary method of wildfire spread.

NFPA and [Firewise USA](#) recognize three zones surrounding a structure.:

*Immediate Zone* (within 5 feet of a structure): This zone is most vulnerable to embers and should be clear of all dead and flammable vegetation.

*Intermediate Zone* (5 to 30 feet from a structure): This area should be carefully landscaped to act as a fire break.

*Extended Zone* (30 to 100 feet – or, in some cases, up to 200 feet – from a structure): This zone should act to interrupt the path of fire and keep embers from becoming airborne.



### **Methodology:**

This document lists a series of prescriptions, programs, and ordinance changes needed to make San Rafael more fire and disaster-resistant. These action items reflect the need for a comprehensive approach to reducing wildfire risk. Removing dangerous vegetation, using fire-resistant building materials, and avoiding risky activities all are vital for protecting the community.

This plan is written with regards to the City and County of Marin Local Hazard Mitigation Plans (LHMP); Marin County Community Wildfire Protection Plan (CWPP); Marin County Lessons Learned 2017 North Bay Fire Siege, September 2018 (*2017 Lessons Learned report*); San Rafael Climate Change Action Plan, and the San Rafael General Plan.

The draft plan was presented to City Council on January 22, 2019. Feedback from the public, elected officials, and City staff has been incorporated into this version. Public input was gathered through public meetings, Homeowners Association and Neighborhood Association meetings, online feedback forms, social media, Nextdoor polls and direct contacts.

The final version of the plan has been re-organized and renumbered from the initial draft. A cross walk of the final draft numbers and draft numbering system is included at the end of this plan.



**Intent:**

The San Rafael Wildfire Prevention and Protection Action Plan is designed to serve as a master plan and framework to the ongoing work to reduce wildfire risk in San Rafael. This plan considers and incorporates local, county, regional, and national findings and best practices, including those incorporated into the Marin County Wildfire Prevention and Protection Plan and the 2017 Lesson’s Learned report.

The plan is designed to address all the phases of disaster response (mitigation, preparedness, response, and recovery) while engaging the whole community. Creative and innovative solutions are considered to help achieve these goals. As a community member summarized via the feedback form “if ever there was a situation where you should not let ‘the perfect be the enemy of the good’, this is it.” This plan is presented as a framework to move efforts forward, establish benchmarks, and provide opportunities for evaluation and improvement.

The following were the guiding principles and intent of this plan:

- Public safety and risk reduction
- Coordination and collaboration
- Environmental protection and sustainability
- Equity
- Cost effectiveness
- Incentivize voluntary compliance before fines and penalties

**Structure:**

The action items are organized into three categories in alignment with the Marin County 2017 *Lessons Learned* report: 1) Vegetation Management 2) Wildfire Prevention and Protection and 3) Emergency Notifications and Evacuation. Each action item includes the objective, rationale, required actions, concerns, costs, potential stakeholders, a proposed timeline, and anticipated outcomes in the following format:

**OBJECTIVE**

| Action                 | This section includes a description of the proposed action.   |
|------------------------|---|
| <i>What this means</i> | This section should explain in more detail what this action would mean to those impacted by it.   |
| <i>Rationale</i>       | This section includes a discussion of why we recommend this, including the scale of impact we believe it will have.   |
| <i>Concerns</i>        | This section includes a discussion of political, legal, or cost feasibility concerns that we've identified. It lists any identified trade-offs, such as the dedication of existing staffing resources away from other projects to do this work.           |
| <i>Costs</i>           | This section includes estimated one-time and on-going costs to the City, as well as any costs the community may incur. The standards for evaluation are listed below. When possible, it concludes with the total estimated cost of implementing the item. |
| <i>Stakeholders</i>    | This section includes a list of stakeholders.   |
| <i>Timeline</i>        | This section says if the action is underway and if not, why. For example, it is noted here if the action requires further or extensive legal review, future City Council action, community outreach, program design work, etc.                            |
| <i>Outcomes</i>        | This section outlines the anticipated result of the item implementation.  |



### **Impacts on Budget and Staff Time:**

A full, year-by-year budget estimating the cost to implement the plan is attached at the end of the plan. This includes contract work for open space fuel reduction projects, staff time to implement and maintain the plan, support for residents through cost share programs and chipper days, outreach and education, as well as supplies and funding for specific projects. As possible, the total estimated cost to implement the objective is included in the cost box. The cost ranges are based on current rates and do not account for inflation. Some projects will be ongoing, while others will have peak periods and then reduced costs as vegetation work shifts into maintenance.

Some cost recovery may be attained through enforcement fines which will be in alignment with the City master fee schedule. The City hopes to achieve voluntary compliance before implementing fines or fees for dangerous non-compliance.

The funding, required staff time, and proposed timelines for each objective have been individually evaluated. If action is requested on the entire action plan, timelines may need to be extended and additional staff may be required. Financial costs have been evaluated and are identified using the following standard:

\$ Efforts are supported by current program budget

\$\$ Efforts could be supported with reprogramming of current budget

\$\$\$ Efforts require additional funding



Staff time required to achieve each objective has been estimated and identified using the following standard:

@ Efforts are supported with currently allocated staff time. No significant impact on other programming is anticipated.

@@ Efforts can be accomplished with existing staff reallocating time. Other projects will be deprioritized.

@@@ Efforts will require more staff time than is currently available. Requires additional staff or increasing hours of part-time staff.

### **Definitions:**

For the purposes of this document, the following words are defined:

**“Fuel”** means any combustible vegetation, including grass, leaves, ground litter, plants, shrubs and trees, that can feed a fire.

**“Prescription”** means a set of standards, regulations, or recommendations that consider the unique aspects of a particular issue including vegetation, slope, aspect, nearby construction materials, and surrounding area.

**“Vegetation Management Plan”** means a site-specific written plan for a property to mitigate the risk of wildfire through strategic reduction of combustible vegetation.

**“Wildfire”** means a fire that originates in an area of combustible vegetation, as opposed to a structure fire, which originates in or adjacent to a building.

**“Wildland-Urban Interface”** is an area where human development (e.g., houses) abut or intermingle with undeveloped vegetation and where the risk of wildfire is high.

A table of acronyms is provided below:

Table 1 – Acronyms

| <b>ACRONYM</b>  | <b>DESCRIPTION</b>  |
|-----------------|---|
| <b>AFN</b>      | Access and Functional Needs                                 |
| <b>CERT</b>     | Community Emergency Response Team                           |
| <b>CSA</b>      | Community Service Agreement                                 |
| <b>CSD</b>      | Community Service District                                  |
| <b>CWPP</b>     | Community Wildfire Protection Plan                          |
| <b>DPW</b>      | Department of Public Works                                  |
| <b>EOC</b>      | Emergency Operations Center                                 |
| <b>GETS</b>     | Government Emergency Telecommunications Service             |
| <b>HEAT</b>     | Homeless Emergency Action Team                              |
| <b>LHMP</b>     | Local Hazard Mitigation Plan                                |
| <b>MCSO</b>     | Marin County Sheriff's Office                               |
| <b>MMWD</b>     | Marin Municipal Water District                              |
| <b>NCCC</b>     | National Civilian Conservation Corps, An AmeriCorps Program |
| <b>NFPA</b>     | National Fire Protection Association                        |
| <b>NRG</b>      | Neighborhood Response Group                                 |
| <b>OES</b>      | Office of Emergency Services                                |
| <b>PG&amp;E</b> | Pacific Gas and Electric                                    |
| <b>PRC</b>      | Public Resource Code  |
| <b>RLT</b>      | Resilient Landscape Template                                |
| <b>SRA</b>      | State Responsibility Area                                   |
| <b>SRFD</b>     | San Rafael Fire Department                                  |
| <b>SRMC</b>     | San Rafael Municipal Code                                   |
| <b>SRPD</b>     | San Rafael Police Department                                |
| <b>VMP</b>      | Vegetation Management Plan                                  |
| <b>WEA</b>      | Wireless Emergency Alerts                                   |
| <b>WPS</b>      | Wireless Priority Services                                  |
| <b>WUI</b>      | Wildland-Urban Interface                                    |

# VEGETATION MANAGEMENT

## 1. Eliminate highly flammable vegetation near structures and roadways throughout San Rafael

|                        |  |
|------------------------|--|
| <b>ACTION</b>          | Propose revising the existing provisions that prohibit Juniper and Bamboo to include Acacia and Italian Cypress, and universally apply these regulations to all properties in San Rafael.  |
| <b>WHAT THIS MEANS</b> | All property owners in San Rafael, both public and private, would be required to remove all Juniper ( <i>Juniperus spp.</i> ), Bamboo ( <i>Bambusa spp.</i> ), Acacia ( <i>Acacia spp.</i> ), and Italian Cypress ( <i>Cupressis sempervirens</i> ) within a set distance of a structure or roadway by July 1, 2020. Support for property owners to meet this deadline may include an enhanced Chipper Day program and the ability to apply for the City to fund additional green waste carts for a limited time. Outreach to nurseries and landscaping companies would be included to help prevent the sale and planting of highly flammable vegetation. Fire prone, non-native and invasive species would also be removed from public spaces as possible. Consider ordinance banning the sale of prohibited plants or requiring “high fire risk” warning labels within San Rafael. |
| <b>RATIONALE</b>       | These species are known to propagate fire at a high rate of spread and create unnecessary risks to the property owners, first responders, and community at large. The ordinance update would help reduce fire ignition, the spread of wildfire, and improve responder safety throughout the entire community by eliminating highly combustible vegetation. Establishing and maintaining citywide vegetation standards simplify education and enforcement efforts. To address aesthetics and erosion, outreach and education efforts would include information about fire resistant plants recommended as replacements.   |
| <b>CONCERNS</b>        | Staff time would be required to proactively encourage voluntarily compliance and enforce as necessary.<br><br>Costs to residents and City to remove and dispose of hazardous fuel loads. Cost to City to meet vegetation standards on City property. Ability to assure equitable wildfire protection with assistance programs. Need and want to replace the removed species for erosion protection, carbon sequestration, habitat, and beautification.   |
| <b>COSTS</b>           | \$ Ordinance change can be accomplished with current funding and staffing levels.<br><br>@@@ Implementation and enforcement of the updated ordinance would require significant staff time.<br><br>\$\$\$ Program support to help property owners meet the requirements would require additional funding. Implementation would include an increased number of ‘Free Chipper Days’ at a rate of roughly \$1,800 per day to support community efforts. The City would consider supporting residents requesting the \$2.20-per-month charge per parcel for an additional green waste cart for a set period. Grant applications have been submitted to help cover the cost of the increased ‘Chipper Days’. To encourage  |

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compliance, an additional 40 chipper days would be offered prior to the July 1, 2020 deadline, for a total cost of \$64,000.

Property owners not in compliance by the July 1, 2020 deadline would incur costs to remove vegetation to meet updated vegetation standards.

**Total: Staff time and equipment costs to implement are estimated between \$75,000-125,000 annually.**

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**STAKEHOLDERS** All property owners in San Rafael, both public and private. Fire Department. Public Works. Nurseries and Landscapers.

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**TIMELINE** Ordinance changes would be internally drafted, reviewed and presented at public meetings in the future. Staff hopes to have an initial round of proposed draft ordinances ready for public and City Council input within 90 days. Education, outreach, and assistance with vegetation removal for property owners would begin within 30 days of the ordinance adoption.

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**OUTCOMES** Voluntary compliance and enforcement would result in less highly flammable fuels in San Rafael resulting in reduced likelihood of ignition and less fire spread within the immediate and intermediate zones. The data reviewed to consider the success of implementation would include tons of vegetative debris removed, results of inspections.

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## 2. Apply vegetation management and defensible space standards citywide

**ACTION** Propose revising the municipal code to apply vegetation standards, building codes and wildfire related ordinances citywide. No boundary would limit where these provisions are applied in the future.

**WHAT THIS MEANS** Requirements that are currently applied only to parcels in the WUI would be applicable to all parcels within the City of San Rafael. Proposed ordinances would outline new citywide vegetation, building, and ground covering standards. A set of revised ordinances would establish citywide vegetation standards. A section unique to WUI ordinances would be maintained for any unique standards. Outreach and education would provide property owners with suggestions for species to plant with consideration to fire resistance, drought tolerance, and carbon sequestration. Application of vegetation standards may include considerations for building material, topography, surrounding fuel and infrastructure, or other impacts to fire behavior. An internal policy would guide the interpretation and enforcement of the ordinances. A permit process allowing homeowners to remove specific vegetation on public land to achieve defensible space for their home would be considered in coordination with City efforts to reduce hazardous fuels in open space. Guidelines would also include standards for planting, maintaining and removing Eucalyptus (*Eucalyptus globulus*)

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|                     | trees.  |
| <b>RATIONALE</b>    | Wildfires do not respect WUI boundaries, and can easily spread to urban areas, outside the WUI as painfully demonstrated in the 2017 Wine County fires. This improvement is included in the <i>2017 Lessons Learned</i> report. Uniform application of all vegetation management and fire prevention related codes and ordinances would improve wildfire resilience throughout the community. Uniform standards would provide clarity and simplify enforcement. The removal of highly flammable and dense vegetation stands would also promote healthy vegetation growth.   |
| <b>CONCERNS</b>     | Public would have varying costs to meet new vegetation management standards. Would require staff training on updated Municipal Code. High cost burden for properties not currently up to the new code. High cost to obtain compliance with new code; could trigger substantial rehab/ or tax reassessment, and possible new insurance costs. Could disincentivize development. The City hillside ordinance would need reviewed and updated to allow new construction to alter landscaping to achieve defensible space. Replacement of removed species for erosion protection and carbon sequestration. Challenges educating property owners not residing in San Rafael of new ordinances. |
| <b>COSTS</b>        | <p>\$\$\$ Costs to support residents meeting updated standards and assuring City property meets standards would require additional funding.</p> <p>@ Ordinance updates can be updated with existing staff</p> <p>@@@ Outreach, education, and enforcement would require additional staffing.</p> <p><b>Total cost to City: Initial staff time and equipment costs to implement are estimated between \$100,000-150,000 annually.</b></p>  |
| <b>STAKEHOLDERS</b> | Fire Department, Building Department, residents, businesses, landowners, Marin Builders Association.  |
| <b>TIMELINE</b>     | Ordinance changes would be internally drafted, reviewed and presented at public meetings in the future. Staff hopes to have an initial round of ordinance updates ready for public and City Council input within 90 days. Building Code updates would be incorporated into the reoccurring review cycle towards the end of 2019.  |
| <b>OUTCOMES</b>     | Reduces hazardous fuels and wildfire risk throughout the Immediate, Intermediate, and Extended zones. Reducing likelihood of ember storms to create new ignitions in or outside of the WUI boundaries. Community wide resilience.   |

### 3. Reduce ember ignitions within immediate zones to prevent structure ignitions through enhanced standards and support

#### **ACTION**

Propose revising the municipal code Title 4 (“Fire”) to include a series of standards to be selectively applied within the immediate zone, generally to mean five feet, of a structure with consideration to unique construction materials, slope, aspect, surrounding vegetation, and fire risk of each property. A policy would be drafted to define the approach to the enforcement.

The perimeter around a structure would need to meet a set of standards designed to reduce the likelihood of embers creating spot fires and igniting structures, on or before July 1, 2020. Individual prescriptions may be established considering unique attributes of the property, a VMP or RLT, and requiring approval of the Fire Chief or designee. These standards may include a selection of the proposed components:

- a) No vegetation in the immediate zone shall make direct contact with the structure.
- b) Hardwood trees are permitted within the zone provided they are well-irrigated, limbed five feet or one-third of the tree height, and have five feet between other tree canopies.
- c) Any vegetation within the immediate zone shall not grow under a window, stairs, decks, or combustible structures or encroach within two feet thereof.
- d) Vines and ivy shall be well-irrigated and maintained to eliminate any dead or dying material build-up.
- e) No ladder or continuous fuels posing a risk to a structure shall be present.
- f) Mulch or similar ground covering is only permitted when no contact is made with combustible exterior walls or plants.
- g) No vegetation except for 3-inch grass, blooming flowers, succulent plants, or established trees shall be present. Exemptions may be considered for erosion control.

#### **WHAT THIS MEANS**

All properties requesting an exemption from vegetation standards would be subject to a vegetation inspection and asked to complete a VMP or RLT, for approval by the Fire Chief or designee.

#### **RATIONALE**

Through voluntary compliance and proactive enforcement, a series of vegetation and other fuel standards should reduce structure ignitions during an active wildfire by reducing the combustible fuel needed to develop embers into flames. Recent case studies show that urban fire conflagrations are not spreading as a wall of fire, but rather as embers starting hundreds of new fires. Reducing structural ignitability reduces property loss and creates less fuel to continue spreading the fire. This requirement accounts for embers falling from roofs and eaves onto the ground. Focusing on the “house out” concept empowers all property owners, regardless of lot

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|                     | size to reduce wildfire risk for themselves and their neighbors. The public's responsibility to decrease structure ignitability and maintain defensible space was included as an area of improvement in the 2017 <i>Lessons Learned</i> report.   |
| <b>CONCERNS</b>     | Cost to private and public property owners. Ability to enforce. Erosion control. Ability to notify all property owners of updated regulations.  |
| <b>COSTS</b>        | <p>@ Ordinance change can be implemented with current staff.</p> <p>@@@ Increased inspections and enforcement could not be accomplished with current staffing levels. Increased public education and outreach.</p> <p>\$\$\$ Additional funding would be needed to support community vegetation removal, such as free chipper days and assistance to low income property owners.</p> <p><b>Total cost to City: Initial staff time and equipment costs to support homeowner implementation is estimated between \$50,000-100,000 annually.</b></p> |
| <b>STAKEHOLDERS</b> | All property owners in San Rafael, both public and private. Fire Department. Code Enforcement. Nurseries, Landscapers.  |
| <b>TIMELINE</b>     | The requirement, modeled in part after Mill Valley ordinance updates, can be incorporated into the new citywide vegetation standards and presented for public and Councilmember comment within 90 days. Staff propose July 1, 2020 as the date of compliance.   |
| <b>OUTCOMES</b>     | Reduced likelihood of structure ignitions. Removal of hazardous fuel near structures.   |

#### 4. Expand goat grazing for vegetation maintenance

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| <b>ACTION</b>          | <b>SRFD program update. Increase the use of goat grazing through cooperative relationships with contractors, FIREsafe MARIN, Marin County and other land-owning agencies.</b>   |
| <b>WHAT THIS MEANS</b> | San Rafael currently leases goats from private industry for specific times throughout the year. The City is working to gain access to the County's new goat resources for open-space vegetation clearance. In addition, new contractors are being considered to help meet the demand and reduce per acre cost. Coordination would also occur between various public and private landowners. Staff would work with property owners to link project sites to create continuous fuel breaks and reduce transportation costs. |
| <b>RATIONALE</b>       | Coordinated grazing reduces the costs associated with transporting the goats to new sites and creates more continuous fuel breaks. Goats are an effective way to manage reoccurring fuels, such as grasses and French Broom ( <i>genista monspessulanus</i> ). Reducing mechanical removal of fuels, such as mowers and weed eaters, also reducing carbon   |

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|                     | emissions.   |
| <b>CONCERNS</b>     | Goats and vegetation management contractors are in high demand. Goats are most cost effective on larger treatment areas. In 2018, over \$80,000 was spent on goat grazing. Moving and securing goats can be challenging. Coordinating the timing of grazing with rain, vegetation growth, and high fire danger is challenging.   |
| <b>COSTS</b>        | <p>\$\$\$ Additional funding is needed to expand the goat grazing program and maintain fuel reduction work. Cost saving associated with reduced transport would support increased acreage.</p> <p>@ Goat grazing coordination can be accomplished with current staff.</p> <p>A recent grazing estimate was \$900 an acre and \$2,500 per transport. At least 61.5 acres need annual treatment, which with transport costs could total close to \$80,000 annually in 2019 dollars.</p> <p><b>Initial Costs to the City are estimated at \$80,000 annually and would increase as more fuel reduction work transitions to goat maintenance.</b></p> |
| <b>STAKEHOLDERS</b> | Fire Department, Public Works, FIRESafe MARIN, Marin County Fire.  |
| <b>TIMELINE</b>     | In progress. Contract negotiations are underway. Goats would be available in late winter/early spring 2019. The majority of goat grazing is completed before July 1st and peak fire season. Grazing is needed annually. The timing of grazing is impacted by rainfall, plant growth and seeding, and extreme fire conditions.  |
| <b>OUTCOMES</b>     | Goat grazing serves as a low carbon emitting fuel reduction and maintenance tool throughout San Rafael.  |

## 5. Establish additional fuel interruption zones

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| <b>ACTION</b>          | <b>SRFD and DPW program. Remove hazardous fuels on public land within 100 feet of structures. Strategically remove hazardous fuels within 30-50 feet of private, improved property to create fuel interruption zones. Efforts would focus on shaded fuel breaks and removal of ground and ladder fuels.</b> |
| <b>WHAT THIS MEANS</b> | San Rafael would take on the cost and burden of clearing vegetation on San Rafael owned and maintained land that abuts privately owned and developed land. Fuel interruption zones consist of low-cut grasses, removal of dead vegetation and ladder fuels, and shaded fuel breaks.                         |
| <b>RATIONALE</b>       | San Rafael must do its part to reduce fuels, particularly in areas bordering other property to assure efforts of one parcel are not negated by another's. This would  |



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|                     | reduce fuels to limit fire ignition and spread in San Rafael Open Spaces and help reduce the potential for a fire to spread from undeveloped to developed land. Aligns with <i>Marin CWPP</i> transition zone strategy.   |
| <b>CONCERNS</b>     | Cooperation and coordination with other public agencies and landowners may be difficult. Costs.   |
| <b>COSTS</b>        | <p>\$\$\$ Efforts require extensive additional funding to achieve necessary results.</p> <p>Fire prevention and mitigation grants may help mitigate the cost. Measure A funding cannot cover all the necessary fuel reduction work. Measure A funding may be used to support maintenance work once the significant fuel reduction is completed. Additional funding is needed to fully fund maintenance and prevent additional fuel build ups.</p> <p>@@@ Substantial staff time is needed to strategically manage projects, contractors and conservation crews while continuing vegetation inspections and educational programming.</p> <p><b>Based on past costs, the current list of fuel reduction projects for 2019 is over \$500,000. The staff time to implement is included in the staffing request costs.</b></p> |
| <b>STAKEHOLDERS</b> | Fire, Public Works, landowners, Marin County, State Parks, MMWD   |
| <b>TIMELINE</b>     | In progress. Fuel reduction work is ongoing but reliant on available funding. A funding request to the Cal Fire, Fire Prevention Grant submitted December 19 <sup>th</sup> , 2018 requests \$922,000 to support fuel reduction in 2019 and 2020. Notifications of awards will be in April of 2019.  |
| <b>OUTCOMES</b>     | Reduction in hazardous fuels near structures and more pre-established fuel breaks to slow fire spread.  |

## 6. Improve public education regarding fire-safe landscaping and living with wildfire

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| <b>ACTION</b>          | <b>SRFD program. Outreach and education efforts, including information about areas of refuge, emergency alerts, defensible space, and reducing structure ignitability would be conducted citywide.</b>  |
| <b>WHAT THIS MEANS</b> | Additional outreach and online resources would be created to support firesafe landscaping and strategies to effectively harden homes. Outreach would target residents, nurseries, and community groups with an emphasis on gardening and landscaping. Current outreach is focused on WUI areas, but this expanded program would target all areas in San Rafael. This item includes an expansion of outreach and improved online resources, in collaboration and support of FIRESafe Marin efforts. In addition, education and outreach materials would be updated to reflect lessons learned from recent wildfires, including helping residents understand wildfire evacuations and |

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|                     | <p>areas of refuge. Outreach and education would provide property owners with suggested ground coverings and species of plants with consideration to fire resistance, drought tolerance, and carbon sequestration. Efforts would also include point of sale locations such as nurseries and landscapers. Property owners would also be better informed on the best ways to dispose of different vegetative debris.</p>  |
| <b>RATIONALE</b>    | <p>Education and outreach efforts need to be expanded to adequately reach the entire community. Residents want to maintain a beautiful community while increasing fire safety. Additional education and outreach are needed to assure residents are landscaping with wildfire risks in mind. Residents are concerned about wildfire evacuations and need to be better informed to make quick decisions. San Rafael needs to incorporate lessons learned from other devastating fires in our wildfire prevention and preparedness efforts.</p>                             |
| <b>CONCERNS</b>     | <p>Multiple outreach strategies are needed to reach various demographics. Volunteer coordination can be time consuming and unreliable. Mailers and outreach materials may not reach property owners, but rather occupants. Need additional strategies to make property owners aware of wildfire safety, new requirements, and actions they can take or empower their renters to take.</p>   |
| <b>COSTS</b>        | <p>@@ Updating online materials, developing new outreach materials, and contacts with residents can be completed with current staff reallocating time and the support of volunteers.</p> <p>\$\$\$ Additional funding is needed to expand outreach, including printing additional materials, citywide.</p> <p><b>Total Costs to the City include the request for additional staffing and outreach materials for an annual cost estimate between \$50,000 to \$100,000. Annual outreach material costs alone are estimated as being between \$20,000 and \$40,000.</b></p> |
| <b>STAKEHOLDERS</b> | <p>Fire Department, Community organizations, property owners, Open Government and Digital Services, nurseries and landscapers, FIREsafe Marin, Marin County</p>   |
| <b>TIMELINE</b>     | <p>Outreach and education regarding updated ordinances would begin immediately following adoption. Updates and lessons learned from recent wildfires would be incorporated into future community presentations. Extensive outreach campaign would occur in the Spring of 2019 to align with fire season and vegetation inspections pending available staff and resources.</p>   |
| <b>OUTCOMES</b>     | <p>Property owners, residents, and businesses would have a better understanding of how to achieve and maintain defensible landscaping, resulting in more voluntary compliance. Better community preparedness and resiliency.</p>  |

## 7. Establish more Firewise communities in San Rafael

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| <b>ACTION</b>          | SRFD program. Conduct outreach to identify communities interested in becoming “Firewise” and support them throughout the process. Coordinate efforts with FIREsafe MARIN and NFPA.  |
| <b>WHAT THIS MEANS</b> | SRFD would dedicate time and effort to help additional communities meet “Firewise” standards, earn and maintain Firewise recognition. This would include increased education, disaster preparedness, and fuel reduction. There are currently three Firewise communities within the SRFD response area. City staff would also communicate the benefits of Firewise communities with insurance companies and support FIREsafe MARIN’s efforts. Currently, only one insurance company offers discounts for policy holders in Firewise communities.   |
| <b>RATIONALE</b>       | Firewise is a National Fire Protection Association (NFPA) program that “teaches people how to adapt to living with wildfire and encourages neighbors to work together and take action now to prevent losses.” The program provides valuable educational information and a roadmap to help make San Rafael neighborhoods more resilient. Reducing fire risk takes neighborhood coordination as hazardous fuels on nearby property can negatively impact a well mitigated property. Firewise provided a mechanism for a few motivated neighbors to help their neighborhood become more fire resistant. Increasing the number of Firewise communities is a priority of the 2017 <i>Lessons Learned</i> report. |
| <b>CONCERNS</b>        | Staff time. Currently, only one insurance company offers discounts for policy holders in Firewise communities. Increasing insurance company support of the program would help encourage more neighborhoods to work together to achieve Firewise recognition.  |
| <b>COSTS</b>           | <p>\$ There is minimal additional cost associated with the Firewise program. Programs of cost, such as community chipper days, are aligned with the overall City fuel reduction initiative, therefore do not represent new costs.</p> <p>@@ Firewise communities can be supported with current staff reallocating time.</p> <p><b>Total Costs would include staff time and sponsored chipper days, costing about \$2,000-\$7,000 for each community becoming Firewise.</b></p>  |
| <b>STAKEHOLDERS</b>    | Fire Department, Homeowners Associations and Neighborhood groups, property owners, FIREsafe Marin   |
| <b>TIMELINE</b>        | In progress. Two new Firewise communities were recognized for the first time in 2018 and more are expected in 2019.   |
| <b>OUTCOMES</b>        | San Rafael would have more Firewise, and therefore more resilient neighborhoods.  |

## 8. Reduce hazardous fuels through an abatement process on privately owned unimproved lots and within 200 feet of a structure or 20 feet of roadway

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| <b>ACTION</b>          | City Program. Develop program and policy to reduce hazardous fuels through increased vegetation removal mandates and abatement on property with noncompliant and unresponsive owners. City and County ordinance and policy changes may be required.  |
| <b>WHAT THIS MEANS</b> | After establishing a vacant parcel list, parcels would be inspected and noticed if they do not comply with the updated vegetation management standards. The abatement process would also be used to enforce vegetation standards on improved lots with unresponsive owners. A public hearing would be conducted giving any property owner the opportunity to commit to compliance within a set period. If property owners do not mitigate the issue themselves, they would be fined and/or have the cost of the City clearing the hazardous fuels charged to the them. A policy would be developed to guide the abatement process. |
| <b>RATIONALE</b>       | Many privately owned parcels do not comply with vegetation management standards and create safety risks for the entire community. Establishing a consistent notification process, timeline for compliance, and cost recovery process would help address these risks.   |
| <b>CONCERNS</b>        | Potential challenges with recouping costs of abatement. Fines would need to be substantial to encourage compliance.  |
| <b>COSTS</b>           | <p>\$\$\$ The City would have to cover the additional costs of clearing unimproved hazardous property. Until costs are recouped this would require additional funding.</p> <p>@@ Staff would need to establish a vacant parcel and noncompliant list, inspect, notice and re-inspect. Coordinating contractor work as necessary would require additional staff time.</p> <p><b>TOTAL: Temporary costs, to be repaid by property owners, are estimated between \$50,000-\$150,000 per year.</b></p>   |
| <b>STAKEHOLDERS</b>    | Fire Department, Public Works, Code Enforcement, Marin County, landowners  |
| <b>TIMELINE</b>        | Program can be developed and brought to the City Council for approval within 90 days. Coordination with the County may delay this process.   |
| <b>OUTCOMES</b>        | Reduce hazardous fuels and recover associated costs from absentee and noncompliant property owners.  |

## 9. Effectively coordinate the removal of vegetative debris from public and private property

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| <b>ACTION</b>          | City program. Work with Marin Sanitary Service to develop a plan to support removal of increased vegetative debris. Consider identifying a City drop off site for removed hazardous fuels. Consider utilizing a scheduled bulk pick up day for vegetation.  |
| <b>WHAT THIS MEANS</b> | Research and stakeholder input are needed to determine if a vegetation debris removal site is necessary or beneficial to helping reduce hazardous fuels. Additional discussions would help determine if a drop-off site should be always public, public on select days, or for City staff and contractors only. Other considerations include increasing green waste carts, chipper days, bulk removal days, large containers (BioBox) or a combination thereof. Responsible disposal would also take into consideration proper disposal and composting to reduce additional greenhouse gas releases. Encourage homeowners to fully utilize their green carts on a weekly basis, reducing the need for bulk removal. |
| <b>RATIONALE</b>       | Stronger vegetation regulations would result in an increased amount of woody biomass and vegetative debris. A coordinated, multi-faceted approach would be needed to effectively and responsibly remove biomass from San Rafael. Goals would include reducing the costs associated with City sponsored chipper days, diverting woody biomass from landfills to biomass markets, and supporting property owners' fuel reduction efforts.   |
| <b>CONCERNS</b>        | Cost. Security. Assuring appropriate use of space. Large piles of vegetative debris could pose additional fire risk if not properly protected. Fuel reduction in areas around drop-off sites would be required.   |
| <b>COSTS</b>           | <p>\$\$\$ Unless an existing, unused site is identified, costs for implementation and maintenance would be extensive. Additional funding is also needed to support increased green waste carts and/or community chipper days.</p> <p>@@ Coordination can be accomplished with current staff reallocating time. @@@ If a full-time drop-off site is established, additional staff may be necessary.</p> <p><b>Total annual Costs to the City are estimated as between \$15,000 and \$30,000.</b></p>   |
| <b>STAKEHOLDERS</b>    | Fire Dept, Public Works, Sustainability Program, Residents, Marin Sanitary Service.   |
| <b>TIMELINE</b>        | Short and long-term recommendations would be drafted within 120 days. The timeline considers the vegetation removal requirement deadlines placed on residents. Implementation would be impacted by funding.   |
| <b>OUTCOMES</b>        | Hazardous fuel debris is removed from public and private property and diverted from landfills.  |

## 10. Engage Community Emergency Response Team (CERT) members, Neighborhood Response Groups (NRGs) and other volunteers in fire prevention

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| <b>ACTION</b>          | SRFD program. Develop program and training to enable San Rafael CERT, NRGs and other disaster volunteer groups to support fuel reduction efforts through education, outreach, data gathering, and direct service.   |
| <b>WHAT THIS MEANS</b> | Utilize existing volunteers and recruit additional volunteers to supplement the outreach, education, and hazard identification work of SRFD.  |
| <b>RATIONALE</b>       | San Rafael has almost 500 trained CERT members, many anxious for ways to be more involved in disaster preparedness. Training and engaging CERT and NRG volunteers would help increase public outreach and education and help inform SRFD's vegetation inspection priorities. CERT and NRG members would utilize local knowledge and willpower while building more resiliency through education and relationship building. Volunteer hours dedicated to fuel reduction may be used as match dollars for fire grants. |
| <b>CONCERNS</b>        | Volunteer safety and assuring the accurate distribution of information and data collection.   |
| <b>COSTS</b>           | <p>\$ The program can be implemented with minimal cost and existing funds.</p> <p>@@ The program can be implemented with existing staff. Initially, some time would need to be reallocated, but once active, CERT members would help save inspectors time.</p>  |
| <b>STAKEHOLDERS</b>    | Fire Department, CERT members, NRGs, Marin County CERT  |
| <b>TIMELINE</b>        | In progress. San Rafael CERT steering committee is re-engaged and looking for ways to stay involved in disaster preparedness and response during 'blue skies. Training needs to be developed and presented by fire prevention staff. A pilot program in a limited geographic area can be rolled out within three months.  |
| <b>OUTCOMES</b>        | Increase capacity of volunteers to support mitigation efforts. Expanded reach and impact with minimal cost implications.  |

## 11. Reengage volunteer “Broom Pull Days”

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| <b>ACTION</b>          | City program. Work with the volunteer program to reestablish an ongoing volunteer program to pull invasive Scotch and French broom ( <i>Cytisus scoparius</i> and <i>Genista monspessulanus</i> ) from public open space and high fire risk areas.   |
| <b>WHAT THIS MEANS</b> | A previous program saw a great deal of success removing and eliminating French Broom in parts of San Rafael. Education and best practice materials exist and can be re-used to support a reinvigoration of this effort. City staff would be needed to support the effort and City staff may be required at the start of projects to assure work areas are clear of debris and threats. With approval, work may include areas in the hundred-foot easement onto state owned lands to establish an effective fuel break. |
| <b>RATIONALE</b>       | The focus of this project would be to engage community will and volunteer labor to work on eliminating French and Scotch broom from high fire risk areas of San Rafael. Volunteer programs provide a path for residents to directly reduce wildfire risks. Volunteers would help reduce the need for contractors and support maintenance in previously cleared areas.  |
| <b>CONCERNS</b>        | Safety of volunteers. Time and effort needed to coordinate project sites, registration, and volunteer safety and technique training. Potential community conflicts over project areas.   |
| <b>COSTS</b>           | <p>\$\$ Reallocated or new funding is needed to purchase tools and safety equipment. Woody Biomass left on site would need to be removed.</p> <p>@@ The program can be implemented with current staff reallocating time. Additional staff time would help expand the project areas.</p> <p><b>Total Cost to the City includes equipment and staff time and is estimated at \$5,000-\$15,000.</b></p>   |
| <b>STAKEHOLDERS</b>    | Fire Department, Public Works, Police Department, Sustainability and Volunteer Program Coordinator, MMWD, State Parks, Marin County  |
| <b>TIMELINE</b>        | A volunteer project could be scheduled within 60 days of having the necessary approvals, tools, safety equipment, and strategy in place.   |
| <b>OUTCOMES</b>        | Increase of 20% in citywide volunteer hours dedicated to fuel reduction and wildfire mitigation. Decrease in hazardous fuels in public/private land borders.   |

## 12. Review and update WUI map

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| <b>ACTION</b>          | SRFD project and resolution. Review and update the San Rafael WUI map for more practical application and consistency with County and other land management agencies' maps.   |
| <b>WHAT THIS MEANS</b> | SRFD would review and update the WUI map for consistency between maps and application of WUI code. The map would be simplified and updated to apply current fire behavior expectations to WUI boundaries. The initial review of the map suggests updates may remove about 500 homes from the WUI and add 2,000.  |
| <b>RATIONALE</b>       | The current San Rafael WUI map has multiple variations used by different jurisdictions and does not accurately reflect the threat posed to many areas in or near the currently defined WUI. Updating the map would improve education, vegetation management, and fire prevention efforts. Maintaining a designated WUI can help with resource prioritization, grant funding, and State code application. |
| <b>CONCERNS</b>        | Potential insurance and code compliance changes for property owners being added or removed from the WUI.   |
| <b>COSTS</b>           | \$ Review and updates can be completed with existing funds.<br>@@ Review, coordination, and map development would require existing staff to reallocate time.   |
| <b>STAKEHOLDERS</b>    | Fire Department, property owners, land management agencies with current San Rafael WUI maps.   |
| <b>TIMELINE</b>        | 160 days would be needed for internal review and coordination with partners. The updated map would be presented to the City Council within 60 days of completion to be adopted through a resolution.   |
| <b>OUTCOMES</b>        | San Rafael would have a consistent and logical Wildland Urban Interface map.   |



### 13. Consider adoption of Public Resource Code 4290 and 4291

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| <b>ACTION</b>   | <b>Consider adoption of Public Resources Code (PRC) sections 4290 and 4291, which serve as guidelines for defensible space and fuel management regulations.</b>  |
| What this means | At a minimum, San Rafael vegetation standards would meet the state minimum outlined in PRC sections 4290 and 4291. Proposed amendments to the language would apply the standards citywide.   |
| Rationale       | Adopting PRC sections 4290 and 4291 assures San Rafael complies with State vegetation management standards and simplifies the existing San Rafael vegetation management standards. PRC sections 4290 and 4291 do not relax our existing codes. Adopting PRC sections 4290 and 4291 would also allow for immediate enforcement of PRC changes. Adopting PRCs 4290 and 4291 would support uniform application of wildfire mitigation standards.  |
| Concerns        | If PRC sections 4290 or 4291 are revised in the future in ways that are deemed detrimental to the City, additional municipal code amendments would be necessary to clarify their application in San Rafael.  |
| Costs           | <p>\$ An ordinance change can be accomplished with current funding and staffing levels.</p> <p>\$\$\$ Providing support to homeowners meeting the updated vegetation standards, through chipper days and increased inspections, would require additional funding.</p> <p>@@@ Implementation and enforcement of an updated ordinance would require more staff time than currently available.</p> <p><b>Total Cost: Costs to the City are included in staff time and other vegetation management objectives, including property owner support.</b></p> |
| Stakeholders    | Fire Department, property owners   |
| Timeline        | Ordinance changes proposing to adopt PRC 4290 and 4291 would be internally drafted, reviewed and presented at public meetings in the future. Staff hopes to have an initial round of draft ordinance updates ready for public and City Council input within 90 days. Enforcement would begin July 1, 2020.   |
| Outcomes        | Reduction in dead and dying vegetation within 100 feet of all San Rafael structures. Clear fuel standards within the immediate, intermediate, and extended ignition zones.   |

## 14. Develop new efforts, solutions, and resources dedicated to wildfire prevention and protection

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| <b>ACTION</b>          | <p>City project. To support hazardous fuel removal, abatement, education and outreach, inspections, and other wildfire risk reduction efforts additional efforts, resources, and solutions are needed. This item seeks to establish new partnerships, funding avenues, and revenue opportunities, including but not limited to adjustments in existing City budget, grants, taxes, fees, donations, and use of conservation corps, inmate crews, volunteers, and on-duty engine crews. Efforts would work to reduce the financial impact on individual property owners, businesses, and the City's general fund. Available funding would support work on public property and be considered for homeowner assistance programs.</p>   |
| <b>WHAT THIS MEANS</b> | <p>San Rafael is applying to numerous grant programs for funding to help reduce the fire risk. Grant funding may provide one-time funding sources to help reduce heavy fuel loading. However, grants do not provide a reoccurring funding source to address the ongoing needs associated with vegetation management. To accomplish this objective San Rafael would also seek and review project bids from non-traditional labor pools such as the Conservation Corps of the North Bay, AmeriCorps NCCC, Cal Fire Delta crews, and County fire crews. The City is also exploring an expanded partnership with Downtown Streets Team to help with fuel reduction work that would provide community members with income and job training. Collaboration with County efforts would be considered for cost efficiency and timeliness of outcomes. Staff would continue to seek mutual beneficial partnerships to support implementation of the plan.</p> |
| <b>RATIONALE</b>       | <p>Heavy fuel loads create dangerous situations throughout the area. Aggressive strategies are needed to mitigate the current risk while implementing a long-term fuel maintenance program. Current funding and resources are not adequate to quickly reduce decades of fuel buildup. Finding additional funding sources and utilizing new crews would be necessary to address the wildfire risk in a timely manner. AmeriCorps NCCC members would be able to assist low-income, disabled, and elderly residents achieve defensible space. A program partnership with Downtown Streets Team may offer an opportunity for cost-effective fuel reduction, job training, and a reduction in individuals experiencing homelessness. Use of on-duty engine crews for inspection would be considered permitting effective emergency response times and staff health.</p>  |
| <b>CONCERNS</b>        | <p>Grant applications and management of projects require substantial staff time and effort. Some grant funds may not be available within the desired timeline. Effective use of various crews would require strategic management. Grants are one-time applications and do not provide an ongoing, predictable funding source for long term strategic fuel management. Some grants require match funds, which may limit other projects. Fuel maintenance would require additional funding to prevent new fuel buildups.</p>  |

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| <b>COSTS</b>        | <p>\$\$ - Grant applications can be submitted with the current program budget. Some grants have matching fund requirements that may require reprioritizing of programming.</p> <p>@@ Grant applications can be submitted with existing staff reallocating time. Grant management and tracking would require additional time reallocations. Crew management would require reallocation or additional staff time.</p> <p><b>Total Cost to the City, including staff time and support resources, is estimated between \$20,000 and \$100,000</b></p>                        |
| <b>STAKEHOLDERS</b> | <p>Fire Department, Public Works, Finance, property owners, businesses, Marin County, Downtown Streets Team, AmeriCorps NCCC</p>   |
| <b>TIMELINE</b>     | <p>In progress. Various projects, grants, and labor options are currently being explored. CAL FIRE prevention grants award notices would be issued in April with funding available in September of 2019. Hazard Mitigation Grant applications are due in April of 2019. An application and onsite visit have been completed for the City to host a National Civilian Conservation Corps (NCCC) team this Spring and Summer. A final decision is expected in mid-March. If approved, crews would be available between April and July of 2019 for six to twelve weeks.</p> |
| <b>OUTCOMES</b>     | <p>The City will dedicate staff time to finding, applying, and managing resources to support wildfire mitigation and education in San Rafael, ideally increasing the available resources with a minimal burden to residents.</p>   |

## Wildfire Prevention and Protection

### 15. Immediately seize ignition sources at encampments and remove encampments in open space as quickly as possible.

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| <b>ACTION</b>          | City program. Evaluate City ordinances for revision and compliance with <i>Martin v. Boise</i> regarding camping limitations and continue collaborative Homeless Emergency Action Team (HEAT) efforts to limit fire risk associated with encampment fire risk.   |
| <b>WHAT THIS MEANS</b> | Continue immediate removal of flammable items and ignition sources posing a fire threat. Continue collaborative effort and improve coordination between Police Rangers, Public Works, Fire, and vegetation contractors to remove abandoned encampments in open spaces. Evaluate City ordinances for appropriate time, place, and manner restrictions on camping in certain areas due to health and safety risks. Consider redirecting individuals experiencing homelessness to identified fire safe areas. Consider efforts to remove abandoned encampments in shorter time intervals. |
| <b>RATIONALE</b>       | Reduce health and safety threat by eliminating flammable items and potential ignition sources in open space.   |
| <b>CONCERNS</b>        | Legal constraints related to limitations on camping enforcement and notice prior to removal of encampments. Resources required to remove and dispose of fire risks, including refuse and other abandoned items in open space areas. Encampments removed from open space may relocate to other areas.   |
| <b>COSTS</b>           | <p>\$\$\$ The additional removal and storing of items would require additional funding.</p> <p>@@@ Additional staff time is needed to effectively monitor open spaces year-round.</p> <p>Storage, cleanup, and debris removal costs are estimated between \$25,000 and \$100,000 annually. Additional costs to the City are included in the staffing requests in Objective #27, estimated at \$250,000.</p>  |
| <b>STAKEHOLDERS</b>    | Fire, Police, Public Works, Homeless Planning and Outreach   |
| <b>TIMELINE</b>        | Ongoing. Continually update strategies based on new case law and best practices.   |
| <b>OUTCOMES</b>        | Reduced fire ignitions originating in open space encampments.  |

## 16. Reduce likelihood of ignition in undeveloped land

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|------------------------|---|
| <b>ACTION</b>          | Propose revision to the municipal code to remove any specific time period of fire season. Resulting in smoking being prohibited in City open space all year. Assure parking areas are clear of flash fuels (highly combustible, fine fuels such as grasses, leaves, pine needles, etc.). Work with other land-owning partners to limit smoking and ignition sources in open space.  |
| <b>WHAT THIS MEANS</b> | Updates would deconflict existing code and remove any dates associated with fire season, expanding the ability of the Fire Chief to enforce fire safety regulations to prevent a wildfire in open spaces. Smoking would explicitly be prohibited year-round within City open spaces. Currently, SRMC has some conflicting information and dates associated with smoking prohibition and fire season. In addition to updating SRMC ordinances, staff would work with other public land-owning agencies to limit smoking in public open space with wildfire risk. |
| <b>RATIONALE</b>       | Updates would provide increased safety, clarity, and consistency within municipal code. Reducing ignition sources helps protect the community and natural resources from a wildfire ignited in the open space.  |
| <b>CONCERNS</b>        | Enforcement is challenging; signage is not very effective. Additional staff is needed to enforce.   |
| <b>COSTS</b>           | <p>\$ Ordinance change can be accomplished with currently allocated funding.</p> <p>@ Ordinance change can be accomplished with current staff.</p> <p>@@@ Strong enforcement of open-space regulations requires additional staff.</p> <p><b>Total Cost: Cost of enforcement is included in the additional police ranger staffing requests, totally about \$250,000 annually.</b></p>  |
| <b>STAKEHOLDERS</b>    | Fire Department, Police Rangers, Public, Park and Open Space Commission, State Parks  |
| <b>TIMELINE</b>        | An update to SRMC 19.10.060(13) would be prepared and presented for community and Councilmember input within 90 days. Enforcement would begin immediately after adoption.   |
| <b>OUTCOMES</b>        | No smoking allowed in open space. Reduced ignition potential.   |

## 17. Explore opportunities in Fire and Building Code updates to increase use of fire-resistant materials and application of CA Fire Code Chapter 7A

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|------------------------|---|
| <b>ACTION</b>          | Ordinance change. Review and propose updates to SRMC to apply CA Fire Code Chapter 7A (fire resistant building material requirements) outside the WUI and to additional structures.   |
| <b>WHAT THIS MEANS</b> | Chapter 7A outlines the materials and construction methods to reduce potential structure ignition during a wildfire for new construction and substantial remodels (50%) within the WUI. Proposed updates to the SRMC would suggest applying Chapter 7A to a broader list of improvement and all new construction, regardless of WUI proximity. Ordinance changes would require any new material used in remodels, updates, or new construction be fire rated. For example, a property owner replacing windows would be required to install windows complying with Chapter 7A. |
| <b>RATIONALE</b>       | Increase compliance with known fire prevention methods, including fire resistant building materials. Include all structures to reduce likelihood of an urban fire conflagration. To reduce the impact of a wildfire, consideration for the toxicity of building materials when burned should be considered. The <i>2017 Lessons Learned</i> report calls on property owners to harden homes, including fire resistant materials.  |
| <b>CONCERNS</b>        | Potential to discourage otherwise positive improvements because of additional costs associated with Chapter 7A compliance. Potential to discourage compliance with permits and inspections for fear of additional costs to meet Chapter 7A requirements.  |
| <b>COSTS</b>           | <p>\$ Reviewing and updating the SRMC can be completed with available funds. Additional permits may increase revenue for the City.</p> <p>\$\$\$ Construction costs may increase for property owners. Additional permits may be required.</p> <p>@@ Research, review and drafting of proposed SRMC updates can be completed with current staff reallocating time.</p>   |
| <b>STAKEHOLDERS</b>    | Fire Department, Community Development, Marin Builders Association, property owners, Marin Association of Realtors  |
| <b>TIMELINE</b>        | Additional research, review, and stakeholder input can be completed within 120 days. Fire and Building Code adoptions would occur in concert with other agencies late in 2019.  |
| <b>OUTCOMES</b>        | San Rafael would have more hardened homes, with a reduced risk for wildfire ignition, property damage, and loss of life.  |

# 18. Eliminate fire hazard associated with shake and wooden roofs

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| <b>ACTION</b>          | Ordinance change. Update building code to require all shake roofs be replaced by January 1, 2029 or at time of resale, whichever is first. Require no shake roof structures be eligible for resale.   |
| <b>WHAT THIS MEANS</b> | Property owners and owners of commercial property with shake roofs would have 10 years to replace their roofs with a safer material and shake roofs would no longer be allowed in new construction. Based on area surveys, staff believe less than 200 shake roofs are in San Rafael. This would effectively result in the near-complete elimination of shake roofs from San Rafael by 2029.  |
| <b>RATIONALE</b>       | This ordinance would eliminate a known threat to structures and the public, decreasing potential ignition and the rate and intensity of the spread of fire. Roof material is a critical component to a wildfire-hardened home. Removing wood roofing materials would increase safety for firefighters and first responders, as well as the neighboring community. Per the 2016 Marin County Community Wildfire Protection Plan (CWPP), "homes with a non-combustible roof and defensible space at least 30 to 60 feet around the structure have an 85-95% chance of survival". Reducing the likelihood of ember ignition on a shake roof also protects neighboring homes from ignition.   |
| <b>CONCERNS</b>        | Roof replacement could be prohibitively expensive for some homeowners and businesses. An exemption for historical structures should be considered. Applicable fines for having a shake roof after the deadline would need to be substantial to encourage compliance. Implementing at time of sale may slow down process and create -increased burden on sellers and buyers.   |
| <b>COSTS</b>           | <p>\$\$\$ Property owners would incur large cost to replace roof. Assistance programs should be considered to encourage compliance. The City would also need to replace any wooden roofs on City-owned buildings. Property owners may see reduced insurance costs after roof replacement.</p> <p>@ Ordinance change, education, and enforcement can be supported with current staffing levels.</p> <p><b>Total Costs: This item is expected to cost the City between \$500,000-\$750,000,</b> which includes the replacement of the wood roof on Falkirk and potential assistance to homeowners through mitigation grants and staff time. Please note, the Falkirk roof replacement would have substantial costs to the City regardless of this item.</p> |
| <b>STAKEHOLDERS</b>    | Fire Department, Community Development, Property owners, Businesses, Marin Association of Realtors  |
| <b>TIMELINE</b>        | The updated building code can be prepared and presented for community and City Council input within 90 days. The re-sale requirement would become effective within 30 days, with an allowance for homes in escrow at time of adoption. There would be a   |

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ten-year period of compliance to minimize financial hardships. Assistance programs, including hazard mitigation grants, should be considered over the implementation period.

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**OUTCOMES**

Shake and wooden roofs and the associated fire hazard are eliminated in San Rafael by 2029.

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## 19. Develop comprehensive San Rafael hazardous vegetation study and mitigation measures

**ACTION**

City project. Consider contracting with a vendor for parcel-level vegetation mapping. Identify areas of with high risk vegetation, including unmaintained Eucalyptus groves. Incorporate findings into mitigation and vegetation maintenance plans.

**WHAT THIS MEANS**

Studies would need to be conducted to gain a better understanding of high fuel density and risk areas. Specific attention would be paid to Eucalyptus grove locations, density and nearness to structures. This data and imagery would help inform strategic vegetation management and forest health moving forward. For example, an identified high-risk Eucalyptus grove may be scheduled for pruning or thinning over the course of a few years, with ground fuel maintenance (removing leaves, dead limbs, etc.) every three to five years thereafter.

**RATIONALE**

Baseline information and imagery would help establish a comprehensive fuel management strategy. Identifying high risk areas would prioritize projects and available funding. Reoccurring studies and aerial imagery would also help show trends in regrowth, successful management strategies and before and after comparisons. Break out mapping by fire agency is included in the *2017 Lessons Learned* report.

**CONCERNS**

No available funds to cover the cost. Balancing fire mitigation, erosion control, habitats, and forest health.

**COSTS**

\$\$\$ Imagery and plan development would require additional funding.

@@ Efforts can be supported with current staff reallocating time. Studies would help reduce staff drive and inspection time.

**In depth mapping would cost the city \$30,000 with an annual reoccurring cost of about \$1,000.**

**STAKEHOLDERS**

Fire Department, Public Works, Marin County Fire

**TIMELINE**

Funding for parcel level mapping was included in the Cal Fire Prevention Grant. If approved, work could begin in September of 2019 and incorporated into the fuel

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management plan for 2020.

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**OUTCOMES** Shift in fuel mitigation strategy from citizen-reported to data-driven and aerial imagery.

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## 20. Complete an analysis of fire roads and strategic fuel breaks

### **ACTION**

**SRFD and DPW project. Develop a plan for a survey of all San Rafael fire roads to identify areas in need of strategic surface improvements, to be used as shaded fuel breaks, and that need vegetation clearance for safe access.**

### **WHAT THIS MEANS**

Identify high risk areas and assure the fire road surface and clearance would remain accessible. Increase fuel clearance along strategic fire roads (such as ridge lines) to create significant fuel breaks to stop or slow fire spread. These fuel breaks would include forest thinning and understory clearing to create shaded fuel breaks. Shaded fuel breaks reduce fire risk while supporting erosion control, carbon sequestration, and natural beauty. Coordination between other landowners, including private, MMWD, County, and State Parks would help assure continuity and effectiveness of efforts.

### **RATIONALE**

Fire roads provide critical access for fire personnel to access and contain existing fires. Fire roads also serve as fuel breaks, means of access for fuel reduction work and enforcement in open space. Increasing fuel clearance along fire roads helps protect responders using the roads and creates existing fuel breaks to limit a fire's spread. Fire roads also serve as trails and provide recreational opportunities in open spaces.

### **CONCERNS**

High costs and potential environmental impact to implement.

### **COSTS**

\$\$\$ Additional funding, possibly via grants, is required to retain contracted labor to establish initial fuel breaks and fire road improvements.

\$\$\$ Reoccurring costs would include maintenance of fuel breaks and road surfaces. It is possible to support some maintenance with reprogramming of existing budget and renewal of Measure A funds; however, comprehensive efforts would require an additional funding source.

@@ Analysis of roads and potential fuel breaks can be completed by existing staff reallocating time.

@@@ Maintenance would require current staff to reduce time spent on inspections and other projects. Developing and implementing a comprehensive and strategic maintenance plan would require additional staffing.

**The Total estimated cost to repair and clear vegetation along the 12 miles of San Rafael Fire roads is \$750,000-\$1,000,000 and should be completed every five years.**

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| <b>STAKEHOLDERS</b> | Fire Department, Public Works, public using fire roads, agencies with connecting fire roads  |
| <b>TIMELINE</b>     | In progress. Road and fuel break analysis is underway. Fire road surface maintenance is an ongoing effort. Additional focus and funds are needed to develop and implement a more strategic and effective approach. The timeline for repairing fire roads and implementing strategic fuel breaks would be dependent on funding. |
| <b>OUTCOMES</b>     | San Rafael fire roads would be well maintained for emergency access and serve as fuel breaks and recreational trails.  |

## 21. Increase the number of hardened homes in San Rafael

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| <b>ACTION</b>          | Outreach and education to help property owners understand the various steps they can take to harden their homes. Consider support for property owners unable to implement on their own. Suggestions range from simple vent covers to building material recommendations and be aligned with FIRESafe MARIN and Marin County Fire suggestions.   |
| <b>WHAT THIS MEANS</b> | In coordination with NFPA recommendations and FIRESafe Marin, the City would work to better inform and support property owners attempting to harden their homes and reduce the likelihood of ignition. Methods to harden homes would range from simple vent covers to building material recommendations. Outreach and education would be aligned with FIRESafe MARIN and Marin County Fire recommendations.  |
| <b>RATIONALE</b>       | Hardening homes is as necessary a step to protect homes from wildfires as vegetation management. Hardened homes with defensible space are most likely to survive a wildfire. Hardening homes includes fire resistant building materials, and design considerations, and limiting the possibility of an ember entering the home. Per FIRESafe Marin, two out of every three homes destroyed are ignited by wind-blown embers (Maranghides and Mell 2009). Encouraging residents to take steps to harden their homes is aligned with the <i>2017 Lessons Learned</i> report. |
| <b>CONCERNS</b>        | Efforts would target residents, but almost 50% of San Rafael residents are renters. Additional efforts to encourage landlords to protect their investments would be needed.  |
| <b>COSTS</b>           | Costs include staff time and educational materials. Property owners' costs may vary from \$100's-\$10,000's depending on the steps they decide to take.<br><br><b>Total cost to the City for educational materials is estimated to be \$20,000 annually.</b>   |
| <b>STAKEHOLDERS</b>    | Fire Department, Property Owners, Fire Safe Marin, Marin County Fire, Code Enforcement   |

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| <b>TIMELINE</b> | Existing outreach and education materials would continue to be used. Increased public outreach, expos, and support for homeowners would depend on staff and funding levels. |
| <b>OUTCOMES</b> | Fewer structures in San Rafael would be susceptible to wildfire ignition  |

## 22. Improve development and implementation of Vegetation Management Plans (VMPs) and create new Resilient Landscape Templates (RLT)s.

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| <b>ACTION</b>          | City program. Create Resilient Landscape Templates that offer suggestions for homeowners to achieve beautiful, fire resistant, drought tolerant, and carbon sequestering landscaping. Align VMP process with plan objectives and County VMP updates. Information will include information on fire resistant, drought resistant and carbon sequestering native plants.   |
| <b>WHAT THIS MEANS</b> | SRFD will take the lead to streamline and automate the current Vegetation Management Plan (VMP) forms and review process. The VMPs will be reviewed for areas of improvement and consistency with County and other jurisdictions plans.<br><br>The City will establish new Resilient Landscape Templates (RLT) designed for property owners rather than landscape architects. The RLTs will help property owners understand what species to remove and avoid and which to maintain and plant. VMPs and RLTs will serve as a resource for reoccurring seasonal work and enforcement with minimal maintenance effort. |
| <b>RATIONALE</b>       | RLTs will serve as a resource to help residents achieve beautiful and fire resistant landscaping. An improved and more accessible VMP process will focus on new construction, remodels, and commercial space. Fire-resistant landscaping would help keep the whole community safe by reducing the chances of ignition and fire spread. An improved system would be necessary to support the additional VMPs submitted because of ordinance changes.   |
| <b>CONCERNS</b>        | Developing a comprehensive, but simple system would be a challenge and require input from multiple stakeholders and staff.  |
| <b>COSTS</b>           | <p>\$\$ Any costs associated with improvements can be funded by reallocating existing funds</p> <p>@@ Updates and improvements can be completed with existing fire staff reallocating time, and support from other departments.</p> <p><b>Total Costs to the City are incorporated into staff requests and may include an</b></p>   |

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additional \$20,000 to \$50,000 for technology or consulting work.

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**STAKEHOLDERS** Fire Department, Code Enforcement, Property Owners, Digital Services and Open Government, Marin County, FIRESafe Marin

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**TIMELINE** Updates to streamline and coordinate the VMP template with the County can begin with additional staffing. The creation of San Rafael RLTs would build off templates from other jurisdictions but require additional staff time and resources to complete.

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**OUTCOMES** Property owners have resources to more easily comply with updated wildfire mitigation efforts while maintaining beauty and environmental consciousness.

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### 23. Increase the number of completed Vegetation Management Plans (VMP)s and Resilient Landscape Templates (RLTs).

**ACTION** Ordinance change. Expand the permits, rebates, cost shares, and exemptions that require submission of a Vegetation Management Plan (VMPs) or Resilient Landscape Template (RLT). Consider retroactive requirement for VMP or RLTs for community owned space, such as HOAs, or for commercial space.

**WHAT THIS MEANS** Additional opportunities to have residents, landscapers and property owners complete a VMP or RLT would be explored. The City would develop a new RLT process to help property owners achieve beautiful, sustainable, and fire defensible space. A VMP or RLT would be required for any property requesting an exemption from vegetation standards. VMPs would still be required under existing ordinances. Property owners completing the work outlined in the VMPs or RLTs may receive City support for vegetation removal, such as participation in 'free chipper' days.

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**RATIONALE** Increasing VMPs and establishing RLTs would help reduce and remove fuels. RLTs help property owners understand how landscaping choices impact the threat of wildfire. Expanded submission requirements would help the City educate and support more property owners. VMPs outline a landscape contractors' plan, including irrigation. Increasing the number of VMPs or RLTs required would increase public education and provide property owners with a path towards more beautiful, fire resistant, drought resistant, and carbon sequestering landscaping.

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**CONCERNS** The current VMP template and process would need to be streamlined to accommodate an increase in number of VMPs while minimizing impact to property owners. Staff effort would be required to create new RLTs to help property owners adjust their landscape. Staff time to review and approve VMPs or RLTs.

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**COSTS** A streamlined VMP process would reduce staff costs. The VMPs and RLTs would be a

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resource for inspectors, property owners, and landscapers and should require minimal maintenance. Having VMPs to reference would support staff enforcement efforts and reduce reinspection's. Some costs may be recovered via a VMP fee schedule.

**Total cost to the City is included in the staffing estimates in Objective 26.**

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| <b>STAKEHOLDERS</b> | SRFD, Community Development, Homeowners and Property Management companies  |
| <b>TIMELINE</b>     | VMP related ordinance changes would be incorporated into fire and building code updates late in 2019. Development of RLT's can begin with availability of staff and resources. Update to vegetation standards would be reflected on the updated templates. |
| <b>OUTCOMES</b>     | Additional VMPs and new RLTs would be submitted from contractors, residents, and property owners. Additional opportunities for outreach, education, and vegetation inspections.  |

## 24. Improve the public's fire risk awareness with sign improvements and installation

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| <b>ACTION</b>          | <b>SRFD and DPW program. Install new and improve existing signage at all open space access areas and along roads in high fire-risk areas.</b>   |
| <b>WHAT THIS MEANS</b> | Signs would be installed across City open space explaining fire danger and risks associated with being in the open space. New signage would be installed in areas of high fire risk to help keep public alert and avoid risky fire behavior. Staff would need to survey all open space access points, and high fire risk areas to determine sign needs. |
| <b>RATIONALE</b>       | Educate public and visitors. Support increased enforcement. Provide consistent messaging. Improve aesthetics and readability of signs.  |
| <b>CONCERNS</b>        | Aesthetic concerns of signs in natural areas. Potential to create culture of fear.  |
| <b>COSTS</b>           | <p>\$\$\$ Additional funding would be needed to develop, produce, and install improved signage.</p> <p>@@ Current staff can complete the project with time reallocation or support of contractors.</p> <p><b>Total Cost for the City to implement is estimated between \$15,000-\$30,000.</b></p>   |
| <b>STAKEHOLDERS</b>    | Fire Department, Public Works, Police Rangers, residents  |

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| <b>TIMELINE</b> | Survey work can be completed within 90 days. With funding, message and signs can be developed within 90 days, with installation to occur shortly thereafter. If funding is available, the project could be completed before the peak 2019 fire season. If utilizing grant funding, the project may be delayed, but would be completed before May of 2020. |
| <b>OUTCOMES</b> | Reduction in fire risky behavior by public due to increased awareness of wildfire risk.   |

## 25. Reduce fire risk and keep visitors using short-term rentals safe

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| <b>ACTION</b>          | <b>Ordinance change and City project. Develop guidance for short-term rental units to reduce the risk posed by and to visitors. Require all short-term rental units to post emergency procedures, information on signing up for emergency alerts, and fire safety information. All short-term rentals would be required to have a VMP or RLT on file.</b>   |
| <b>WHAT THIS MEANS</b> | Efforts to better inform visitors of wildfire risk would be incorporated into interactions with short-term rental units. Visitors, potentially unfamiliar with the area or wildfire risk, would be informed about the emergency procedures and can register for emergency alerts during their stay. Outreach should be conducted with all short-term rentals, to improve property owner and renter wildfire awareness and general safety. Direct outreach to VRBO, AirBnB and similar companies would be considered.  |
| <b>RATIONALE</b>       | Short-term rentals represent a unique fire risk for a variety of reasons. Those using short-term rentals may be from out of the area and unfamiliar with wildfire risk and safety procedures. The information helps assure the safety of visitors and provide important fire prevention information to visitors unfamiliar with wildfire risks and necessary ignition precautions. Having a VMP or RLT would help assure the property is safe, unlikely to ignite from a careless visitor, and support enforcement of vegetation standards for property owners. |
| <b>CONCERNS</b>        | Increased cost of compliance could reduce the number of short-term rentals. Potential for increased cost of permit processing and code enforcement.   |
| <b>COSTS</b>           | <p>\$ Ordinance change can be accomplished with current funding and staffing levels. Potential revenue to City from fees and fines.</p> <p>@@ Outreach, monitoring, and enforcement can be accomplished with current staff reallocating time.</p> <p><b>Total Costs to the City are included in the requests for additional staff outlined in Objective 26.</b></p>   |

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| <b>STAKEHOLDERS</b> | Fire Department, Code Enforcement, property owners renting space, visitors   |
| <b>TIMELINE</b>     | In Progress. General guidelines are in development for short-term rental units and include safety information requirements. Additional research is needed to determine the best method for developing VMPs or RLTs for short-term rental properties. |
| <b>OUTCOMES</b>     | Incorporate fire safety, disaster preparedness, and emergency notification information into any regulations or guidance provided to short-term rentals   |

## 26. Hire additional staff dedicated to vegetation management and disaster mitigation

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|------------------------|---|
| <b>ACTION</b>          | <b>City staffing. Convert the existing part-time employee to full-time, fixed-term. Hire three additional seasonal employees to support inspections, project management, and public education in the spring and summer of 2019 and 2020.</b>  |
| <b>WHAT THIS MEANS</b> | Increased staff levels would allow for a more strategic approach to vegetation management and fire mitigation while staff continues to offer inspections. There are currently 1.5 Vegetation management specialists.  |
| <b>RATIONALE</b>       | Additional staff is needed to meet the demand for strategic fuel removal, fire road improvements, increased outreach/education, increased number of VMPs and RLTs, and vegetation inspections. Ongoing maintenance would require less staffing to assure parcels and public space remain free of hazardous fuel loads. Additional staff can also help support volunteer efforts in open space, following Marin County model.                                |
| <b>CONCERNS</b>        | Funding the position may require voters to approve additional revenue stream(s), which likely would mean FY 2020 at earliest. Fixed-term and seasonal positions result in higher rates of turnover.   |
| <b>COSTS</b>           | <p>\$\$\$ The fully burdened position would cost an additional \$76,000 annually.</p> <p>@ Recruitment, onboarding, and training can be managed by current staff.</p> <p><b>Total estimated vegetation management staffing costs would range between \$250,000 to-\$300,000 annually and decrease when fuel reduction work requires less staff. Part-time DPW staff to support fuel reduction work is estimated between \$100,000-150,000 annually.</b></p> |
| <b>STAKEHOLDERS</b>    | Fire Department, residents, businesses, public, DPW   |
| <b>TIMELINE</b>        | Research needed into best funding approach for position as well as timeline. Increasing staff hours can begin immediately with funding. Recruitment would be necessary to   |

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hire and train a seasonal vegetation inspector.

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**OUTCOMES**

Increased inspections, enforcement, fuel reduction project coordination, and customized vegetation plans. Additional staff support for communities working on Firewise designation and chipper days.

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## 27. Increase Police Ranger staffing

**ACTION**

City staffing. Provide for one full-time fixed-term police Ranger in addition to the two part-time police rangers currently employed to patrol open spaces.

**WHAT THIS MEANS**

Increased ranger capability would allow for year-round open-space patrolling for fire hazards and code violations in open spaces. Law Enforcement would continue coordination with City- and County-wide efforts. Additional funding should be allocated to SRPD to support additional evacuation drills, which was identified as an important area of improvement in the 2017 Lessons Learned report.

**RATIONALE**

A full-time ranger would allow for increased patrols, more active enforcement of code violations, a more dynamic reduction in potential ignition sources in open spaces, and the ability to support evacuation planning.

**CONCERNS**

Funding the position may require voters to approve additional revenue stream(s), which likely would mean FY 2020 at earliest. Legal constraints may impact code enforcement and policy development.

**COSTS**

\$\$\$ The cost of one fully-burdened Professional Temporary Ranger position is approximately \$250,000 per year. Measure A funding currently supports two-part time positions. Additional funding is needed to support increased staffing for open space enforcement.

@ Recruitment and training of the additional position is supported with current staffing.

Total additional annual cost to the City is estimated between \$250,000-\$350,000 and includes the addition of one full-time police ranger to the current staffing model of two-part time Ranger positions. Additional staff time dedicated to evacuation planning and community drills is also included. An additional one-time cost for an additional 4-wheel drive vehicle may be necessary.

**STAKEHOLDERS**

Police Department, Public Works

**TIMELINE**

Additional funding is necessary before recruitment can begin.

**OUTCOMES**

Increased law enforcement presence and enforcement of open space regulations. Additional staff time available to support evacuation drills.

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# Notifications and Evacuation

## 28. Reduce fuels along roadways

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | <b>City program and policy. Develop a policy to clearly direct the enforcement of current State regulations and SRMC relating to vegetation clearance along public roadways. Updates to SRMC may also be needed to update, clarify and uniformly apply standards.</b>   |
| <b>WHAT THIS MEANS</b> | Stronger and more consistent enforcement and abatement of vegetation along roadways with a focus on pre-identified primary and secondary evacuation routes. Consideration would be given to shade and maintaining San Rafael as a "Tree City USA". Fuel removal would target continuous fuels between the ground and canopy. Hardwoods and native trees would generally be excluded from these efforts. Highly flammable shrubs near roadways would require removal.  |
| <b>RATIONALE</b>       | Reduces the risk of fire ignition along roadways. Improves potential evacuation routes by limiting the fire fuel along roadways. Creates additional fuel breaks to stop and slow the spread of wildfire. Increased responder safety through improved visibility and decreased roadside fuel. Removing continuous fuels from along roadways would reduce potential fire tunnels and fire spreading from the ground into the canopy.  |
| <b>CONCERNS</b>        | Residents may be resistant to removing vegetation along roadways serving as a privacy fence for their property. Disposal of large amounts of woody biomass.   |
| <b>COSTS</b>           | \$\$\$ Additional funding is needed to support community chipper days and support for property owners removing vegetation.<br>@@ Policy can be developed with current staff reallocating time<br>@@@ Additional staff time is needed to effectively enforce policy and support community chipper days.<br><b>Total cost to the City would include support for homeowners and chipper support which may cost \$50,000-\$75,000 for the first few years, decreasingly significantly after maintenance is reached.</b> |
| <b>STAKEHOLDERS</b>    | Fire Department, Public Works, property owners  |
| <b>TIMELINE</b>        | A policy clarifying implementation of existing standards can be drafted within 60 days. Enforcement can begin immediately. Fall and Winter are slower times for vegetation inspections, allowing for a concentrated effort relating to clearance along roadways. Community support, including chipper days, cannot begin until additional funding is secured. Additional evaluation is needed to determine what, if any, SRMC changes may be needed.  |
| <b>OUTCOMES</b>        | San Rafael would have safe evacuation routes and less changes of roadside ignitions.  |

## 29. Establish a residential hillside “parking box” program

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | <b>Ordinance change and City project. Establish a residential hillside “parking box” program on narrow roadways in hillside areas. Parking would only be permitted in “boxed” areas which are established in areas that allow emergency vehicles safe access and public safe egress.</b>  |
| <b>WHAT THIS MEANS</b> | An ordinance change would establish the parking box program and require that in designated areas, street parking would only be permitted in designated parking boxes. A fire engine would drive through high problem areas to determine where street parking can safely be designated. DPW then would mark the parking boxes, and enforcement would occur via parking tickets and/or towing. Parking would only be permitted on roadways with a clear space of 10' for access and a parking area that is a minimum of 8' wide by 15' in length. In designated areas, the parking box ordinance would replace the six feet from center parking ordinance. Ways to support property owners attempting to build off-street parking pads in the impacted areas would be considered, such as waived permit fees or exemptions. Parking for open space would also be reviewed to assure parking areas are adequately defined to assure emergency access and egress. |
| <b>RATIONALE</b>       | SRMC section 5.40.080 currently prohibits parking on narrow streets unless six (6) feet from center is maintained unobstructed. This standard is confusing, hard to enforce, and does not guarantee fire engines and other large vehicles can safely access all areas of San Rafael. The “parking box” concept is easy to observe and understand for both residents and visitors. The program would assure emergency traffic can respond to daily calls for assistance and in a large-scale emergency. The easy to understand system would also make enforcement, particularly on red flag days, easier.  |
| <b>CONCERNS</b>        | Loss of parking spaces in impacted areas. Traffic congestion during implementation.   |
| <b>COSTS</b>           | <p>\$\$\$ Implementing and program maintenance would require additional funding. Simplified regulations would support strong enforcement may result in increased ticketing revenue.</p> <p>@@ The ordinance and program can be implemented with existing staff reallocating time. Contractors may need to be considered based on other concurrent priorities.</p> <p><b>Total cost to the City is estimated to be \$10,000-\$25,000 initially, and \$1,500 to repaint every three years.</b></p>  |
| <b>STAKEHOLDERS</b>    | Fire Department, Public Works, Parking Enforcement, Residents   |
| <b>TIMELINE</b>        | Within 180 days, a draft ordinance and proposed pilot project would be developed. Implementation would be dependent on funds, staff, and project prioritization. A full implementation could be completed in FY 2020.   |

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**OUTCOMES**

Narrow roads in San Rafael would have clearly defined safe parking areas, allowing for emergency vehicle access and public evacuation.

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### 30. Improve public emergency alerting capabilities and policies

**ACTION**

City project and County policy. In coordination with Marin County, develop a proactive policy for the use of Wireless Emergency Alerts (WEA) during emerging situations. Establish templates that clearly communicate risk, requested action, and sources for follow-up information. Enhance internal capabilities.

Currently, the City of San Rafael relies on Marin County for non-opt-in messaging. The City's internal ability to message is limited to SRPD's Nixle subscription, which only reaches those who opt-in for messaging. This item has two interacting parts; 1) a clear policy for when and how San Rafael can request the County to issue emergency alerts on its behalf and; 2) Staff's recommendation to upgrade the internal ability to send messages that do not require users to opt-in. In both situations, policies, templates, and coordination would be needed.

**WHAT THIS MEANS**

Considerations would also be given to other alerting methods including NOAA weather radios, sirens, or coordinated community efforts. Sirens may be considered to alert residents in open space of an active threat. Sirens are not designed to be heard indoors and therefore would not be considered for citywide implementation as a primary alerting tool. Plans and policies would be developed to better inform the public of red flag and high fire risk days and any associated access changes, such as closures of open space. Plans would also improve coordination between alerting authorities and all news providers, including TV, Radio, and print. Expansion of Neighborhood Response Groups would strengthen connections and peer-to-peer communication.

**RATIONALE**

Assure policy and templates in place empower WEA message to be sent if threat exists. Reduce the likelihood that a message would be delayed or won't be sent. Reduce risk of loss of life. WEA messaging was NOT issued during the North Bay fires of 2017 or the Butte County Camp Fire in 2018. Internally the City needs to improve its messaging capabilities, including access, training, and policies, to assure communication with residents in time of crisis. While broad-based alerting tools, such as sirens or coordinated church bell rings can be considered, it is imperative that each individual register for alerts and have a local alerting redundancy, such as a weather radio. Improvements to emergency notifications and Red Flag warnings is a consistent theme in the 2017 *Lessons Learned* report. Senate Bill 833 and Assembly Bill 1877 established new alert, warning, and planning requirements for State, county, and local officials.

**CONCERNS**

Over-messaging can reduce the impact of an essential message. Incomplete or inaccurate messaging may cause panic or undue traffic congestion during evacuation. Messaging may overreach to nonimpacted areas. Coordination between County and

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|                     |   |
|---------------------|---|
|                     | City alerting authorities is necessary. Develop plan and strategies to meet the needs of those with Access and Functional Needs (AFN) to include mobility limitations and communication or language barriers.   |
| <b>COSTS</b>        | <p>\$\$\$ To allow San Rafael the direct ability to message, without requiring a user opt-in, an annual \$6,000 increase in SRPD's Nixle subscription is expected. Cost share program between the City and residents to obtain NOAA weather radios should be considered.</p> <p>@@ Efforts can be accomplished with existing staff reallocating time. The objective would require coordination between San Rafael PD, San Rafael Fire, and Marin County.</p> <p><b>Total Cost to the City is expected to be about \$6,000 annually for the advanced Nixle technology and a \$2,000 one-time cost help low-income residents obtain weather radios.</b></p> |
| <b>STAKEHOLDERS</b> | County OES, MCSO, SROES, SRPD, SRFD, Residents  |
| <b>TIMELINE</b>     | In progress. A streamlined policy would rely on agreement from Marin County Sheriff's Office. Updating the Nixle subscription can be done within days of an identified funding source.  |
| <b>OUTCOMES</b>     | San Rafael has ability to message all residents in the event of an emergency.   |

### 31. Increase capability for early fire warnings and detection

|                        |  |
|------------------------|--|
| <b>ACTION</b>          | City program and policy. Increase San Rafael's access and control to partner technology, including cameras with heat detection and micro-weather stations. Install two additional cameras to cover the highest fire risk areas in San Rafael. Assure detected wildfires are promptly reported to the National Weather Service to promote weather radio announcements.  |
| <b>WHAT THIS MEANS</b> | PG&E has and continues to install cameras and micro-weather stations to monitor fire and fire weather conditions. Only a limited number of County Fire employees can currently control the view on the cameras. The live stream of the existing cameras is publicly available at <a href="http://www.alertwildfire.org/northbay/">http://www.alertwildfire.org/northbay/</a> . To increase the camera coverage of San Rafael, new cameras could be installed on San Rafael Hill and San Pedro Ridge. San Rafael Fire staff could have direct control of the view and zoom of these additional cameras. |
| <b>RATIONALE</b>       | Cameras would allow for increased ability to monitor open space, which in turn could mean early wildfire identification and response, increased knowledge of weather conditions impacting fire spread, and increased firefighter safety. The ability to directly control cameras monitoring San Rafael increases internal capabilities and reduces the   |

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|                     | delay and reliance on third parties.   |
| <b>CONCERNS</b>     | Access to monitoring technology is determined through partnerships. Ownership and space on existing towers impact possible installation locations.   |
| <b>COSTS</b>        | <p>@ Efforts are supported with currently allocated staff time. No significant impact on other programming is anticipated.</p> <p>\$\$ Expanding the existing camera network with a greater focus on San Rafael would have additional costs. The camera's costs about \$5,000 each. PG&amp;E grants may be available to help cover the costs of the cameras.</p> <p><b>One-time costs to the City may total between \$12,000-\$20,000 and annual maintenance costs around \$1,000.</b></p> |
| <b>STAKEHOLDERS</b> | PG&E, Fire Department, Marin County Fire   |
| <b>TIMELINE</b>     | Discussions to install new cameras and/or gain further access to existing camera are ongoing. Installation of new cameras would require funding and an agreement with the site owners in the desired locations. Improved coordination with wildfire monitoring partners and new technology would be in place in the Summer of 2019.  |
| <b>OUTCOMES</b>     | San Rafael has direct access to early warning technology and improved response times.  |

### 32. Review and expand evacuation plans, incorporating areas of refuge, and support neighborhood evacuation drills.

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | City project. Review Countywide evacuation plans and expand existing plans to address San Rafael's unique needs, neighborhoods and resources, including possible water evacuations.   |
| <b>WHAT THIS MEANS</b> | Additional evacuation planning would establish additional redundancies and potentially reduce the burden on a single egress artery during an emergency. These efforts would consider evacuating to areas of refuge during a fast-moving wildfire. Maps of evacuation routes and potential safe areas would be shared with residents. Expanded plans would better address the unique needs of the AFN community, to include limited mobility, communication and language limitations, and transportation independence. Coordination with Waze, Google Maps, and other GPS providers would be considered. City resources, including the Fire Department, Police Department, and OES would help neighborhoods develop individuated evacuation plans and support community organized evacuation drills. |
| <b>RATIONALE</b>       | San Rafael has multiple areas with limited egress options, due to water, open space and narrow roads. San Rafael should review alternate options for evacuation, including establishing agreements with Golden Gate Transit and Dutra to support a water  |

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|                     | evacuation. Providing residents with more detailed information about existing and expanded evacuation plans would allow residents to be better informed and prepared.   |
| <b>CONCERNS</b>     | Evacuations are dynamic and situation dependent, making comprehensive planning ineffective. Efforts may create false sense of security or avoidance of individual planning.   |
| <b>COSTS</b>        | <p>\$\$\$ Creating an evacuation annex to the City Emergency Response Plan would require a contractor or additional staff. Support of evacuation drills would require addition Police Department staff time.</p> <p>@@@ Efforts would require additional staff time.</p> <p><b>Total Cost to the City is estimated to be \$50,000 one-time costs, and reoccurring costs of \$10,000 annually.</b></p> |
| <b>STAKEHOLDERS</b> | Fire Department, Police Department, Golden Gate Transit, Dutra, Marin County, Residents   |
| <b>TIMELINE</b>     | Planning efforts are ongoing. Water evacuation planning can be established throughout 2019 with collaboration from partners. Updated evacuation plans would be incorporated in the City Emergency Operations Plan (EOP).  |
| <b>OUTCOMES</b>     | Improved public awareness of evacuation routes and areas of refuge.   |

### 33. Assure safe and resilient critical infrastructure

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | In partnership with utility providers, determine best method(s) to reduce fuels around critical infrastructure such as power poles, power lines, and other combustible infrastructure. Work to remove fuels from roadways and primary escape routes. Work with all utility providers to assure they are protecting their infrastructure from wildfires and have redundancies in place to reduce gaps in service delivery.                                   |
| <b>WHAT THIS MEANS</b> | The City would initiate an effort to identify the best approaches to vegetation management activities around critical infrastructure. This would include coordination with PG&E and Marin Municipal Water District (MMWD). Potential ordinance changes would be evaluated. Efforts would focus on reducing likelihood of damage to infrastructure, assuring access to infrastructure, and reducing likelihood of infrastructure contributing to a wildfire. |
| <b>RATIONALE</b>       | Reduce the risk of fire ignition and protect critical infrastructure from fire. Share burden of protecting infrastructure with property owners and utility providers. Reduce the likelihood and impacts of utility outages and road closures during a disaster.   |

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| <b>CONCERNS</b>     | Property owner confusion regarding the responsibility of maintaining clearance around the service lines from the pole to the structure. Esthetics of vegetation and tree trimming and removal. Difficult to determine which homeowner is responsible for the cost of tree trimming. Jurisdictional issues may create challenges.  |
| <b>COSTS</b>        | <p>\$\$\$ Funding needs would depend on partnerships with PG&amp;E and other agencies responsible for maintaining infrastructure. Support for residents removing fuel around infrastructure on their property would require additional funding.</p> <p>@@ A policy can be developed with current staff reprioritizing projects.</p> <p><b>Total cost to City is included in vegetation work and additional staffing requests in Objective 26.</b></p> |
| <b>STAKEHOLDERS</b> | Fire Department, Public Works, Community Development, property owners, PG&E   |
| <b>TIMELINE</b>     | In Progress. Guidelines for fuel reduction around critical infrastructure are being established and coordinated with utilities. Outreach and education can begin within 30 days of policy being finalized, dependent on staff time. Programs to support residents would be dependent on securing additional funding.  |
| <b>OUTCOMES</b>     | San Rafael critical infrastructure would be better protected and less likely to contribute to a wildfire.   |

### 34. Assure that appropriate staff can send and receive emergency alerts

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | <p>City program. Establish schedule to assure that all appropriate San Rafael staff members routinely issue Everbridge test messages. Maintain current database of all staff contact information to assure communication with staff during an emergency.</p>  |
| <b>WHAT THIS MEANS</b> | <p>Staff with Everbridge/alerting capability would be required to send test messages at least quarterly to assure access and proficiency. Staff would have templates and training materials to help develop proficiency. Citywide effort is needed to assure correct cell phone numbers are on file and can be used to reach City staff in an emergency. Routine message tests would help maintain an accurate database. Tools include Everbridge (managed by Marin County OES) and upgraded Nixle.</p> |
| <b>RATIONALE</b>       | <p>All staff with the authority to issue alerts must be able to log in and navigate the system to send time-sensitive information. A centralized system to communicate with staff in an emergency is necessary to confirm staff safety and communicate closures and requested actions.</p>  |

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| <b>CONCERNS</b>     | Potential to issue test messages broadly. Lack of participation. Ongoing database management is time consuming.   |
| <b>COSTS</b>        | \$ Program can be implemented with current funding.<br>@@ Program would require multiple staff members reallocate time for testing and database management.   |
| <b>STAKEHOLDERS</b> | San Rafael Staff with emergency alert capabilities (about 10 people), Department Directors, Human Resources, All City staff   |
| <b>TIMELINE</b>     | A ‘how to’ guide is already created. Once City management agrees to the value of the tests, a routine test schedule can be developed and implemented. Maintaining an accurate alerting database is an ongoing process that would require an established process. Tests in Nixle are dependent on system update. |
| <b>OUTCOMES</b>     | Designated City staff would be confident in their ability to internally message during an emergency. All staff would be able to receive messages in an emergency.   |

### 35. Assure that City staff can communicate during an emergency

|                        |  |
|------------------------|--|
| <b>ACTION</b>          | City program. Determine and implement the best method to assure City staff with assigned emergency response duties can use cell phones and landlines. This would require a combination of Wireless Priority Service (WPS), First Net, and Government Emergency Telecommunications Service (GETS).        |
| <b>WHAT THIS MEANS</b> | Complete a cost-benefit analysis of using WPS, Verizon First Responder, and GETS options. Register all Fire, PD, DPW field staff, building inspectors, and EOC staff with WPS and/or Verizon priority accounts. A policy for personal cell phones registered on the system would need to be established. |
| <b>RATIONALE</b>       | The ability to communicate via cell phone after a disaster is negatively impacted by infrastructure damage and peak usage. There are tools available to help cell phone providers prioritize responder traffic. Acting now would limit the impact on communications during an emergency.                 |
| <b>CONCERNS</b>        | Staff time to implement. Data management and maintenance of multiple tools.  |
| <b>COSTS</b>           | \$ There is no cost directly associated with these programs.<br>@@ Staff time would be needed to initially enroll all designated phones, estimated to be about 200. Routine maintenance would be required.   |



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| <b>STAKEHOLDERS</b> | Impacted agency staff, Digital Services and Open Government  |
| <b>TIMELINE</b>     | WPS access can be requested immediately with cell phone account information. More research is needed to understand the new Verizon responder accounts and potential costs. GETS access can be requested immediately after determining additional needs. Usage policy can be developed within 120 days. |
| <b>OUTCOMES</b>     | City staff would have redundant and prioritized methods for communication in an emergency  |

### 36. Assure that residents can evacuate through garage doors if power is out

|                        |   |
|------------------------|---|
| <b>ACTION</b>          | City program. Develop program to encourage the implementation of garage door battery backup systems. Consider cost share programs with low- income individuals.   |
| <b>WHAT THIS MEANS</b> | San Rafael Code Enforcement would need to start enforcing updated safety requirements for automatic garage doors. San Rafael Fire would immediately begin incorporating garage door functionality into evacuation and wildfire preparedness material. San Rafael could consider applying this standard to rental properties and/or encouraging battery back-up installation on legacy garage doors. The City should consider a retroactive requirement or other method to increase back-up battery systems.   |
| <b>RATIONALE</b>       | Power failures, impacting the functionality of automatic garage doors, can make evacuation by car impossible during an emergency. Effective, July 1, 2019, Senate Bill 969 requires all new and replacement automatic garage doors to have a backup battery or other means that assures the garage door can open in the event of a power failure. The new law does not have a retroactive requirement. Public education is necessary to alert people of the risk and relatively low-cost solutions available, as not everyone has the physical ability to open a garage door manually. Garage door failure was noted in the 2017 <i>Lessons Learned</i> report. |
| <b>CONCERNS</b>        | The update to Health & Safety Code Section 19891 and addition to Section 19892 do not retroactively apply or protect people with existing garages. Outreach can help inform, but not require adherence to stronger safety requirements. Assure outreach addresses the needs of those with Access and Functional needs, including limited mobility.  |
| <b>COSTS</b>           | @@ Staff time to develop and coordinate information would require some time   |

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|---------------------|---|
|                     | <p>reallocation</p> <p>\$\$ Educational materials and outreach would require some reprogramming but can largely be incorporated into other wildfire prevention and protection outreach.</p> <p><b>Total costs to the City are included in outreach materials, but could include a cost share program with low income residents totaling \$2,000-\$10,000.</b></p> |
| <b>STAKEHOLDERS</b> | Fire Department, Code Enforcement, Property owners.   |
| <b>TIMELINE</b>     | The Senate Bill requires that garage door installations and replacements on or after July 1, 2019 meet the new requirements. Education and outreach about this new requirement should begin immediately.  |
| <b>OUTCOMES</b>     | Increased community awareness and implementation of garage door backup batteries or other means assuring evacuation is possible in a power outage.  |

### 37. Prevent potential entrapments by requiring 2 gates in any fence in designated areas

|                        |  |
|------------------------|--|
| <b>ACTION</b>          | <b>Ordinance change. Update building code to require new and replacement fences have two gates. Existing fences within designated single-lane access parcels must install 2 gates.</b>   |
| <b>What this means</b> | Designated parcels would be required to have more than one means and direction of egress in the event of a wildfire or other emergency. Fences over a designated height would be required to have two gates installed, accessing different cardinal directions. This would include new fences and replaced fences. Staff would consider programs to help low-income residents install an additional gate in areas with limited egress. |
| <b>Rationale</b>       | This would help assure that multiple escape routes exist in the most vulnerable areas and provide ease of access for firefighters.   |
| <b>Concerns</b>        | Cost burden for property owners not currently up to the new code. Enforcement.   |
| <b>Costs</b>           | <p>\$ Ordinance change can be accomplished with current funding.</p> <p>@@ Public education and ordinance enforcement would require reprioritization of staff time.</p>  |
| <b>Stakeholders</b>    | Fire Department, Code Enforcement, property owners   |
| <b>Timeline</b>        | An updated ordinance, incorporating stakeholder input, can be brought to City Council within 160 days. Updates may be incorporated into the 2019 planned code updates.   |

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**Outcomes**

Fenced properties would have additional means of egress, benefiting them, and potential neighbors during an evacuation.

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### 38. Maintain and expand coordination of wildfire prevention and response planning with Marin County, other Marin jurisdictions, Marin County Fire, FIRESafe MARIN, and neighboring landowning partners.

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|------------------------|---|
| <b>ACTION</b>          | Continue and expand the collaborative work throughout Marin County to address the risk of wildfire. Review and consider any wildfire mitigation plan proposed by Marin County and other land-managing neighbors. Assure prevention efforts address needs of unincorporated areas.   |
| <b>WHAT THIS MEANS</b> | Coordinate mitigation work, and fire road repairs in bordering areas. Explore opportunities for collaboration that provide benefits of scale and efficiency. Any future guidance or regulations brought forth by the County would be reviewed and considered for local adoption. Coordinate 2019 countywide fire and building code updates with County and other cities and towns.  |
| <b>RATIONALE</b>       | Wildfire and disaster do not respect jurisdictional boundaries. A fire starting in one jurisdiction can spread and impact many others. Continuing and expanding current collaboration would help assure efforts are as effective as possible. Similar fire and building ordinances would help simplify outreach and education while allowing for unique local adjustments. When practical, sharing resources may reduce costs through economies of scale. |
| <b>CONCERNS</b>        | Challenges of consensus building. Speed of implementation. Impact on direct local control, responsibility and accountability.   |
| <b>COSTS</b>           | @ Minimal costs associated with staff time dedicated to coordination.<br>\$ Potential cost savings related to use of shared resources for fuel reduction and education and outreach.  |
| <b>STAKEHOLDERS</b>    | San Rafael Fire Department, Marin County, Marin County Fire, FIRESafe MARIN, SRAs and CSAs  |
| <b>TIMELINE</b>        | Ongoing. Updates to fire and building codes would be adopted late in 2019.  |
| <b>OUTCOMES</b>        | Provide effective wildfire mitigation to San Rafael. Benefit from economy of scale and collaboration.   |

Table 2 - Objective and Impact Summary

| Objective   | Exists, Plan expands | \$ | \$\$ | \$\$\$ | Additional Staff Needed |
|---|----------------------|----|------|--------|-------------------------|
| 1. Eliminate highly flammable vegetation near structures and roadways throughout San Rafael   | X                    |    |      | X      | X                       |
| 2. Apply vegetation management and defensible space standards citywide  |                      |    |      | X      | X                       |
| 3. Reduce ember ignitions within immediate zones to prevent structure ignitions through enhanced standards and support                          |                      |    |      | X      | X                       |
| 4. Expand goat grazing for vegetation maintenance   | X                    |    |      | X      |                         |
| 5. Establish additional fuel interruption zones   | X                    |    |      | X      | X                       |
| 6. Improve public education regarding fire-safe landscaping and living with wildfire  | X                    |    | X    |        | X                       |
| 7. Establish more Firewise communities in San Rafael  | X                    | X  |      |        |                         |
| 8. Reduce hazardous fuels through an abatement process on privately owned unimproved lots and within 200 feet of a structure or 20 feet roadway |                      |    | X    |        |                         |
| 9. Effectively coordinate the removal of vegetative debris  | X                    |    |      | X      |                         |
| 10. Engage Community Emergency Response Team (CERT) members, Neighborhood Response Groups (NRGs) and other volunteers in fire prevention        |                      | X  |      |        |                         |
| 11. Reengage volunteer "Broom Pull Days"  |                      |    |      | X      | X                       |
| 12. Review and update WUI map   |                      | X  |      |        |                         |
| 13. Adopt Public Resource Code 4290 and 4291  | X                    |    |      | X      | X                       |
| 14. Develop new efforts, solutions, and resources dedicated to wildfire prevention and protection   | X                    |    | X    |        |                         |
| 15. Immediately seize ignition sources at encampments and remove encampments in open space as quickly as possible                               |                      |    |      | X      | X                       |
| 16. Reduce likelihood of ignition in undeveloped land   | X                    |    |      |        | X                       |

| Objective  | Exists,<br>Plan<br>expands | \$ | \$\$ | \$\$\$ | Additional<br>Staff<br>Needed |
|--|----------------------------|----|------|--------|-------------------------------|
| 17. Explore opportunities in Fire and Building Code updates to increase use of fire-resistant materials and application of CA Fire Code 7A | X                          |    |      | X      |                               |
| 18. Eliminate fire hazard associated with shake and wooden roofs   |                            |    |      | X      |                               |
| 19. Develop comprehensive San Rafael hazardous vegetation study and mitigation measures  |                            |    |      | X      |                               |
| 20. Complete an analysis of fire roads and strategic fuel breaks   |                            |    |      | X      | X                             |
| 21. Increase the number of hardened homes in San Rafael  |                            | X  |      |        |                               |
| 22. Improve development and implementation of Vegetation Management Plans (VMPs) and create new Resilient Landscape Templates (RLTs) and.  | X                          |    | X    |        |                               |
| 23. Increase the number of completed Vegetation Management Plans (VMP)s and Resilient Landscape Templates (RLTs).                          | X                          | X  |      |        |                               |
| 24. Improve the public's fire risk awareness with sign improvements and installation   | X                          |    |      | X      |                               |
| 25. Reduce fire risk and keep visitors using short-term rentals safe   |                            | X  |      |        |                               |
| 26. Hire additional staff dedicated to vegetation management and disaster mitigation   | X                          |    |      | X      |                               |
| 27. Increase Police Ranger staffing  | X                          |    |      | X      |                               |
| 28. Reduce fuels along roadways  | X                          |    |      | X      | X                             |
| 29. Establish a residential hillside "parking box" program   |                            |    |      | X      | X                             |
| 30. Improve public emergency alerting capabilities and policies  | X                          |    |      | X      |                               |
| 31. Increase capability for early fire warnings and detection  | X                          |    | X    |        |                               |
| 32. Review and expand evacuation plans,  | X                          |    |      | X      | X                             |

| Objective   | Exists,<br>Plan<br>expands | \$ | \$\$ | \$\$\$ | Additional<br>Staff<br>Needed |
|---|----------------------------|----|------|--------|-------------------------------|
| incorporating areas of refuge, and support neighborhood evacuation drills.  |                            |    |      |        |                               |
| 33. Assure safe and resilient critical infrastructure   |                            |    |      | X      |                               |
| 34. Assure that appropriate staff can send and receive emergency alerts   |                            | X  |      |        |                               |
| 35. Assure that City staff can communicate during an emergency  | X                          | X  |      |        |                               |
| 36. Assure that residents can evacuate through garage doors if power is out   |                            |    | X    |        |                               |
| 37. Prevent potential entrapments by requiring 2 gates in any fence in designated areas   |                            | X  |      |        |                               |
| 38. Maintain and expand coordination of wildfire prevention and response planning with Marin County, other Marin jurisdictions, Marin County Fire, FIRESafe MARIN, and neighboring landowning partners. | X                          | X  |      |        |                               |

Table 3 - New and Draft plan Objective number Cross Walk

| # | Objective   | Draft # |
|---|---|---------|
| 1 | Eliminate highly flammable vegetation near structures and roadways throughout San Rafael                            | 1       |
| 2 | Apply vegetation management and defensible space standards citywide   | 2       |
| 3 | Reduce ember ignitions within immediate zones to prevent structure ignitions through enhanced standards and support | 4       |
| 4 | Expand goat grazing for vegetation maintenance  | 15      |
| 5 | Establish additional fuel interruption zones  | 32      |
| 6 | Improve public education regarding fire-safe landscaping and living with wildfire                                   | 11      |

| #  | Objective  | Draft # |
|----|--|---------|
| 7  | Establish more Firewise communities in San Rafael  | 22      |
| 8  | Reduce hazardous fuels through an abatement process on privately owned unimproved lots and within 200 feet of a structure or 20 feet roadway | 34      |
| 9  | Effectively coordinate the removal of vegetative debris from public and private property   | 37      |
| 10 | Engage Community Emergency Response Team (CERT) members, Neighborhood Response Groups (NRGs) and other volunteers in fire prevention         | 33      |
| 11 | Reengage volunteer “Broom Pull Days”   | 35      |
| 12 | Review and update WUI map  | 23      |
| 13 | Adopt Public Resource Code 4290 and 4291   | 3       |
| 14 | Develop new efforts, solutions, and resources dedicated to wildfire prevention and protection  | 7       |
| 15 | Immediately seize ignition sources at encampments and remove encampments in open space as quickly as possible.                               | 8       |
| 16 | Reduce likelihood of ignition in undeveloped land  | 5       |
| 17 | Explore opportunities in Fire and Building Code updates to increase use of fire-resistant materials and application of CA Fire Code 7A       | 24      |
| 18 | Eliminate fire hazard associated with shake and wooden roofs   | 6       |
| 19 | Develop comprehensive San Rafael hazardous vegetation study and mitigation measures  | 31      |
| 20 | Complete an analysis of fire roads and strategic fuel breaks   | 14      |
| 21 | Increase the number of hardened homes in San Rafael  |         |
| 22 | Improve development and implementation of Vegetation Management Plans (VMPs) and create new Resilient Landscape Templates (RLTs).            | 17      |
| 23 | Increase the number of completed Vegetation Management Plans (VMP)s and Resilient Landscape Templates (RLTs).                                | 26      |
| 24 | Improve the public’s fire risk awareness with sign improvements and installation   | 36      |



| #  | Objective   | Draft # |
|----|---|---------|
| 25 | Reduce fire risk and keep visitors using short-term rentals safe  | 29      |
| 26 | Hire additional staff dedicated to vegetation management and disaster mitigation  | 9       |
| 27 | Increase Police Ranger staffing   | 10      |
| 28 | Reduce fuels along roadways   | 19      |
| 29 | Establish a residential hillside “parking box” program  | 25      |
| 30 | Improve public emergency alerting capabilities and policies   | 13      |
| 31 | Increase capability for early fire warnings and detection   | 12      |
| 32 | Review and expand evacuation plans, incorporating areas of refuge, and support neighborhood evacuation drills.  | 30      |
| 33 | Assure safe and resilient critical infrastructure   | 20      |
| 34 | Assure that appropriate staff can send and receive emergency alerts   | 18      |
| 35 | Assure that City staff can communicate during an emergency  | 21      |
| 36 | Assure that residents can evacuate through garage doors if power is out   | 16      |
| 37 | Prevent potential entrapments by requiring 2 gates in any fence in designated areas   | 28      |
| 38 | Maintain and expand coordination of wildfire prevention and response planning with Marin County, other Marin jurisdictions, Marin County Fire, FIRESafe MARIN, and neighboring landowning partners. |         |

City Council Meeting Correspondence

March 18, 2019

**5b. Wildfire Protection and Prevention Action Plan**

Resolution Approving the Wildfire Protection and Prevention Action Plan (FD)

*Recommended Action – Adopt Resolution*

| <b>DATE OF CORRESPONDENCE</b> | <b>NAME</b>     | <b>REPRESENTATIVE OF</b>                               | <b>COMMENTS</b>                              |
|-------------------------------|-----------------|--|--|
| 2/24/19                       | Kelly London    | Loch Lomond Neighborhood Association                   |  |
| 3/1/19                        | Kevin Hagerty   | Glenwood Homeowners Association                        |  |
| 2/16/19                       | Gregory Poulos  | San Rafael resident                                    |  |
| 3/3/19                        | Gregory Poulos  | San Rafael resident                                    |  |
| 2/27/19                       | Paul Minault    | Dominican Black Canyon Neighborhood Firewise Committee |  |
| 3/13/19                       | Victoria DeWitt |  |  |
| 2/11/19                       |                 |  | Comments from community meeting at City Hall |
|                               |                 |  | Comments from online form on City website    |

----- Original Message -----

From: Kelly LONDON [REDACTED]

To: [REDACTED]

Date: February 24, 2019 at 8:00 PM

Subject: SRA-LRA Anomaly

Dear Chief Gray and Quinn,

I started working on a draft recommendation to the City of San Rafael and its Fire Department to push for the prioritization of the SRWPPP Objectives; particularly a cooperative effort to create a ridge line Strategic Fire Break above our neighborhoods along the East San Rafael Peninsula.

In order to do so, I needed to do a deep dive into the jurisdictions involved and found a significant anomaly. Both San Pedro Mountain and a majority of China Camp State Park are listed and shown as part of the State Responsibility Area (SRA;) yet for unknown reasons, the limit of the China Camp SRA is at the ridge line and excludes all of the downslope drainages and the dogleg abutting our neighborhoods.

In addition, China Camp is identified by the State as having several trees infected with Sudden Oak Death (SOD) exacerbating the threat of wildfire.

The CalFire Fire Resource and Assessment Program (FRAP) maps for Marin County, Fire Hazard Severity Zones in SRA and Very High Fire Hazard Zones in LRA (Local Responsibility Area,) both show all the portions of China Camp State Park south of the ridge line to be incorporated into the City of San Rafael.

Until this anomaly is explained we cannot prepare a multi-jurisdictional action plan to create the desired Strategic Fire Break.

Please let us know if there are cooperative agreements with CalFire regarding the southern slopes of China Camp State Park and if so, we would like access to those agreements for review. If there are no fire services agreements that split China Camp State Park, please let us know what jurisdictional boundaries you recognize, seek an explanation for this anomaly reflected in official CalFire mapping, and share it with us.

Thank you,

Kelly London, President  
Loch Lomond HOA

[REDACTED]

# Glenwood Homeowners Association

## Comments on the Proposed San Rafael Wildfire Prevention and Protection Action Plan

Glenwood Homeowners Association (GHA) of San Rafael through its Ready Glenwood Committee has been working with neighborhood residents on strategies to prepare for disasters. We have also been working with the City's Fire Department and surrounding neighborhood Homeowner Associations in achieving this goal.

We are glad that the City is taking an aggressive approach to the wildfire hazard and that the San Rafael Fire Department has provided the first draft of the San Rafael Wildfire Prevention and Protection Action Plan (SRWPPAP) and asked for comments. The GHA and its Ready Glenwood Committee believe this is a good first step that builds on previous strategies and we offer the following comments:

As an overview of wildfire risks and prevention measures, the 37 items listed on the Plan are reasonable and logical. Nevertheless, we consider the document to be more of an outline for a plan, rather than a detailed, structured plan of action. It is a collection of prepared and proposed ordinances, including a number of immediate and planned projects. Although the document is a comprehensive list of issues, the priorities are not clearly stated. It would help to clarify the plan's priorities and how they will be addressed.

We suggest that City focus their efforts on accomplishing a smaller number of items from the list of 37 objectives. Once those initial items are completed or well under way, additional items could be added to the City's Wildfire Prevention Plan. As items are selected in moving forward, it is important to recognize the need to establish the priorities, agree on a process, assemble the key stakeholders, and then proceed with the action plan.

### **The Glenwood Neighborhood list of Wildfire Prevention priorities include:**

- Keep residents focused on creating **defensible space** around their homes and make sure they have the information they need and whatever help is necessary to accomplish this paramount objective.
- Ensure homeowners are aware of the best methods to **harden homes against ember-impingement**.
- **Develop a reliable evacuation plan** and coordinate with adjacent neighborhoods and the City/County. Communicate the evacuation plan to all parties.
- Ensure clear **access to fire roads** in the WUI surrounding the neighborhoods and **create defensible fire breaks** in conjunction with that effort. Recognize and work through any jurisdictional issues that might impede these objectives.

We also believe it is important to acknowledge the current 2017 Marin County Community Wildfire Protection Plan, and to provide clarification as to how the proposed San Rafael Plan would work with the County Plan. We understand that the County Plan includes a risk assessment and has identified the areas that constitute the highest risk for life and property within the county, using the most recent data

and fire models (shown in Figure 19 of the CCWP). We also understand that most of east San Rafael, even those areas in the WUI (Henry Barbier City Park and China Camp State Park) are not among those areas noted in the county plan in Figure 19. Elsewhere in the county plan (Figures 16-18, and Table 15), east San Rafael is ranked Very High for wildfire risk. (The County plan can be found at <http://www.firesafemarin.org/cwpp>).

Consequently, we believe that SRFD and the City should coordinate with the County to ensure that the assessments are consistently documented and implemented in both the City's and County's planning.

We suggest that the SRFD provide additional information for each of the chosen measures, including:

- what the measure is meant to accomplish
- who is responsible for the measure (city departments, citizens, etc.)?
- how the measure is to be implemented and timeframe to do so, estimated cost, and who is to bear the cost and whether there is a potential for subsidy if the costs fall on those for whom it is a burden

These are real concerns, and if not well-explained, can result in pushback, rather than buy-in by homeowners and renters who may be adversely impacted. For example, some of our neighborhood residents have expressed concerns the City may pass legislation requiring them to remove certain types of vegetation from their property or make changes to their houses (new roofs, vents, etc.) that they cannot afford or have the physical ability to accomplish.

We believe the City needs to consider and address these questions:

- How and by when does the City intend to set the priorities to implement the objectives, and how will this be announced to the community?
- What is the communication process? Public meetings to follow, mailings, Q/A sessions?
- Does a detailed plan with dates, steps to implement, dependencies, and contingencies, exist currently? Is one underway?

The GHA and Ready Glenwood Committee support the City of San Rafael Wildfire Prevention and Protection Action in concept, and we are encouraged to see the momentum accelerating to address the wildfire risks to our community. We intend to work collaboratively with the City, SRFD, and all San Rafael neighborhoods, to implement the plans as they are developed. For that effort to become most effective, we would like to see more structure in the plan and its communication to the San Rafael neighborhoods.

Thank you very much for the opportunity to participate in the process.

Kevin Hagerty  
President, Glenwood Homeowners Association

Roger Byars  
Steve Ziman  
Members of Ready Glenwood Steering Committee

March 1, 2019

GREGORY W. POULOS

February 16, 2019

City of San Rafael

The following comments are submitted in response to the City of San Rafael's proposed "Wildfire Prevention and Protection Plan" ("plan") as it is currently drafted for public comment on February 11, 2019. Given the complexity of the issues presented, this initial letter is only a partial response to the plan. Additional comments will be submitted under separate cover.

EXECUTIVE SUMMARY OF COMMENTS:

The plan as currently drafted is ill-conceived, overly broad, largely unnecessary and extraordinarily expensive. If implemented it would require the removal of thousands of trees and shrubs from around the homes and streets of San Rafael while raising property taxes, city fees and homeowner insurance rates. At least 22 of the 37 proposals require "additional funding sources". In addition, the plan, if implemented, would impose unwarranted and unnecessary burdens on home sellers including making some homes "ineligible" for resale without expensive upgrades and creation of a "Vegetation Management Plan" (VMP). Even remodeling a small portion of a home or building (even in the business district) would require creation and submission of a VMP and bringing of the entire structure up to Statewide fire code standards.

Another problem with the plan is that it proposes to make every home and building subject to State laws that are specifically written only for "Wildland Urban Interface" properties. This would result in insurance rate increases for every home or building in San Rafael. It does not make sense to take State laws designed to apply to specific remote environments and make them wholesale applicable within a modern city.

COMMENTS BY SECTION OF PROPOSED PLAN:

**SECTION 2:** This section proposes to amend the City Code so that all requirements in the current Wildland-Urban Interface (WUI) provisions of the Fire Code apply to *every parcel in the City*.<sup>1</sup> There are two obvious problems and one potentially significant "hidden" cost. First, the summary provided by the City does not tell anyone what those current standards are. Second, as noted above, it is clear that the City plans to adopt ordinance changes but hasn't said what those changes are. Before adopting an ordinance change the specific wording of the proposed change must be included in the City Council's proposal and the public given the opportunity to comment on the precise wording.

One change that is partially spelled out is that the City intends to garner more income through "additional building permit fees." The building permit fees are already extraordinary in San Rafael so

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<sup>1</sup> The current WUI standards can be found in Chapter 4.12 of the Municipal Code by following this link. [https://library.municode.com/ca/san\\_rafael/codes/code\\_of\\_ordinances?nodeId=TIT4FI\\_CH4.12WIBAIN\\_VEMAST](https://library.municode.com/ca/san_rafael/codes/code_of_ordinances?nodeId=TIT4FI_CH4.12WIBAIN_VEMAST)

adding to them will be burdensome and make San Rafael housing even less affordable. Before adopting this proposal the City must spell out exactly what the proposed fees will be and allow public comment.

Reviewing the current WUI standards in Chapter 4.12 of the San Rafael Municipal Code there are numerous provisions that should NOT be made applicable to every home in San Rafael. These include:

- a. Homeowners must maintain 100' of "defensible space" around any structure on the property including houses and sheds. Creating "defensible space" around homes in well established neighborhoods like Gerstle Park, Loch Lomond, Glenwood, Peacock Gap, Dominican, etc. would result in a massive reduction in trees and substantially change the character of the City and its neighborhoods. It would also impose a very high cost of homeowners. Tree removal by professional services can run into the thousands of dollars.
- b. The current WUI plan requires that trees be trimmed either 1/3 of the way up from the ground or 10' from the ground. This would again impose a significant cost of homeowners and change the character of the neighborhoods.
- c. Remove all "combustible vegetation" (anything that "ignites readily and burns intensely"). See comments under Section 4 (below). In summary almost every home in San Rafael would be required to change their current landscaping much of which is well established.
- d. All bamboo and juniper plants must be removed. The city has already run into problems enforcing the current requirements for removal of juniper around homes and has even failed to remove it from city owned property. This is yet another major expense for homeowners.
- e. Homeowners will be required to keep roofs and gutters free of any leaves or debris...or face fines. There is no question that regular maintenance of homes is an important part of home ownership. On the other hand we do not live in a "police state" where city patrols should be going around determining who's roof is sufficiently clean to avoid a fine. There are no specifics of how the "clean is clean" or how long after a storm or windy day the homeowners will have to address the recently fallen leaves or twigs. One potential "unintended consequence" of this and other proposed ordinance changes is that they create potential additional liability issues for homeowners. Failure to comply with a law can be "negligence per se" under California law. Thus in the event of a fire homeowners can start suing each other for failing to comply with the ordinances *and they can also sue the City for failing to properly enforce its ordinances.*
- f. The proposal would allow the Fire Chief or his designee to enter private property at any time to enforce the provisions of the code and failure to comply with the code can be a misdemeanor or infraction punishable by a fine up to \$500 and / or imprisonment for up to six months. This would give expansive and unwarranted authority to an unelected official to come onto private property virtually "at will" under a threat of fine or imprisonment. As such it is highly objectionable.

- g. The proposal would permit the City to undertake abatement actions after “reasonable notice” and assess the homeowner for all costs plus administrative fees and put a lien on the home. There is no provision defining what is considered “reasonable notice” or what “administrative fees” would be.

There are also potentially “hidden” cost of these change (and also the changes outlined below). The most significant likely hidden cost is the increases in homeowner insurance costs resulting from having property designated as part of a Wildlife Urban Interface. This is suggested by section 23 (“Potential insurance and code compliance changes for property owners being added to the WUI.”) Even though the City is aware that homeowner insurance rates will rise, there has been no study done by the City (at least none disclosed to the public) regarding how much those rates will rise for the average homeowner in San Rafael. The cost of a new ordinance to the tax payers should be researched and considered before a new ordinance is adopted.

**SECTION 3:** This section states that “at a minimum” the city will adopt ordinance changes to incorporate and meet the standards of the California State Public Resources Code sections 4290 and 4291 *and apply them citywide.*

There are many problems with this proposal. The most obvious problem with this concept is that those code provisions were not written to be applied to urban areas; they are specific to mountainous areas and forest covered lands. It does not make sense to apply those State code provisions to areas of San Rafael that are, for example, in the canal or downtown business district. Adopting them wholesale is just lazy legislation. Moreover, if the ordinance is drafted so that it simply incorporates them, together with any future changes, then the citizens of San Rafael will be saddled with obligations that are not currently foreseen and we will be at the mercy of whatever lawmakers in Sacramento decide are future standards for mountain and forest lands. Are we represented by Sacramento or our own city council?

**SECTION 4:** This section contains what is, arguably, the most significant overreach in the plan. Section 4 outlines requirements to reduce “ember ignitions” by eliminating all vegetation that could be an ignition source from within five feet of a building. Any property that has trees, shrubs or anything growing taller than 3 inches and within five feet of a home / building must be cut down. Before implementing this provision the City should undertake a survey and inform residents of how many trees would need to be eliminated under the plan. It should also be noted that the removal of vast amounts of trees and other vegetation is contrary to the City’s existing Climate Change Action Plan particularly that section of the plan that addresses “Our Environment”.

The allowance for a variance from the Fire Chief does not save this provision. First, there is no information on what standards the Fire Chief will apply in determining whether to grant a variance. Second, there is no information provided regarding what cost the City will impose for requesting a variance. Currently the City imposes very large fees for requesting variances from the City’s building codes, and any appeal beyond the City Planning Department to either the Planning Board or the City Council is prohibitively expensive running into the thousands of dollars. What similar fees are being contemplated for disagreeing with the unelected Fire Chief?

The further requirement that any variance request be accompanied by a “Vegetation Management Plan” further complicates the issue and creates significant burdens and expenses on homeowners. A quick review of the current template of a Vegetation Management Plan shows that it must be a very



detailed plan listing all the types of vegetation on a property, how it is watered and maintained etc. Preparation of a proper VMP as it is currently set forth would require the services of professional landscape designers resulting in a further expense for home owners.

The City proposal also admits that this part of the plan cannot be completed with current funding levels. This is a short hand for the plan to raise property taxes. There is nothing in the City's current plan that spells out how much the City intends to add by way of a parcel tax or other revenue creation model to fund this and other provisions of the plan. Tax measures must be specifically set forth with adequate notice and an opportunity for public hearing.

**SECTION 5:** No comments at this time.

**SECTION 6:** This section addresses a requirement for replacement of all shake roofs by 2029. The draft plan acknowledges that there is no data on how big a problem this is in San Rafael. Common sense suggests that one ought to know if there is a "problem" before adopting ordinances to "fix" it. In addition, there is substantial overreach in the proposal to make homes with shake roofs "ineligible" for sale until the roof is replaced. Roof replacement should be addressed between the seller and buyer much as other code provisions currently are

A further objection is to the provision that would make the ordinance changes effective within 30 days of adoption. Many homes may already be in 60 – 90 day escrows or will be by the time the ordinance change is adopted (if it is). There is no provision for how these homes will be affected by the adoption of an ordinance?

**SECTION 7:**

This proposal states that the plan is to "increase funding sources" and "revenue opportunities" for wildfire mitigation. The section discusses grant programs but it also acknowledges that grants "do not provide an ongoing, predictable funding source for long term strategic fuel management." The section does not reference increased homeowner / business fees or taxes but those are the most common and obvious source for "ongoing, predictable funding..." It is disingenuous to not spell out specifically that the proposal will likely be made to raise taxes or fees in some manner. It is also incorrect for the section to list only the Fire Department, Public Works and Finance as the "Stakeholders" when the real stakeholders will be property owners, businesses and the public.

**SECTION 8:**

This proposal is for immediate seizure of flammable material from homeless encampments. As noted this proposal will require additional funding sources that are not specified. While the proposal is laudable, the lack of specificity as to the planned funding sources is problematic. Before being adopted the City must disclose its proposals for revenue sources. As discussed in Section 7 above, anytime that the Plan calls for additional funding sources it should list the homeowners, businesses and public as stakeholders...probably under a group heading of "Taxpayers" since ultimately that is who will be footing the bill.

**SECTION 9:**

This proposal is the increase City staff with a position costing \$76,000 per year (with or without pension contributions?). As the summary notes, additional funding is required and must be put to a vote.

#### **SECTION 10:**

This proposal to increase funding for a temporary ranger position. As with other provisions this would require additional funding from unspecified sources. Before adoption the City must identify the sources or taxation that it intends to seek to fund this position.

#### **SECTION 23:**

This proposal is closely aligned with the proposal in Section 2 and this comment should be read to reference the comments in Section 2. As noted by the “Concerns” statement, there are “potential insurance and code compliance changes for property owners being added to the WUI.” What isn’t stated is that those changes will be significant cost increases in the cost of home owner insurance premiums and compliance costs. As noted above, the City should conduct a study to determine what those increased costs are likely to be.

#### **SECTION 24:**

This proposal is to make California Fire Code Section 7A applicable to any building that gets a new roof, a new window, installs a Tesla charger or remodels more than 25% of the home. Section 7A, however, includes many provisions that would require very significant costs on the homeowner such as changing roof vents and even replacing outdoor decks with fire retardant materials depending on what they are currently constructed of and whether they attach to the structure. These requirements are a regulatory overreach and would impose significant cost burdens of residents of San Rafael. The Plan also notes that “Construction costs may increase” for property owners but then fails to list property owners as “Stakeholders” when they clearly are the persons that will be most affected by the adoption of this portion of the plan.

#### **SECTION 27:**

This would require the creation of Vegetation Management Plans for all home sales. See discuss in Section 4 above.

#### **SECTION 29:**

This section would require owners of short-term rentals to post as yet unknown emergency procedures and also to create Vegetation Management Plans. See comments regarding VMPs in Section 4 above.

#### **SECTION 32:**

The proposal to remove vegetation on public land that is located within 30 – 50 feet of private property is an extraordinary undertaking that will forever change the character of properties that abut City owned parks. Houses that are near every park in the City will be substantially impacted. Before adoption the City should map out exactly what vegetation it plans to remove and how the removal will affect the nature and value of neighboring parcels.

#### **CONCLUSIONS:**

San Rafael has submitted a “Wildfire Prevention and Protection Plan” for comment. The plan is ill-conceived, overly broad and extraordinarily expensive. If implemented it would require the removal of thousands of trees and shrubs from around homes and streets while increasing city staff and raising

property taxes, city fees and homeowner insurance rates. At least 22 of the 37 proposals require “additional funding sources”. Some homes would be “ineligible” for resale without incurring substantial costs and the plan would impose further restrictions on short-term rentals and remodels including a requirement for creation of “Vegetation Management Plans” and compliance with provisions of the State Fire Code that are not designed to apply in an urban environment. An example of the overreach is the proposal to require homeowners to cut down any vegetation higher than 3 inches within 5 feet of a home. Before adoption the City should study and alert the public to how many trees will be lost if the plan as currently drafted is implemented. The Plan also proposes to make parts of the California Public Resources Code and California Fire Code applicable to every home and building. Those laws currently only apply to homes in limited areas designated by the State. Imposing them on all of San Rafael would increase costs on homeowners particularly when selling or remodeling. It is illogical to apply to San Rafael the State laws specifically written for remote areas.

The potential for wildfires in areas adjacent to wildlands is a legitimate concern for city government. Reasonable planning is important but must be specifically targeted. The broad brush, overreaching and overtaxing approach of San Rafael should be rejected.

Gregory Poulos

San Rafael, California

GREGORY W. POULOS

March 3, 2019

Re: Proposed San Rafael Fire Prevention and Protection Plan

Dear Ms. Gardner:

Thank you for your email of February 22 regarding my comments on the draft Wildfire Prevention and Protection Action Plan. I appreciate your having taken the time to read my comments and respond to them. You mention that the plan has been updated to respond to some of the points that I raised, and I would appreciate receiving a copy of the "plan update" that you refer to so that I can see the specific changes. It would also be very helpful for me to have a copy of the Power Point presentation that was made at the February 11 meeting. Can you please send that as well?

In the interim I'll respond further to some of the items in your email. Please consider this letter part of the official record of public comments.

1. Your email describes the plan as "a master plan to provide a framework for moving San Rafael wildfire mitigation, preparedness, and response efforts forward." With respect, it is more than a framework. Sections 1 - 6 appear under the heading of "**PREPARED ORDINANCE CHANGES**" leaving no doubt to the fact that the Fire Department has already prepared ordinance changes for each of the first six proposed items. It is thus already well into the implementation stage despite not having gone through the public review and comment requirements. Moreover, if the City Council adopts the current plan it would be obligating the City to follow through on the plan's component parts including other proposed ordinance changes and tax measures.
2. The third paragraph of your email addresses two points: a) "vegetation standards" and b) whether the standards being proposed are "one size fits all." I'll take these two points in order:
  - a. Regarding "vegetation standards" your email references a "new trend" in wildland fires involving "ember storms". Fire embers can and do travel significant distances in the rare circumstance when conditions are precisely right for them to do so. Those conditions can vary greatly due to topography, wind, humidity and sources and types of combustible materials. Those are obvious points and they do not in any way constitute a "new trend." Rather than being a "new trend" in wildland fire behavior, what is occurring is the fuel loads in wildland areas have become so dense that fires in those areas grow more rapidly and at higher temperatures creating a fire that is more difficult to control. You can see this in reading the CalFire reports on the various fires occurring over the last several years. The CalFire report on the Cascade Fire in 2017 is a good example. The report described the fire as starting in an area of "combination of heavy understory of shrub and oak, heavy brush fields and grass and oak woodland."  
[http://calfire.ca.gov/fire\\_protection/downloads/FireReports/CascadeFire\\_InvestigationReport\\_Redacted.pdf](http://calfire.ca.gov/fire_protection/downloads/FireReports/CascadeFire_InvestigationReport_Redacted.pdf) Similar types of conditions have existed in the Redwood Fire Complex also in 2017 as well as the more recent Paradise Fire, the River Fire and others.

The plan that is currently under consideration is titled as a “Wildfire Prevention and Protection Plan” but the majority of the focus is protection from a fire rather than the work necessary to prevent a wildfire in the first place. While some sections of the plan (Section 7, 14, 15, 19 and 35) do discuss fuel load reductions most of those provisions are to raise money and study issues (See 7, 14, 15 and 19). Only two of them (15: get goats; 35: citizen broom pull crews) are specific for direct and immediate fuel reduction. The large fires in the past few years have all begun in wooded areas where fuel loads have been allowed to accumulate for years with no effort at controlled burning or other means of vegetation management. The fires that have burned down whole communities have rarely started within the community itself. This would strongly suggest that resources should be focused on proper wildland vegetation management including controlled burning instead of stripping our city and neighborhoods of vegetation. This would be both cheaper and more likely to succeed than a plan which envisions cutting down our trees and shrubs while the wildlands grow ever wilder.

- b. Your second point is the assertion that “the changes we are proposing will not be a one size fits all approach but allow for “individual prescriptions.” I believe that the “individual prescriptions” that you are referring to are the allowance under the plan for the Fire Chief to allow an “exemption” from the proposed vegetation standards. As you’ll see in my earlier comments I addressed this part of the proposal in my discussion of Section 4 of the plan. I encourage you to review my earlier comments regarding that provision as I do not agree that much leeway is given for variance. Item 4(a) for example specifically limits any exemption to “erosion control.” This also relates to the discussion in your third substantive paragraph discussed below.
3. Your email states that the plan does not call for removal of all vegetation within five feet [of a structure], but rather establishes “a set of standards to help homeowners recognize the most important fuel reduction work...in the area closest to [the] home.” I would ask you to please re-review those proposed standards set forth in the plan. Section 4 of the plan sets forth the following proposed standards for the “perimeter around a structure”:
    - a) Immediate area hardscape: no vegetation except for 3-inch grass or succulent plants shall be present. Exemptions may be considered for erosion control.
    - b) No vegetation in the zone shall make direct contact with the structure.
    - c) Hardwood trees are permitted within the zone provided they are well irrigated, limbed five feet or one-third of the tree height, and have five feet between other tree canopies.
    - d) Any vegetation within the ignition zone shall not grow under a window, stairs, decks, and combustible structures or encroach within two feet thereof.
    - e) Vines and Ivy shall be well-irrigated and maintained to eliminate any dead or dying material build-up.
    - f) Mulch or similar ground covering within the ignition zone is only permitted when no contact is made with combustible exterior walls or plants. All properties requesting an exemption to vegetation standards are required to complete a VMP and have approval from the Fire Chief.

It would be helpful for you to define the terms from Section 4: a) “perimeter around a structure”; b) “immediate area”; c) “zone”; and d) “ignition zone.” My understanding is that the “immediate area” is five feet and the “zone” and “ignition zone” are larger areas. Is this correct? Of course three inch tall grass and succulents are “vegetation” allowed in the

“immediate area” but they are not typical of the vegetation found around a vast majority of homes in San Rafael. My point is that the proposal will require most homeowners in San Rafael to cut down mature trees and shrubs adjacent to their homes. If the plan does not require this then it should be made clear and existing landscaping can be exempted so that the ordinance would only apply to new construction that results in changes to existing landscaping. Your letter also states that the plan only calls for removal of “highly flammable plants” in the “zone”. I disagree. See Plan Section 4(a).

Finally, I will re-emphasize an earlier point. Sections 1 – 6 of the current plan appear under the heading: “**PREPARED ORDINANCE CHANGES.**” *Please provide me with a copy of the actual wording of each of the proposed ordinance changes that have been prepared in both their draft and current wording.*

4. Designation as a WUI: I understand your position that the plan does not explicitly call for designating all of San Rafael as part of a WUI. *Please provide me with a copy of the updated WUI map referenced in paragraph 23.* Beyond that, however, even if the City does not specifically name each part of the City as being in a WUI, the fact that the City intends to apply those same standards to all buildings throughout the City essentially accomplishes the same goal and, as a result, it will have the same effect. This fact is acknowledged by the plan Section 23 reference to increased insurance rates for more homeowners. Has the SRFD determined how many homes and businesses will be included in the re-mapped WUI? If so, what are the numbers?

Finally, and as an additional comment, my earlier email to Chief Gray referenced San Rafael’s Climate Change Action Plan (CCAP). That plan emphasizes that San Rafael has a “urban forest” that helps with carbon sequestration. The CCAP encourages “more plantings of street trees and private landscaping” to keep and improve our “urban forest.” The plan that your department has put forward is in direct contradiction of that goal.

I began my correspondence with Chief Gray at the request of the Vice Mayor and in response to his suggestion that we arrange a meeting to address the many issues that I have raised regarding the plan. I am happy to meet with you both at any mutually convenient time. It would be helpful if, in advance of that meeting, I can be provided with the items I have requested.

Best regards,  
Gregory W. Poulos

Items Requested:

1. Plan update since February 11 meeting;
2. Power Point Presentation from February 11 meeting;
3. Copies of the actual wording of each of the proposed ordinance changes that have been prepared in both their draft and current wording. This relates specifically to items 1 – 6 of the current plan.
4. A copy of the videotape taken of the public meeting held on February 11.

PAUL MINAULT

February 27, 2019

BY EMAIL:

Chris Gray, Chief  
San Rafael Fire Dept.

Re: San Rafael's December 2018 Draft Wildfire Prevention and Protection  
Action Plan

Dear Chief Gray:

The Dominican Black Canyon Neighborhood Firewise Committee has reviewed the December 2018 Draft San Rafael Wildfire Prevention and Protection Action Plan (the Plan). We fully support the objectives of the Plan and offer the following comments and additions, following the numbered sequence of Plan objectives.

The first five objectives of the Plan call for revisions to the city's wildfire codes, and we briefly review these objectives here. Objective 1 calls for revising the vegetation management section of the city's existing Wildland Urban Interface (WUI) fire ordinance, which now prohibits juniper and bamboo within 100 feet of any structure, with exceptions for individual specimens. The revision would also prohibit Acacia and Italian cypress and expand the prohibition to include all areas outside the WUI, including public property.

Objective 2 calls for updating the wildfire codes generally, adopting new vegetation management codes, and applying them to all areas of the city. Objective 3 is to adopt Public Resources Code Sections 4290 and 4291. Section 4290 authorizes state regulations governing minimum fire safety standards for defensible space for the perimeters of and the access to new development in specified wildfire zones, as well as water supply and vegetation clearance on one acre and larger lots. Section 4291 establishes vegetation management and defensible space requirements for developed properties in high fire hazard zones and a compliance certification process for new construction in such zones.

Objective 4 proposes to revise the wildfire codes to require three feet of hardscape adjacent to all structures, following the example of Mill Valley. Objective 5 expands the fire season to the entire year, prohibiting smoking in open space year-round.

We have a number of comments on these five regulatory objectives. We believe the proposal in Objective 1 to prohibit Acacias could be problematic, because some species, particularly Blackwood Acacia, can grow into very sizeable trees that would be very expensive to remove, and in many cases would just need to be limbed up and thinned. (Examples can be seen at Falkirk, which has a number of large specimens and a sizable grove in back.) And because they are invasive, they seldom grow as isolated specimens.

We also think that the ordinance should incorporate compliance schedules reflecting the flammability and size of the trees that need to be trimmed or removed, as well as their distance from buildings, so as to spread compliance costs over a period of years. For example, trees listed by the city as flammable in Vegetation Standard 100 that are 4" in diameter or less at breast height ("dbh") and within 15 feet of a structure should be removed by the first compliance deadline. Those that are 6" (or 8") or less dbh and within 30 feet of a structure should be removed by a second and later compliance date, and those over 6" (or 8") dbh within 30 feet of a structure need only be removed if they cannot meet standards for building overhang, laddering and canopy separation by a third compliance date. And so on for the 100 foot and 200 foot ranges.

Objective 2 would revise the city's ordinance to eliminate the distinction between the WUI and non-WUI areas for compliance purposes. We support this change but believe the city should consider prioritizing different zones within the city for compliance enforcement purposes based on the relative level of wildfire threat presented within each. This might not need to be incorporated into the ordinance if it were handled as a written enforcement policy.

Objective 4 calls for three feet of hardscape around buildings with only succulents allowed to grow in this zone. We suggest considering non fire-prone forbs also, perhaps limited to those with no woody structure, to reduce public resistance to this requirement. Examples would be flowering plants like tulips, poppies, irises, and violets.

Once the ordinance is adopted, it should be translated into Spanish and posted alongside the English version on the Fire Department website.



We also think this new regulatory structure should incorporate the following values:

- The ordinances should be clear enough that ordinary citizens can understand them and be held responsible for complying with them on their own initiative, without an inspection.
- Compliance, or at least a good faith attempt, should be required as of a date certain.
- In the compliance zones closest to buildings, requirements should be simple and prescriptive and have the earliest compliance deadlines. In the more distant zones, requirements could be more performance-based, with room for interpretation and negotiation, and the compliance deadlines would be later.
- There should be both support and incentives for timely compliance, especially for the zones immediately surrounding homes and buildings. These could take the form of loans or possibly grants for the work from the funding mechanism for the Plan, and possibly staged compliance dates for properties requiring extensive work.
- There would, of course, need to be exceptions for indigence, physical and mental disability, special circumstances, and so forth.

We strongly support these five regulatory objectives as a way to strengthen the city's vegetation management program and expand it city-wide. San Rafael, like many other California cities, is in the position of having to lead its citizens out of an almost nation-wide suburban culture that subscribed to a fairly homogeneous landscaping design approach for areas with historic hardwood forests, with slight variations for local climate, elevation and history. The ultimate goal of this journey will be a new landscape culture that responds to California's wildfire challenges and reflects its unique history and natural environment. The role of government is to provide a regulatory structure upon which landscape design professionals and knowledgeable non-professionals can build this new landscaping culture. We can see that in many desert areas of the American West, a place-appropriate style of landscaping has developed. California's coastal areas still look mostly to their Eastern antecedents for landscape design, but that will have to change. We think the regulatory changes now being proposed in cities throughout California may come to be seen as a necessary start, and that over time and with experience a new and more fire-tolerant landscaping culture will emerge.

Now we move on to the other objectives. Objective 6 calls for reducing the risk of homeless encampments causing wildfires by removing them from open space areas. We wonder if part of this strategy might include the city's providing a site on one of its own properties or leasing private property such as the large parcel near Home Depot for a city or non-profit-managed seasonal encampment for the homeless, perhaps using large event-type tents for common area uses and temporary sanitary facilities.

Objective 7 calls for developing new funding, partnerships and other resources for wildfire mitigation. Consideration should be given to use of inmate crews and developing an extensive volunteer and summer youth program.

Objective 8 calls for developing fire roads as fuel breaks. The Marin County Open Space District has extensive experience developing fire roads as fuel breaks and developing other types of fuel breaks, and not all of that experience has been positive. In particular, some fuel breaks have become infested with invasive broom, greatly increasing annual maintenance costs, increasing fire hazards and compounding the negative recreational and ecological impacts of broom spread in open space areas.

We are concerned that a fuel break program narrowly focused on short term goals could have similar negative consequences for long term efforts to control broom and reduce wildfire hazards. We strongly recommend that the city consult with knowledgeable Open Space District staff and engage knowledgeable consultants to help in the planning and execution of this proposal.

Also, we firmly believe that fire road maintenance should have as one of its goals to minimize broom seed deposition on the roadway, which will require more frequent and wider cutting because broom seeds spread by ballistic dispersal up to 12' from the plant when seed pods pop open in summer heat. The reason for limiting seed dispersal is that broom seeds can be picked up by vehicle tires and carried to uninfested portions of the road, especially in winter when the soil and the seeds are wet and sticky, resulting in the spread of broom along roadsides. One can see the effects of this along the Aquinas and summit fire roads in Barbier Park, both of which are lined with bands of broom which are continuously elongating.

To help prevent this type of seed spread, we recommend that Fire Department staff tasked with fire road maintenance download, review, and incorporate into city contracts for this work the California Invasive Plant Council's online publication "Preventing the Spread of Invasive Plants: Best Management Practices for Transportation and Utility Corridors" at <https://www.cal-ipc.org/resources/library/publications/tuc/>. We also recommend

that the Department require the contractors who do this work and their employees to be familiar with this publication. (The employees we have observed do not appear to speak or read English proficiently and have no apparent environmental sensibilities related to the work they do, as evidenced by the seed-covered broom plants they throw to the side of the road and the trash they leave behind. Surely the city can develop some requirements to address these behaviors.)

We have similar concerns regarding Objective 10, which calls for expanded goat grazing to reduce flammable vegetation. Goat grazing is popular with the public and can be very effective, but herds can also introduce invasive seeds from the last site they grazed, resulting in a net loss in wildfire safety and ecological integrity. One way to control this is to require goat herds to be given clean feed at their home ranch for at least two days prior to being brought on site. Such a requirement is costly for herders and difficult to enforce. The alternative is to do business only with herders with the integrity to guarantee that their herds come onsite from work in uninfested environments. We believe that the Marin County Open Space District has had some success with the latter approach, and we suggest you consult with them. At a recent public meeting, mention was also made of possibly leasing the county's own herd, which could be a positive step.

Objective 11 calls for public education on a number of fire-related topics, including "areas of refuge." We have not found anything on the city's website resembling a list of designated public emergency shelters, such as existed during the Cold War. People evacuating from a fire should know what facilities in their area are designated as evacuation shelters so they know where to go.

Objective 13 calls for using CERT volunteers to support fuel reduction efforts. Volunteer efforts directed at vegetation management should not be limited to CERT volunteers but should include others who may be interested. People with a focus on the outdoors, gardening, landscaping and arboriculture may be far more knowledgeable about vegetation management than CERT volunteers, whose primary focus may be more on human health and safety.

Objective 14 calls for developing a city volunteer program focused on removing broom and other invasive plants from parks and open spaces. We strongly support such an effort. We are familiar with successful examples of such programs at the Marin County Open Space District and the GGNRA. City staff tasked with initiating such an effort should become familiar with these programs. They will discover that success requires committed leadership in the field by at least one staff member who is socially oriented; a strong social focus including food, beverages, trinkets, a publication, and ancillary events; a consistent presence on social media; the use of seasonal interns; and the ability to attract corporate, church, scout and community groups and both weekend and weekday events. And

because broom has a very long-lived seed bank, success in controlling broom requires a consistent effort over a period of decades.

Objective 15 calls for improving the development and implementation of Vegetation Management Plans (VMPs) for individual properties. We strongly recommend that city staff handling VMPs become familiar with at least the major invasive plants in Marin County, including those that are particularly fire prone. The California Invasive Plant Council maintains an inventory of the 200+ invasive plants in California on its website at <https://www.cal-ipc.org/plants/inventory/>. Marin County Parks includes a list of 18 Priority Invasive Plants in its annual vegetation management reports. See, e.g. Marin County Parks, Vegetation and Biodiversity Management Report and Work Plan 2017-2018, at: [https://www.marincounty.org/-/media/files/departments/pk/vbmp-ipm/final\\_mcp\\_vegplan\\_20171219.pdf?la=en](https://www.marincounty.org/-/media/files/departments/pk/vbmp-ipm/final_mcp_vegplan_20171219.pdf?la=en). See pages 19 and 20 and a list of 26 new invaders at page 23. Because invasive plants by definition are harmful to the natural environment and have no place in a landscaping plan approved by any government agency, the SRFD can provide a much needed public service by ensuring that no invasive plants are ever shown on any city-approved VMP.

Objective 15 also calls for VMPs to be self-certified. We are not entirely certain what is intended here, but we support initiatives to simplify regulatory programs and shift the initiative for compliance onto the property owner or the owner's consulting specialist.

Objective 16 calls for requiring VMPs for new private community open space areas. We believe more is required. Most private open space areas in Marin are not maintained by the associations that own them. To address this issue for new private open space areas, the subdivision ordinance should be revised to require, as a condition of approval of the subdivision and the VMP, that the open space area dedication be accompanied by an endowment that will produce sufficient investment income to fund the management of the open space in perpetuity. This is a common requirement for conservation easements, and should be applied in this context.

To prevent the VMP process from becoming overly burdensome and costly, formal boundary line surveys should not be required for VMPs that do not accompany a building permit or other permit application that already requires a formal survey, provided that property lines are not in dispute with adjacent property owners. Standards such as "best available evidence" (such as an assessors parcel map or a survey from the time of construction) or "longstanding acceptance" of boundaries such as by fences and hedges should suffice.

Objective 17 requires a VMP for all residential property sales. Time of sale requirements like this tend to generate strong opposition from realtors associations. That could be particularly true if new irrigation systems are required for existing properties without them, which could be costly. Solid support from the city council may be important for this proposal.

Objective 19 requires enforcement of state and city requirements for side clearance of vegetation along roadways. As part of this process, the city attorney should prepare a short explanation for citizens of their common law and statutory obligations to maintain their property for the benefit of the public. This may also need to include an explanation of the relationship between private property lines, public road rights of way and public roads that are owned outright by public agencies. In some cases, the private property adjacent to a road extends to the centerline of the road while the road right of way extends from the centerline of the road into the adjacent private property for a specified distance, often well past the edge of pavement. This can leave the private property owner very confused as to the physical boundaries of his legal responsibilities.

Objective 20 proposes to reduce fuels around power poles and lines, in cooperation with utility providers. Minimal requirements for clearance are included in Pub. Res. Code Sections 4292 – 4296. Section 4293 also requires that “[d]ead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut or trimmed so as to remove such hazard,” and this applies without regard to the distance of these hazards from power poles or lines.

Objective 23 calls for creating 30-50 foot wide fuel breaks around the perimeters of city property adjacent to private property or property owned by other public agencies. Such zones will consist of low cut grasses and shaded fuel breaks. In Marin, annual grasslands are easily overwhelmed by invasive species, resulting in increased maintenance costs and environmental degradation and habitat loss. Where possible, shaded fuel breaks should be the preferred control strategy.

Objective 25 is to establish more Firewise communities in San Rafael. We believe that three arguments best support a neighborhood’s joining the Firewise program: 1) Homes in a designated Firewise community are less likely to lose their fire insurance coverage; 2) Firewise communities are more likely to be prioritized for city grant funds for vegetation management and other fire prevention programs; and 3) other members of the community are mobilized to assist you and others with all the multitudinous tasks involved in wildfire prevention and response. You are not alone.

Objective 27 calls for the hiring of an additional full-time police Ranger to patrol open space, at a cost of about \$100,000 per year. An additional or alternative strategy should be considered: make open space areas used by homeless more recreation friendly. The homeless are much less likely to occupy open space areas with substantial recreational use, and recreational users are much more likely to report homeless encampments in recreational areas they enjoy and frequent.

San Rafael's open space areas are underused for recreation compared with those of other jurisdictions in the county because the city has no funding for encouraging, enhancing or managing open space recreation. The city has no publications that describe or show citizens where to find city open space suitable for recreation, there are no trailhead signs or published trail maps to help people access and enjoy the open spaces, and there is no management program to build and maintain trails and other recreational assets. The city Community Services Department does not even show the city's open spaces on its map or list them along with the city's parks in its quarterly Activities Guide. See, e.g. San Rafael Community Services, San Rafael Activities Guide, Spring 2019, page 33. Yet the city's flagship Barbier Park equals or exceeds in size, habitat quality and recreational assets many other open space areas in the county.

The city should consider whether the \$100,000/year proposed for a full time ranger might be better spent on encouraging vibrant recreational use of its underutilized open spaces, especially those used by homeless, while empowering recreational users to report homeless use through signage and other means of communication. This effort could be coordinated with the fire awareness signage proposed in Objective 30.

Objective 29 calls for eliminating wood shake and shingle roofs. Roof replacement permits should require that all roof penetrations enclosed with siding materials (boxed in chimneys, dormers, etc.) be retrofitted with new flame resistant siding, and that all roof vents be replaced with vents that meet current fire codes.

Objective 34 recommends better coordination of the removal of vegetative debris. As part of this effort, we recommend that the City secure the approval of Marin Sanitary and any other waste collection contractors in the city to encourage residents to offer their empty green cans to neighbors who are engaged in vegetation management projects and need to dispose of cuttings, and to publicize that this arrangement is officially allowed and acceptable. Otherwise, some residents may feel that this is not or should not be allowed, or is dishonest, or would find a request from a neighbor to be intrusive or inappropriate.

Objective 37 calls for a comprehensive review of evacuation plans. This objective (or a separate objective) should also include an engineering review of evacuation routes by the Public Works Department. In Dominican, for example, Mountain View Avenue is a primary evacuation route for a substantial portion of the neighborhood—nearly 300 homes. Yet its lower reaches, which will have the most evacuation traffic, have two narrow lanes with no shoulders and roadside ditches 12-18” deep, and these ditches are punctuated by raised concrete driveways that could inflict irreparable damage on any auto that went into the ditch. A single ditched and wrecked car could ensure that one of the two lanes would be partially or wholly blocked for an extended period. In a chaotic and panicky evacuation, with visibility greatly reduced by smoke and embers, such an accident is highly likely, making this evacuation route a disaster waiting to happen.

Dominican also has a paper street that crosses a creek and connects Mountain View Avenue to Locust Avenue, another major exit route, and this paper street could be developed into an emergency evacuation route to be used if Mountain View were blocked by downed trees or power lines. Thus, there are both evacuation hazards and evacuation opportunities that deserve consideration by the Department of Public Works.

That completes our review of the numbered objectives. We also recommend a number of additional objectives for the Plan. The first is for the Fire Department to coordinate with upwind jurisdictions and landowners outside city limits regarding fire prevention, emergency response, and evacuation. Upwind here means to the northeast of the city, since that is typically the direction from which winds blow during Red Flag conditions. Relevant entities would include China Camp State Park, Dutra quarry, McNears Brick and Block, Peacock Gap Country Club, McNears Beach County Park and the residential enclaves.

The second objective is to require property owners to complete four simple, inexpensive and highly protective home hardening measures to defend against embers:

- 1) Installing 1/8” or 1/16” (for areas with flammable storage) wire mesh over existing vents;
- 2) Replacing plastic gutters with metal ones, and;
- 3) Installing gutter covers (metal mesh or metal panels such as Gutterguard or Gutter Genius) to keep out embers and flaming debris.
- 4) Installing garage door insulation to keep embers out of garages, which often have flammable materials in storage.

The Plan should require these to be completed within a relatively short time, say two or three years. Given the relatively recent realization that most homes that

burn are ignited by embers, the Plan should definitely include an objective related to ember exclusion.

The third objective is to engage and educate the local home improvement and landscaping businesses community to become knowledgeable about and involved in Plan-related requirements and activities, so that they can advise citizens and perform code compliant work on vegetation management, VMPs, defensible space, home hardening, fire safe construction, and evacuation preparedness. In addition, the City should consider an education and certification program for construction, roofing, gutter, landscaping, and tree contractors, whereby contractors who complete a specified course of education can undertake specific types of work on private property and certify to the City that the work meets the requirements of the fire code—similar to the vehicle smog certification program at the state level, or the way Certified Tax Preparers handle citizens' taxes. The role of the City would then be to conduct occasional audits to ensure that the certification program was functioning as intended and make any necessary changes. This program would be intended to focus on fire-related retrofit work, and not new construction. This program would also require the City to ensure that the relevant code sections were sufficiently clear to allow independent certification of compliance without a lot of interpretation and independent judgment.

The fourth objective is to update the fence ordinance to ensure that new fences meet the same fire-related performance standards required for new or existing landscape vegetation. Otherwise, there is a risk that hedges that the city requires to be removed will simply be replaced with equally flammable fences.

The city might also sponsor a contest for non-flammable privacy fence designs, and have contestants install a panel with their design in a fence at an appropriate site on city property that the Fire Department could refer to on its website. The City could also follow the example of MMWD's Eco-Friendly Garden Tour, but with a focus on new wildfire-wise landscaping and fence designs. See: <https://www.marinwater.org/476/Eco-Friendly-Garden-Tour>.

We also suggest adding one feature to the city's current inspection program. That is to make accessible to the public the database of inspected, compliant and non-compliant properties so that property owners can know the compliance status of the properties around them. This allows people to see what a compliant property looks like, and to feel secure that their neighbors have done what is necessary to protect others from the common threat.

A final recommendation is to seek funding for an academic institution to prepare a report on the psychology of human response to the threat of disasters of unknown timing, location and extent, and how best to mobilize people to



overcome the innate indifference that seems to be a common response to these types of threats.

Regarding Plan costs, the Plan states that of the 37 Plan objectives, 12 could be supported by current program budgets, 5 by reprogramming current budgets (presumably meaning that other, current activities of the relevant departments would be de-funded) and 22 require new funding. Clearly, additional funding will be required to implement the Plan. We strongly support the city's seeking additional funding, not only from state and federal grants, but more importantly from local sources of revenue that will provide a consistent and dependable funding source for years to come. We urge the City to commission a public opinion poll to determine citizens' willingness to pay for the Plan.

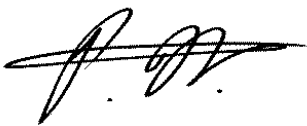
We also believe that some portion of the funding for the Plan should be made available for low-interest loans and possibly grants to fund the cost of meeting Plan objectives on private property, such as the replacement of flammable roofing materials and the removal of large trees. Loan administration might be handled by a local bank or credit union through a cooperative agreement with the City.

We also recommend including financial compliance incentives into the funding program, if possible, depending on the type of funding mechanism proposed. Allowing citizens to be relieved of the funding obligation upon achieving full compliance could help secure citizen support for the funding program.

Also, to ensure that citizens are fully informed about the need for funding for the Plan, the City should explain what the current expenditures and activities are that would have to be defunded or de-prioritized under the Plan and the consequences of doing so.

We look forward to further engagement with the Fire Department and the City regarding the Plan and our proposals in this letter.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'P. Minault', with a stylized flourish at the end.

Paul Minault  
Member, Dominican Black Canyon Neighborhood Firewise Committee

Cc: Mayor Gary Phillips  
Vice Mayor Andrew Cuyugan McCullough  
Council Members:  
Kate Colin  
John Gamblin  
Maribeth Bushey  
Police Chief Diana Bishop  
Marshall Nau  
Quinn Gardner  
Bill Guerin, Public Works Director

Members of the DBCNA Firewise Committee:  
Jack Nixon  
Jay Hubert  
John Contini

March 13, 2019

Fire Chief Christopher Gray  
San Rafael Fire Department  
1600 Los Gamos Drive, Suite 345  
San Rafael, CA. 94903

Quinn Gardner, Project Manager  
San Rafael Fire Department  
1600 Los Gamos Drive, Suite 345  
San Rafael, CA. 94903

San Rafael Fire Commissioners  
1600 Los Gamos Drive, Suite 345  
San Rafael, CA 94903

Mayor Gary Phillips and City Council Members  
City of San Rafael  
1400 Fifth Ave  
San Rafael, CA 94901

att: Fire Incident Report for January 4, 2016.

**RE: Comments for Wildfire Prevention and Protection 37 point Action Plan – specifically addressing the Fremont Rd/Upper Fremont Dr. area of San Rafael**

Please include this letter in the packet presented to the Council for discussion on March 18, 2019.

At a previous City/Federation meeting, Fire Chief Gray discussed increased efforts by the City to improve wildfire prevention. I suggested that Chief Gray identify areas in the City that were indefensible and to include proposed improvements to defend these areas since we now know that wildfires are unpredictable and given the right conditions, can easily spread throughout whole neighborhoods and as in the case of the camp fire, whole cities, and they put firefighters at risk.

Fremont Road and Upper Fremont Drive are narrow one-lane, two-way, dead-end streets, that measure 9' - 12' wide, with no adequate turnarounds. (Note that the City's zoning defines a substandard street as less than 25' wide.) There is no street parking on these streets, only parking on private property, so the proposed point #25 "Establish a residential hillside "parking box" program" will do nothing to improve access on these two streets. There are no "parking boxes" to create on Fremont Rd and Upper Fremont Drive because there is NO street parking. The City can only paint lines to designate the edge of the street to discourage vehicles parked on private property from overhanging onto the street.

On a rainy day, in January, 2016, a house at 55 Fremont Rd caught fire and was destroyed. Access to this property is down a dirt road (an extension of Upper Fremont Dr, a city street) across from #31 Upper Fremont. They couldn't get fire equipment up the hill so the fire fighters hand carried equipment up a steep hill, some 800', from Marquard/Fremont to the site. According to the Fire log, at 1:42 am, E54 and B52 were stuck and unable to get off the hill. See attached 4-pg Fire incident report.

Since I have lived on Fremont Road, new homes have been built, one at a time, on these old lots that it didn't seem possible to build on. There has been an increase of over 40% of new homes built on Fremont Rd and Upper Fremont Drive with no improvements in access required, not even a Fire Truck turnaround which is required by International Fire Code (Section D 103.4).

There are currently 2 additional proposals for new homes in the Planning Department, which if built, will result in an increase of 60% of additional homes in this area, and there are more vacant lots on Upper Fremont. What disaster does it take for the City to take the issue of emergency/fire access seriously?

I think it's short sighted to just look at the lot being built on, requiring fire resistant vegetation and sprinklers. I think the Fire Department needs to look outside the lot, to the surrounding environment, to determine if the environment can support defending an additional structure, and, if not, requiring improvements before any further development. The Fire Department should look at access - should road improvements be made, is there an adequate turnaround for emergency vehicles, are fire roads adequate and maintained, does the water pressure in existing fire hydrants meet minimum standards, are there enough fire hydrants. Where a new development has access to more than one street, the street with better emergency access should be required. Because we now know that a fire started in an inaccessible area can be disastrous for the whole City. Thank goodness, it was raining the night of January 4, 2016, otherwise, this would probably be a different letter.

Retiring CalFire Chief Ken Pimlott was quoted as saying, "California's increasingly deadly and destructive wildfires have become so unpredictable that government officials should consider banning home construction in vulnerable areas. Government and citizens must act differently to protect lives and property from fire that now routinely threaten large populations." (Marin IJ, December 12, 2018).

I am asking the City of San Rafael to act differently and be serious about wildfire prevention. You can not knowingly turn your back on issues that if you acted differently could save lives and property. I am asking the Fire Department to identify indefensible areas in the City and propose improvements to the areas to make them defensible. If the City cannot make an area defensible, then is it irresponsible and life threatening to allow further development in that area.

I am asking the Fire Department to put in the necessary Fire Truck turnarounds, to make the road improvements or create Fire roads to access the inaccessible areas. For example, in the Upper Fremont Drive area, I am asking the Fire Department to consider a Fire road connecting Upper Fremont with Terrace or Dunand. At the intersection of Fremont and Upper Fremont Dr, a small corner lot was supposed to be dedicated to the City for road improvements – was that done? Has the City looked at improving the corner at Fremont/Trost?

I am requesting that you ALL take a drive up Fremont Road and Upper Fremont Drive to experience what I am talking about. Thank you for your consideration of these comments.

Sincerely,



Victoria DeWitt





**San Rafael Fire Dept.**

Station: **51**  
Shifts Or Platoon: **B Shift**

|   |   |
|---|---|
| Location:<br><b>55 UPPER FREMONT DR<br/>SAN RAFAEL CA 94901</b>         | Incident Type:<br><b>111 - Building fire</b>  |
| Lat/Long:<br><b>N 37° 58' 17.96"<br/>W 122° 32' 31.5"</b>               | FDID: <b>21075</b><br>Incident #: <b>2016-000110</b><br>Exposure ID: <b>15880280</b><br>Exposure #: <b>0</b><br>Incident Date: <b>01/04/2016</b><br>Dispatch Run #: <b>SF-F16000385</b> |
| Zone:<br><b>5101 - 5101</b><br>Location Type: <b>1 - Street address</b> |   |

|                             |                    |                 |   |
|-----------------------------|--------------------|-----------------|---|
| <b>Report Completed by:</b> | deLambert , Robert | <b>ID:</b> 4686 | <b>Date:</b> 01/05/2016                   |
| <b>Report Reviewed by:</b>  | Hamilton , Kyle    | <b>ID:</b> 4332 | <b>Date:</b> 01/06/2016                   |
| <b>Report Printed by:</b>   | Sinnott, Robert    | <b>ID:</b> 6076 | <b>Date:</b> 5/11/2016 <b>Time:</b> 08:44 |

|   |  |
|---|--|
| Structure Type: <b>Enclosed building</b>                          | Property Use: <b>419 - 1 or 2 family dwelling</b>  |
| Automatic Extinguishment System Present: <input type="checkbox"/> | Detectors Present: <input checked="" type="checkbox"/> Cause of Ignition: <b>Cause under investigation</b> |
| Aid Given or Received: <b>None</b>                                | Primary action taken: <b>10 - Fire control or extinguishment, other</b>                                    |
| Additional actions: <b>12 - Salvage &amp; overhaul , -</b>        |  |
| <b>Losses</b>   | <b>Pre-Incident Values</b>   |
| Property:   | Property: Civilian Injuries: <b>0</b> Fire Service Injuries: <b>0</b>                                      |
| Contents:   | Contents: Civilian Fatalities: <b>0</b> Fire Service Fatalities: <b>0</b>                                  |
| Total:  | Total: Total Casualties: <b>0</b> Total Fire Service Casualties: <b>0</b>                                  |
| Total # of apparatus on call: <b>8</b>                            | Total # of personnel on call: <b>19</b>  |

|  |
|--|
| <b>NARRATIVE</b>   |
| <p>E51 to 55 Upper Fremont Drive for a reported structure fire. E51 assigned access from Espalda Court. E51 was assigned "Fire Attack," with E55, which later progressed to salvage and overhaul after extinguishment. E51 relieved E52 from "Fire Watch," then assisted with equipment removal from the incident. E51 briefly assisted the fire investigation team, then turned the building over to homeowners.</p> <p>E55 responded to structure fire at 55 Upper Fremont Dr as part of first alarm assignment. E55 arrived behind E52 at Fremont Rd and Trost Rd. E55 was left at Trost Rd for access reasons and the crew responded the remaining distance on foot. E55 assisted E52 with water supply by advancing approximately 800' of working line to the fire from E52 at the hydrant. Upon arrival at the structure, E55 was assigned to E51 who was Fire Attack and assisted with interior fire attack. #5471</p> <p>B52 responded for a Structure fire. I arrived to find smoke and fire coming from the main floor of the unit. With assistance from Officer Sabido I made access to the structure and removed the resident who was attempting to extinguish the fire. I directed the resident to M51 for evaluation. I then assumed command of the fire. We were able to make an interior attack and overhaul the structure while ventilating. Patient signed AMA and was privately transported. No firefighter injuries. E52 stayed through the night for fire watch. Investigators arrived in the AM, see attached report.</p> <p>E52 responded to structure fire. Engine advanced up Upper Fremont to position near hydrant at 31 Upper Fremont, began supply operations using 2.5" line and bundles. E52 pumped fire, assisted with fire attack, overhaul, and firewatch.</p> <p>T57 responded to structure fire and accessed at the end of Espalda Ct. T57 assisted fire attack with bundles and tools. T57 was assigned ventilation and broke 4 skylights and cut a 4x6" hole in the roof. T57 assisted E51 w/ overhaul. T57 assisted E55 loading 2.5" hose</p> |
| <b>Narrative from dispatch:</b>  |
| -----01/04/2016 23:32:31-----ENTRY-----HOUSE ON FIRE , THERE IS STILL ONE MALE OCCUPANT INSIDE CMDE5-----  |

| <b>APPARATUS</b>                            |                      |                       |                      |
|---|----------------------|-----------------------|----------------------|
| <b>Unit</b>                                 | B52                  | <b>Unit</b>           | E51                  |
| <b>Type:</b>                                | Chief officer car    | <b>Type:</b>          | Engine               |
| <b>Use:</b>                                 | Suppression          | <b>Use:</b>           | Suppression          |
| <b>Response Mode:</b>                       | Lights and Sirens    | <b>Response Mode:</b> | ()                   |
| <b># of People</b>                          | 1                    | <b># of People</b>    | 3                    |
| <b>Alarm</b>                                | 01 /04/2016 23:32:31 | <b>Alarm</b>          | 01 /04/2016 23:32:31 |
| <b>Dispatched</b>                           | 01 /04/2016 23:32:40 | <b>Dispatched</b>     | 01 /04/2016 23:34:58 |
| <b>Enroute</b>                              | 01 /04/2016 23:34:56 | <b>Enroute</b>        | 01 /04/2016 23:34:59 |
| <b>Arrived</b>                              | 01 /04/2016 23:46:16 | <b>Arrived</b>        | 01 /04/2016 23:46:35 |
| <b>Cancelled</b>                            | -- /--/-- --:--:--   | <b>Cancelled</b>      | -- /--/-- --:--:--   |
| <b>Cleared Scene</b>                        | 01 /05/2016 03:17:59 | <b>Cleared Scene</b>  | 01 /05/2016 08:17:42 |
| <b>In Quarters</b>                          | -- /--/-- --:--:--   | <b>In Quarters</b>    | -- /--/-- --:--:--   |
| <b>In Service</b>                           | 01 /05/2016 03:17:59 | <b>In Service</b>     | 01 /05/2016 08:17:42 |
| <b>Unit</b>                                 | E52                  | <b>Unit</b>           | E54                  |
| <b>Type:</b>                                | Engine               | <b>Type:</b>          | Engine               |
| <b>Use:</b>                                 | Suppression          | <b>Use:</b>           | Suppression          |
| <b>Response Mode:</b>                       | Lights and Sirens    | <b>Response Mode:</b> | ()                   |
| <b># of People</b>                          | 3                    | <b># of People</b>    | 3                    |
| <b>Alarm</b>                                | 01 /04/2016 23:32:31 | <b>Alarm</b>          | 01 /04/2016 23:32:31 |
| <b>Dispatched</b>                           | 01 /04/2016 23:32:40 | <b>Dispatched</b>     | 01 /05/2016 00:08:11 |
| <b>Enroute</b>                              | 01 /04/2016 23:34:53 | <b>Enroute</b>        | 01 /05/2016 00:10:39 |
| <b>Arrived</b>                              | 01 /04/2016 23:48:49 | <b>Arrived</b>        | 01 /05/2016 00:26:11 |
| <b>Cancelled</b>                            | -- /--/-- --:--:--   | <b>Cancelled</b>      | -- /--/-- --:--:--   |
| <b>Cleared Scene</b>                        | 01 /05/2016 10:51:26 | <b>Cleared Scene</b>  | 01 /05/2016 01:55:53 |
| <b>In Quarters</b>                          | -- /--/-- --:--:--   | <b>In Quarters</b>    | -- /--/-- --:--:--   |
| <b>In Service</b>                           | 01 /05/2016 10:51:26 | <b>In Service</b>     | 01 /05/2016 01:55:53 |
| <b>Unit</b>                                 | E55                  | <b>Unit</b>           | M51                  |
| <b>Type:</b>                                | Engine               | <b>Type:</b>          | ALS unit             |
| <b>Use:</b>                                 | Suppression          | <b>Use:</b>           | EMS                  |
| <b>Response Mode:</b>                       | ()                   | <b>Response Mode:</b> | ()                   |
| <b># of People</b>                          | 3                    | <b># of People</b>    | 2                    |
| <b>Alarm</b>                                | 01 /04/2016 23:32:31 | <b>Alarm</b>          | 01 /04/2016 23:32:31 |
| <b>Dispatched</b>                           | 01 /04/2016 23:32:31 | <b>Dispatched</b>     | 01 /04/2016 23:32:40 |
| <b>Enroute</b>                              | 01 /04/2016 23:36:04 | <b>Enroute</b>        | 01 /04/2016 23:35:02 |
| <b>Arrived</b>                              | 01 /04/2016 23:50:30 | <b>Arrived</b>        | 01 /04/2016 23:52:02 |
| <b>Cancelled</b>                            | -- /--/-- --:--:--   | <b>Cancelled</b>      | -- /--/-- --:--:--   |
| <b>Cleared Scene</b>                        | 01 /05/2016 03:02:50 | <b>Cleared Scene</b>  | 01 /05/2016 02:32:56 |
| <b>In Quarters</b>                          | -- /--/-- --:--:--   | <b>In Quarters</b>    | -- /--/-- --:--:--   |
| <b>In Service</b>                           | 01 /05/2016 03:02:50 | <b>In Service</b>     | 01 /05/2016 02:32:56 |
| <b>Unit</b>                                 | M55                  | <b>Unit</b>           | T57                  |
| <b>Type:</b>                                | ALS unit             | <b>Type:</b>          | Truck or aerial      |
| <b>Use:</b>                                 | EMS                  | <b>Use:</b>           | Suppression          |
| <b>Response Mode:</b>                       | ()                   | <b>Response Mode:</b> | ()                   |
| <b># of People</b>                          | 1                    | <b># of People</b>    | 3                    |
| <b>Alarm</b>                                | 01 /04/2016 23:32:31 | <b>Alarm</b>          | 01 /04/2016 23:32:31 |
| <b>Dispatched</b>                           | 01 /04/2016 23:32:32 | <b>Dispatched</b>     | 01 /04/2016 23:38:02 |
| <b>Enroute</b>                              | 01 /04/2016 23:32:33 | <b>Enroute</b>        | 01 /04/2016 23:39:12 |
| <b>Arrived</b>                              | -- /--/-- --:--:--   | <b>Arrived</b>        | 01 /04/2016 23:58:00 |
| <b>Cancelled</b>                            | 01 /04/2016 23:32:34 | <b>Cancelled</b>      | -- /--/-- --:--:--   |
| <b>Cleared Scene</b>                        | -- /--/-- --:--:--   | <b>Cleared Scene</b>  | 01 /05/2016 01:55:00 |
| <b>In Quarters</b>                          | -- /--/-- --:--:--   | <b>In Quarters</b>    | -- /--/-- --:--:--   |
| <b>In Service</b>                           | -- /--/-- --:--:--   | <b>In Service</b>     | 01 /05/2016 01:55:00 |
| <b>Number Of People not on apparatus: 0</b> |                      |                       |                      |

*Recording started with voices at 1:38*

Chief Gray: If you do everything right and your neighbor does nothing, you are at risk. So, how do we make sure there is consistency among us?

So, we are working to correlate and coordinate and collaborate, I guess you could say, with all of the agencies. So our hope is that we will have a consistent application of codes and assistance in enforcement across those lines. Because we are all in this together, we're going to be hopefully preparing for that fire together and are going to be responding to that fire together, and it's important that we work hand in hand before the fire that will occur.

Again, good comment and there is a lot of work in that effort, and in principle, I'd like to bring up something that occurred to me. We were talking about this whole issue of WUI (Wildland Urban Interface). Essentially, those plans were put in place and possibly a change in really the conventional thinking that you are more at risk if you are in closer proximity to open space. What did the recent fires tell us? If you are 500 feet away from the open space, were you at more at risk than somebody 2 miles away? And that's what happened – Coffey Park, Santa Rosa, is not near the open space.

So, our WUI map essentially, is identified by 1,000 feet from the open space. If you are across the street or happen to be the house that's next door to someone where that line is drawn, what difference does it make if they are taking action and you are not? And vice versa. That's why we felt that we should be consistent across the board. If we are going to suggest that we remove bamboo and juniper within one area, why should we do it on one side of the street and not on the other? We are all at risk. And so this is a measure that's actually being looked at consistently County wide. If we're going to take vegetation and defensible space to the community, then it should be consistent. No matter what neighborhood you live in or what your proximity is from the open space, the entire community is at risk.

Next speaker: "I'm a real trouble maker and I started in around 2013 to convince corporate landlords that they really need to bring the landscaping up to a proper level. And after 5-6 years of struggle, I have to say that from the standpoint of routine property maintenance, we're in great shape. However, I believe there are issues that go beyond that, and I do not have a landlord who is practicing due diligence when these issues are brought to their attention. I'll give you a couple of examples. The first and major one is that one side of our property is completely blocked by fencing. I have asked not only for paths and gateways in those fences, but I've asked that those pathways be ADA accessible. Because what started as an adult independent living community has essentially segwayed into a life care community with people aging in place. With that in mind, we have one woman who happens to be housed in the same quadrplex that I'm in – it's a senior village – and she has a habit of walking out of the kitchen and leaving the water on or leaving a pot on the stove. And I have asked over and over and over again that the landlord install a motion detector on the stove so if there is no motion in the kitchen for a period of 10-30 minutes, that the stove would

automatically turn off. Now I know these are available because many senior facilities in the City already have them. And I strongly suggest that if anybody here in the audience has a senior who is independently living, does anybody consider putting into their home a motion sensor in the kitchen on the stove? There are a number of other areas that we could go into, and I have been preparing a rather lengthy documentation of what I have observed that I'll be sending to you, Chief Gray and to you (Quinn Gardner), because I feel it is very important that we get going, if we as tenants do not have an opportunity to go out and really do the work ourselves. So, we really are dependent on corporate landlords who really need to pay due diligence when issues are brought to them. Thank you

Quinn Gardner: Thank you for that comment. It raises a multitude of issues, of course. One piece that I did not cover a lot in the brief overview but we want to acknowledge is that we want to make sure that the plan is covering for those with access and functional needs everything from evacuation planning to alerting, again providing assistance to achieve defensible space. Of course, we've seen what the recent fires does disproportionately to people losing their lives, the elderly and the disabled, so thank you for bring that it up. Another piece of this too is not just the corporate landscaping but the renter/landlord relationship and the responsibility therein, so thank you.

Larry Minicus: I'm currently serving on the Water Infrastructure Citizens' Advisory Committee with Jason Weber, the Fire Chief, it is a relatively new committee. What we're coming to realize is that it is going to take a lot of money and the question for the community – it's really for the community – are we willing to step up. We've seen what's happened in the last two years and it's seemed to have awakened a lot of people in this community. It's really a question for us, because in the January 22 San Rafael meeting here, toward the end, that point did come up. It was raised that southern Marin has a Measure U that they voted unanimously to support to bring more money to the community to work on these kind of issues. I think it's something we all want to think about and really comment on because there's a lot of work here. We have an enormous amount of fuel to deal with and we are seeing it on watershed lands and the need for upgrading the infrastructure is just tremendous at this point.

Next speaker (female): Hello, I'll be nice, don't worry. I don't really have any issues with a homeowner removing vegetation, I'm near the WUI so I had to all this stuff in 2007, that's great. However, the stuff you all are talking about doing with Eucalyptus is so insufficient and short sighted. You think you're going to limb it up, you're going to clean up under the Eucalyptus. How often are you going to go clean under them? I mean, they are constant mess. And having lived in Oakland during the big fire, I can tell you, those trees explode. So if the Eucalyptus that are in my neighbor's yard get a few embers on them, it won't really matter what I've done to my house. Nothing in here is telling them that they have to clean up or limb up or do anything. And I understand it is really expensive to remove these, so I'd really like some specific effort in your plan that says for homeowners who have Eucalyptus that we are going to look for some funding



or some matching funds, some grant funds – something to encourage this. Because these to me are a much bigger problem than your Cypress plants are. And on another note, I just want to agree that we need to have the County involved, we need to have other cities involved in what we're doing. Like San Anselmo, which is right over the hill from us that we really need to be collaborative in the County. Thank you

Chief Gray: I just want to make one comment. We want to be aggressive with the Eucalyptus growth. As an example, a living example that's up on the top of the ridge above Sun Valley which you may have seen, that's a City and County project, with the Marin County Open Space and the two fire departments that was taken on over the past year. So not only was it thinned significantly, there's an effort to maintain it. We're going to be looking at a prescription of different ways to handle Eucalyptus both on public and private property.

Chase Hubert: I'm Chair of Black Canyon/Dominican Firewise Community. We achieved that just last June, and it required a lot of cooperation and support from the fire department in San Rafael. I have to say that the support was outstanding, we've removed hundreds of tons of brush with their assistance. A lot of private land owners have really cleaned up their acts with City support from the inspectors. I think part of my concern is maintaining the excellent level of support we have now. Good emergency people and good inspectors are hard to find – we need them desperately. The City has made enormous progress in the last two years. It's really impressive how much of a change there's been. This plan in front of us is extremely comprehensive, there's probably more in it than anybody could accomplish in a short period of time, and I think there's room for community input and comment. There are things that need to be clarified, improved and prioritized. I look forward to the kind of progress that can be made. Ultimately, the City can't do it all, it requires partnership from the community, individual homeowners have to take responsibility, and we need to do it together. It's a cooperative effort, the City can't do it for us, the County can't do it for us. We need to engage our neighbors, because if a house with a shake roof goes up across the street from your house, it's likely to burn down. Your house would burn down from the radiant heat from that fire, so we need to be prepared and I think the City is making great progress and I just encourage them to continue.

Chief Gray: Thank you very much, we appreciate it.

Heidi Rank: I live up on Southern Heights Blvd. About a month ago, the rains brought down a giant Eucalyptus tree. It's been a nemesis – it's right across the street from my house. I'm in pretty good shape, because I spend one day a week on the weekend cleaning scotch broom, I own a chainsaw, I'm just one little lady at the house. I cut down my own trees, I chop them up and don't have a chipper, but I don't have enough place to throw them away. I have extra bags that I buy, but I need help with that. I am concerned because that tree fell down and it did start a fire and thank goodness it was raining, so it got out pretty easily. But the tree is sitting in - it's huge, and is one of three - and it's sitting in the ravine. What's going to happen to us? I feel like, why am I doing this? It's like ok, I get some good health benefits – I'm in good shape in

that I clean up my yard. But other than that, why should I even bother if those are still there.

Narrator: Thank you, we will look into that – I promise you. I really appreciate it. These comments are great. We really appreciate it, it's very helpful. And just so everyone knows, we are recording this this evening so that we can go back and take better notes and record this incorporate your comments into our plans.

Female speaker: I live here in San Rafael, in Glenwood, and have been here for 40 years. A couple of years ago, I was at one of the local nurseries and there was scotch broom for sale. If you're going to say that you don't want to have Italian Cypress, Bamboo, and Acacia and probably Eucalyptus, first of all, we need to know that before we actually hire a landscape architect to come out and design it. We purchase the plants and we plant them, and then you come along and say that's not good. It seems picky, but I want you to look good. I want you to do good in your job, I want your department to be excellent, and I want the City of San Rafael to be respected. When you put out a document that does not include the botanical names, you look not good and unprofessional. Also, by using the botanical names, you're going to be specific, there will be reduction of ambiguity because when you use Italian Cypress I'm not quite sure you're using the botanical definition and you go into the Sunset Garden book and there's going to be a little conflict there. Secondly, when you say Eucalyptus, people this it's the type that sheds its bark and that is globulous and the City of San Rafael has many Eucalyptus street trees that do not shed and are planted along road ways. They perform beautiful, and I've planted Eucalyptus in a public space and the next time I came along and that tree was removed, that tree was specifically chosen because it would absorb the water, it was an evergreen, did not shed, and it was going to be a benefit for its shade. You say you're going to inform the public by depending upon public outreach and the website, but I know from using grants that that money disappears and there has to be another way to get that information out. One of the other things that has not been talked about is the ground cover using wood chips at all and that needs to be addressed.

Thank you, those are really wonderful comments.

Next speaker: Thanks for proposing this plan, it is appreciated. Just one comment on the plan. This is very much a custom, hands-on regulatory program we're looking at here with a lot of hand holding and a lot of personal attention. And I think it's going to be very important in the long run that we engage the business community to make this work over the long term and that we have a simple prescriptive compliance program that the people who just want to get it done get it done right and get signed off that they can follow and that the contractors, landscape architects, arborists, the building contractors for the homeowner can come to someone's property and let them know that this is what they can do, what it will cost and get it done. Think of the smog

program. Where's the government? It's not there. The DMV does not come knock on your door and look at your car and ask to put something in your exhaust pipe. It's all handled by the commercial sector. Look at your taxes in the simple context. You go to H&R Block and they do it for you. You pay them stuff. We need a simple thing for this program and there will be plenty of people who will need special attention and special exceptions but we will need a simple prescriptive program that the private sector can implement. Now let me vote on Eucalyptus from the last speaker. Go to Dominican campus and you will see the most gorgeous Eucalyptus you've ever seen, they're not the Blue Gums we have that look like hell and you might change your mind about Eucalyptus.

Next speaker: My name is Stuart Lum and a couple of comments here. My reading of the 37 proposed ordinances, expand quite a bit from what I can tell. The ordinances from covering WUI properties and primarily residential properties to all properties in San Rafael. Which means a lot of commercial properties, downtown properties where I'm hoping that the way the ordinance is implemented allows, if the ordinance isn't applied to them, then they don't have to go back every year or two years for a vegetation management plan. I have properties in San Rafael that have zero lot lines and frankly, I don't want to have to worry about putting in a plan or submitting to other kinds of inspections as a result of this ordinance. That's one thing. Secondly, I live in this area which you are next to and we've been trying to restart our homeowner's association in order to do a lot of the things that we have done in the past and want to upgrade our country club neighborhood to be able to respond to some of the things that we have learned from the fires up in the north bay. But if we plunked this ordinance or some of these types of ordinances into Country Club, we'd have a real problem, because I'm not sure it works. But, some of the economics here, and I appreciate, and some of the work that you've done here is to alternatives or ways to reducing the cost of complying. For example, cutting down a Eucalyptus tree costs about \$5,000 at this point, it is really expensive – and that's where you've only cut down the tree. So, we have properties in ravines that as you know have hundreds of Eucalyptus trees in those ravines. So, we're talking about millions of dollars being spent to comply. So, we need to figure out ways to reduce the cost for homeowners so they can comply with you.

Patricia \_\_\_\_: I just moved to San Rafael two years ago, I grew up in Mill Valley, lived in San Anselmo for years. I've lived in a lot of places and have always come back to Marin and part of that is the aesthetics of Marin, It's beautiful. I grew up in a Redwood forest, I live up in Culloden Park, a lot of Redwood trees, a lot of green, a lot of mature landscape, and it's my love. I'm a gardener, I come from a family of gardeners. So, when you talk about 5 foot defensible in front of my house, which is a 120 year old house, and has beautiful old mature well-irrigated landscaping rose gardens in front of it and the idea of tearing that out and putting in gravel and succulents just makes me want to cry. There's a little bamboo grove on the back of my property and it's probably 50-60 years old. I don't know how I would ever get it out. The roots probably go 8 feet down. You're talking about some serious impact on people's gardens and on the aesthetics of our neighborhoods. My cousin lost her home in Napa last year, so I'm not

without feeling about fire and the fear we all have about fire, but I also don't want to change the landscapes so dramatically that our neighborhoods become gravel and succulent. That doesn't appeal to me as a gardener, as a homeowner here and someone who grew up in a 100-year old home and lives in another 100-year old home now. So I needed to just put it out there that yes, probably 35 of your proposals are great, 37 in fact when I lived out in Sleepy Hollow, they would pick up 6-7 cans every week for free. You'd just put out extra garbage cans and Marin Sanitary would take them away. And we kept our property really clear, because out in Sleepy Hollow, there were a lot of dry grass and a lot of debris and I can always fill my two cans, I would pay for four, but it would be lovely if Marin Sanitary would take more debris, and those of us who have mature gardens and they are well irrigated and well tended, I'd hate to have to see them dug up and replaced with gravel and take mature landscaping that is well irrigated and remove it.

Quinn Gardner: Quickly, we certainly hear that concern and one of the pieces of #4 specifically that gets at some of that, specifically I think calls out well irrigated is okay, basically. So it is with that idea that if you're maintaining even something like ivy, as long as it's green and you're keeping the dead leaves out of it, that's where that individualized prescription comes in because the same concerns you have are the ones we share, and what we have heard from the community. So, again, I know that the 5 foot out house concept is startling in a lot of ways but just to clarify that somewhere.

Stan Burford: I've lived in Marin for 49 years, 26 here in San Rafael. And as they say, full disclosure, I'm also a member of the San Rafael Fire Commission. I believe strongly in all of the points brought up by the Fire Department – why wouldn't I? But there is something that is missing in all of this conversation and none of you have tiptoed anywhere near it. So, I'll bring it up and I'll ask a question, and then you'll understand there's more to this than just what the Fire Department is proposing. How many of you in this room have fire insurance on your homes? Show me your hands. How many of you in the room would like to have your homes without fire insurance? Okay, it's already started. In Fair Hills, we have residents now who are being told by their insurance company their insurance will not be renewed. They have gone from company A to company B. Company B has said, oh no, we're not going there, it's too risky. They've gone to company C and they've gotten insurance. And it is costing them a small fortune. The same thing could happen to you. Think about what's being proposed here and how it would then be accepted by the analysis made by insurance companies. You'll probably all still have your fire insurance. I'm not saying that it's going away, but I'm saying that door is open and it's beginning to creep out. Keep it in mind when you take a look at the idea of having to change some of the things around your property – it just might be worth it.

Chief Gray: I'd like to comment further. The insurance companies are looking favorably at the firewise certification for neighborhoods, and as Stan mentioned there is a guarantee that you would receive fire insurance in the state of California, it's called the California Fair Plan, and was introduced in the 1970s, but it can be costly. And I think that's one of the primary benefits of introducing fire safe design into your home and into your landscaping. We can not only ensure the preservation of your insurance, but can also see that it's possibly even reduced in terms of cost. And I think everyone probably learned some lessons and we had the Insurance Commissioners office actually present at one of our symposiums last year to talk about this. It's a good thing to evaluate your premium too and see what it does cover and what it may not cover. There were a lot of surprised residents that unfortunately lost their homes in these recent fires. So, thank you

Denise Van Horan: During the Santa Rosa fires and the Paradise fires, they were both in the setting of of Santa Ana type winds, whatever we call them here, and the well thought out evacuation plans that were present in these communities just went up in smoke, literally, as everyone was just trying to get away from where the fire was. The roads immediately became blocked. My son, who lived in Rohnert Park, needed over two hours to come down from his neighborhood which was not being evacuated, to come down and shelter in place with us. And those images of abandoned cars alongside the highway are very vivid. So, one thing I haven't heard addressed in this plan is where in a situation like this, our roads are going to just fill up instantaneously and there's only one main drag out the south and one main drag out the north. So, what are possible shelters that would be available? Because my plan is, if that thing is coming anywhere near me, I'm going somewhere else. I'm going to clean up all my brush and everything else I need to do, but I have no idea of what is a reasonable shelter I could go to in the event of something like that happening.

Chris Gray: The countywide plan that Quinn actually had on the monitor shows the shelter areas. Part of the gap is that you may not recognize and may think that there are school locations and other things. So, the prominent locations for points of public assembly that could be utilized (and recognize that the fire situation is going to be dynamic) although they may be on a map someplace and they may be included in the plan, the fire could dictate terms where it may not be accessible or available. So, we're looking at a number of alternative shelter locations, or a refuge as you might call it, and we're also looking at a water evacuation as a possibility in alignment with both Dutra at the location of the quarry and some alignment with Golden Gate ferry, possibly with transport. So, we're not limiting ourselves just to the land base and the primary response routes and again, there is some work going on to ensure that the full route around China Camp, in this example, is going to be available for our use, but some of that is taking into account the dynamics of the fire and recognizing that people need to understand it. Because, what happens in the emergency, and we've seen this, and sometimes based on just the decisions that some people make about what they take and what they leave and when they go, is that you lose some of your rational thought process in the midst of these very trying and panic-stricken

emergencies, and we want to have a thoughtful plan in order that you'll know and hopefully, through the context of communication and what we be able to help direct you to a safe place and/or an appropriate evacuation route. So, this is something we're looking at very closely, it's presented a number of challenges. And let's face it, we're on a peninsula. What went on last week with the bridge – we had some concrete fall from an expansion joint and shut it down and it literally paralyzed traffic for a period of time. A wildfire would present a whole new set of variables that we'd have to deal with and thousands and thousands of people looking for a safe way out, some that may need to be evacuating and some that may not. So, it's something we're giving a lot of thought to and working in deed with the community at all levels to make sure we've got a comprehensive plan but one that's adapted to the needs.

Now the greatest fire threat we feel, and if you all remember the night of the Tubbs fire, the first fire started in Napa at a junk yard. We started receiving calls from the Peacock Gap area and along the peninsula there late that evening and were reporting that the fire was in China Camp. And what were they experiencing? Smoke, and they were experiencing ash coming into their homes. And so that northeastern condition is one that we're very concerned about and the only benefit I can say is between what they experienced coming from the geysers and coming over the ridge line into Santa Rosa is the wind has to cross the bay and it does pick up moisture in the bay before it comes across into that peninsula there but the fire threat is actually that Nor-easter coming across. We have a fire event and all it takes is a point of ignition, wherever it occurs, and then it running, getting into the open space along the ridge and moving westward into San Rafael. So, we're trying to prepare for a number of scenarios and a number of evacuation scenarios, and as Quinn mentioned, we're going to be doing more of actual evacuation drills, neighborhood by neighborhood, to help with that coordination of plan.

Lori Shifrin: I have a question and I don't have an answer for you but it's something I'd like you to look into. There are a lot of houses that have wood siding and older houses that have, it's not dense, but it's actually such that a cigarette could light up the house. Same thing with wooden decks, and I don't know if there is a treatment that could be put on a wood deck to make it less flammable, but there's got to be something for people to do. And I also want you take into consideration people that are absentee owners but still have people living in the houses. If there is a way to make these decks less flammable and the houses less flammable, I think everybody would love to know that one.

Chief Gray: Thank you very much, and just some quick comments. Those are all good points and obviously areas of concern in terms of exposure from an ember storm and I think much like everything else that's done in moderation, a wooden deck by itself doesn't present a tremendous threat as long as it's effectively maintained without a lot of combustibles. Now, if you've got firewood and cans of gasoline, LPG (liquid propane for bbqs), a number of things – and we see them all the time. I'll tell you, we've had a lot of deck-related fires as a result of refinishing and spontaneous combustion of oily

rags and literally significant damage to homes in the community over the last several years. If the deck is maintained and in good condition, so you don't have a rotting deck, and you don't have combustibles stored either underneath it or on top of it, then you're, again, doing what we are trying to minimize some of the threat of the combustibles immediately around your home.

John \_\_\_\_: I'm actually a member of California State Task Force Code for WUI. In the past, we've always been mandated to deal with code issues for the WUI for new construction. And this year for the first time, we're being mandated to come up with a retrofit program to actually make homes more addition resistant than what they are now. We really have, there are two issues, there's a flame and there's a radiant exposures. And with high density housing and zero lot lines, it's a big issue. As we talk about embers, it's more than 1,000 feet. Embers can go for miles, and when you talk about embers, it's not just the small embers with the swirling winds. You can have branches breaking through windows, so it's a big issue of overdoing. So, with the technologies that are out there and to answer your question on what siding, the technology is there to protect it. But there's a lot of technology dealing with skylights, decks, storage sheds, upgrading the Grade A class roofing – not only for houses but for storage sheds and buildings because all of this stuff contributes. So, we have a mandate and if you're interested, I can keep you on board with what we're doing because the retrofit, we had 20,000 homes in 2017, of that, 9,000 were in the urban area that had nothing to do with homes in the wildland urban interface. And last year, over 30,000 homes in the huge percentage was again in the urban area. So, it's a big issue and we're working on it at the State Fire Marshal's office on that, just to let you know.

Chief Gray: Thank you very much. It's an important issue and these are recognized as, we're talking about wildfire, but what we've been experiencing, and in particularly in communities like Paradise, these are urban conflagrations, much like you saw at the turn of the century. Anyone know of the history of Chelsea, Massachusetts and much like literally the construction of our Fire Station 52. That actually started in 1956-57 there as a result of an urban conflagration in San Rafael, multiple buildings were on fire and they continued to burn before they were successful. We had one fire station at the time, it was one that used to be across the street, currently under reconstruction – thank you very much San Rafael – but this can happen and this is where these fires are involved. They are building to building. Thank you

John Hanson: First of all, I'd like to say that I am very, very impressed with this list. This, I don't know exactly how you're going to do it, when, what your schedule is, or what is the agenda, how you're going to pay for it, but it's great. You know, if these things come together, this is a wonderful program. The one problem I do have, a question really, that is it looks like the majority of your public alert system is telephone based and that makes it a very critical infrastructure. And the problem that I see is that (1) landlines, well first of all, as soon as you get a major fire, power goes out, it happens usually. As soon as the power goes out, landline telephones are virtually useless because they're electronic. So, unless you have a battery back up for your telephone,

then you won't be able to use it. Cellular phones are the alternative there, and the problem with cellular is that when the power is down, roughly half the cell towers are dysfunctional because their battery backups are not maintained well. And the other ones that do have a power backup, you have about let's say about four hours. So that means that your major system for alerting the public and giving them directions, especially on a conflagration as it's happening, or even just a major fire, is somewhat compromised. Now I know that Mill Valley is putting in an alarm system, sort of like sirens, and I wonder if you're considering that as well, something like that, or something I would say at least to really put some effort into monitoring and making sure that the cellular infrastructure is up to snuff. Because even in the best of circumstances, cellular will only handle about 20% of the population. That's about it, thanks.

Chief Gray: Good comments, and thank you. Quinn and I are going to make a few responses relative to this. This is a really serious and important point of making sure that people are notified in the event of an emergency, regardless of the circumstances. You pick the scenario – we're talking about wildfire tonight, it could be something else. Just by a show of hands, does anyone in the audience still have a landline with a nonamplified phone that doesn't need to be plugged in? (A few applauded). That's great – glad to hear it! I keep one here myself, but I'll tell you what, we're a minority and becoming fewer and fewer. So, the other factor that we're relying on now is cellular technology and other means; and at this point, we're not discounting anything. We're looking closely at what others may do, what can be done by success. I think you're all familiar with the term "belt suspenders and elastic waistband". Multiple points of failure, but those cell towers were going out, Santa Rosa lost about 100 of them within the first hour of their incidents and can you rely on door-to-door knocking for your alerting? We're looking at a number of measures and I think that's the purpose of gathering both community input and working in conjunction with other agencies to see what's successful here because it's going to take a multi-pronged approach.

Quinn Gardner: I think to the point, the redundancy is really, really critical and one understanding the database, so we do ask that during any type of emergency that if you're using data on your phone, text messages, social media, etc. and not calls, just due to the bandwidth that takes. The point about the cell towers is well taken and certainly an area we are looking more into. On the siren note, and I just want to kind of clarify this, because we hear it a lot, specifically outdoor warning sirens are designed to be heard when you are outside to tell you to get inside. And so, they will not wake you up when you are sleeping. If you are indoors, they are not designed to be heard indoors, so think of them in the most traditional sense in terms of whether it's tornado warnings (probably the most common usage of them), tsunami or things like that, or some type of large physical attack. That's where historically, you go back to the "duck, cover and hold". So, there are some kind of systems around that and the Chief has even mentioned, can we even get in touch with all of the churches to ring church bells all at once. And so, we're looking into all of these creative solutions, but we don't want to create a false sense of security through sirens either, where people say "oh well there are sirens – I don't need alerts", because that couldn't be further from the truth. It is very



important that everybody gets signed up for alerts but the neighborhood connections are so essential. Knowing your neighbors and knowing that we're going to check up on each other if one of us gets an alert, we're not going to assume the other person got it – we're going to knock on doors. So all those are done and really critical and part of the ongoing and expanded outreach we want to do with this plan. So, thank you for that.

*\*at this point, it sounded like the microphone was off and speakers sounded far off, hard to interpret\**

Our plan here is an all weather radio and it will provide emergency alerts. And this particular radio, which are anywhere from \$30 to \$60, it has AAs, it has a lithium rechargeable battery, it has a \_\_\_ for recharging. There really is no excuse not to have a recharged battery. And if that fails, you can put it out in the sun, since it has a solar charge. And it works. It sounds off with an alert and if you have evacuation warnings, and power went out, you'd have this transistor radio that would give you these alerts and would give you a notification that there's a mandatory evacuation. This is just another medium that we're looking at. This particular one is made by Michelin and it's an all-hazard, NOA (national weather) system radio. There are hundreds of them and different types available online or at the store.

Next male speaker: Two points, first of all as you might hear, I'm from England, and during the second world war, sirens got through every single window and door, into the basements, people heard them everywhere, and it saved thousands and thousands if not millions of lives. Second point is, I notice in #33 that you have the CERT members and there are a lot of CERTs in Marin, and they are all stepping up because they care about safety and the communities – not just their own. And my experience is that they are completely under-utilized by the Fire Department, the Police Department, and the City. And I think this is a great opportunity to reach out beyond the way we've been doing it in the past. It's great to have a CERT look after traffic during a parade, but that's not what they're there for. They are there to take care of the safety of our communities and I encourage you to reach out to them. Thank you

Rick Taff: I live on Fifth Avenue, and I have a little story. Last year, or I guess the year before, my stepmother's house which was in Coffey Park, burned to the ground. Nothing was left and she got out with absolutely nothing. She moved back in about 5 weeks ago, had good insurance, Nationwide, if you will, but any company – they pay for everything, everything went smooth. The house was a stucco house, the second block in on Coffey Park. There were no real trees there. There were a few trees but nothing like Eucalyptus or like we have here. The fire came from the East side of the highway, it blew across an eight-lane highway, four lines each way, ignited things along the way. My brother and I felt that the rain gutters had leaves in them, and that's where the fire started. They get in the rain gutter, the leaves catch on fire, and if you've ever been in your attic in the summertime, it's 120 degrees daily up there and you wouldn't know if it's not hot outside, really. That wood is so dry, if it gets in your house that way, or gets in your house through the vents on the side, it can easily be plugged off, run.

There's no hope, that house is going to burn down. If that attic catches on fire, you are in big trouble. That's today's story.

That's a great story, thank you for sharing. It's an important story. Please we want to hear from you. The comments tonight have really been wonderful. We really appreciate it.

Rich Rustorff: I live in Rafael Highlands above Sun Valley and we are a firewise community, we just got our designation in December, it's really a great program. My question to you is, you've got 37 points, have you run into any resistance at all in your thoughts about achieving all 37 points? Along those same lines, let's say you couldn't accomplish 35 of the points, what two points do you think, Chief Gray, are the most important that you would just not let go of?

Chief Gray: So, I don't know that there are any points that we can be quick to jettison. It's a comprehensive package that works closely together. They're all interrelated in some way, and our hope is to achieve success over, and this is not just a period of months but years in the making, and this is going to be a journey working together, of really the community hand in hand, one mentioned before, a prevention partnership. And I think that some of the challenges we'll likely face are those that require coordination with our neighbors and with our other public agencies. And I'm thinking about CalTrans, I'm thinking about we met a couple of weeks ago with the Friends of China Camp. And this isn't intended to put China Camp on the spot, but you can go actively smoke using tobacco products in China Camp and walk along a trail 365 days a year right now. Now, if you ask me, that puts us at risk. And so, I think the greatest challenges are going to be ensuring that we have coordination with what's been brought up here, with the other public agencies and communities. Fires, again, don't know borders, and ensuring that CalTrans, the state of California, Marin County, and MMWD, the Friends of China Camp, and all of these other stakeholders, are helping us as a community, which includes all of the residents and business owners in ensuring that we're better prepared to face this fire emergency that will come. Not to avoid the question, but I think that's the one that's going to give us the greatest challenge, but we're up to the challenge. The council asked us to be bold and we're going to do our absolute best to carry out the mission.

Speaker in the audience: What can any of us here in this room tonight do here to help you?

Chief Gray (*then stood up, making it difficult to hear – it was muffled and there was static*): I think being here tonight and to advocate and to speak positively in an advocacy role on any of the social media outlets, please talk to your neighbors and friends in support of the plan. We hope to be back to council, the second meeting is March 18. At that time, we are going to take into account all of the excellent feedback that we've been receiving and recommend some immediate measures to the City Council and we'll see how that goes. Obviously, continued support \_\_\_\_\_ \*static\*

Another speaker in audience: I noticed in your brief summary, different dollar signs associated with \_\_\_\_\_

Chief Gray: We are in the process of doing that and refining the numbers to exactly what we believe it will cost and will prevent that from happening.

Another speaker: \_\_\_these public meetings going on?

We don't, but if we felt there was a need, and I would propose to you for a recommendation for more of these, I can just tell you, over the past year, we've been to nearly every homeowners' association, we didn't talk specifically about the 37 point plan. We've been talking about this and building up to it over the past years and we're receiving a lot of input currently. And that is something that if we feel it would be helpful to do that and host another meeting, we'll absolutely do it because I think it's good for us and good for all of you.

This group has a very good idea. Chris, can you repeat the questions please? There was a comment made to host joint meetings with the County and we'll absolutely work on that.

Quinn: On the meeting note, I would add that this is the only meeting we've done specifically in this environment, if you will, but we have met with two or three other neighborhood associations just asking them to act specifically on the plan, and a few other groups. So, easily 300-400 other people have gotten something written on this plan for outreach.

Chief Gray: The mayor intended that we conduct a meeting that met with all the neighborhood meetings

Other speaker: You know that with our retrofit program – one of the goals is common sense. You can't just go crazy and mandate over-the-top stuff, it's got to be simple and clean, good technologies and the proper testing that goes with it.

Chief Gray: And as it is fully intended, the pragmatic response to what is a very complex problem is out there. In some of those trigger points that were brought up here, you mentioned within the context of the plan here, it would be advisory maybe if you needed to upgrade your siding or your roof or something like that or you want to accelerate the roof replacement of your roof or the siding, based on newfound knowledge and protection of your home, but the general trigger points would be something you would tend to use in making an addition or doing a remodeling of your home.

Those are ordinarily triggers

Female speaker: I look forward to this getting off the paper and out there.

Chief Gray: Thank you, and me too. With that, I think we'll close, and once again, thank you all very much. We appreciate it.

Quinn: If you have comments that you wrote down, if you could turn them in up here.

I'm Sasha MacAntee from City of Mill Valley, I just wanted to let you know that the County is going to have another community fire meeting the way we did last time that Marc Levine hosted and it's going to be in early May. So, just watch for that. There will be another County meeting.

**Wildfire Action Plan Feedback : Entry # 4040****Action Item/Objective**

4- Establish structure ignition zone standards

**Feedback**

Vegetation is not the foe; in fact, vegetation can help put out a fire if it is properly managed. The mantra of clearing everything simply means the embers blow up against the house rather than being trapped by the vegetation. The issue is that we have dehydrated the soil, we have sealed it over so water cannot percolate. Most soil supports moist plants that do not catch fire. They have already learned this lesson in San Diego. We have an expert on this topic speaking on May 9th at the Bay Model; come hear what they have learned. He is now helping the US Navy @ Camp Pendleton. You will never get homeowners to agree to the vegetation plans you are advocating nor should they--bare ground simply evaporates the carbon in the soil, which means the soil does not absorb any water, which means plants do not stay hydrated without excessive efforts. make nature work FOR you and the problem will be much reduced. Laura Lovett, Marin chapter, CA Native Plant Society

- I would like to provide feedback on a second item

**Action Item/Objective**

General Comment

**Feedback**

If you request that PG&E start insulating their power lines in San Rafael when they replace them, or in certain high-hazard locations, you may do more for fire safety than all the brush clearing you can order.

**Wildfire Action Plan Feedback : Entry # 4017**

**Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

We had gotten a letter telling us we have to remove the bushes in front of our house. Can you (1) recommend what to plant instead of what have?

We have 2 small dogs that need to be kept in yard. (2) We are all Sensor Citizens @ this house. Is there a service that will help Sensors with this problem? (3) When we were notified of this problem - you/they didn't check the hill in the back. (4) What about the Eucliptist (?) trees on the hill down the street - who will be taking care of them?

**Name**

Wendy Springstead

**Email**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 4014****Action Item/Objective**

General Comment

**Feedback**

The proposal to remove vegetation within 5 feet of homes should be revised to be less restrictive. I have green shrubs that are well maintained and probably less combustible than my wood siding. Most homes in my neighborhood also have shrubs around them. Like vines, they are more aesthetically pleasing than bare walls. Please revise this section of the plan to allow low combustible vegetation within 5 feet of homes.

**Wildfire Action Plan Feedback : Entry # 4013****Action Item/Objective**

25- Parking Box program

**Feedback**

Parking Boxes please redo the video to explain Parking Boxes.

Telling me they are like Mill Valley and Larkspur does not tell me what you are proposing.

What do they look like?

I'll reserve comment until I see exactly what a parking box looks like.

I'll know you received this when you change the video.



**Wildfire Action Plan Feedback : Entry # 4012**

**Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

Wow this wildfire plan looks good in theory I have two questions:

I live on Southern Heights Boulevard at the closed bridge. The two plots of land on the west side of Southern Heights at the bridge have extremely dense, high fuel trees. We have asked the neighbor to thin them and he has refused and threatened litigation, should any on authorized trimming occur. In the land of Marin, with its high potential for vexatious lawsuits, how does the city of San Rafael intend to force fuel reduction with obstinant homeowners?

Also, the homeless issue should be first in for most. It is well known that the homeless are major fire starters, at least on San Rafael Hill. With new homeless protection laws such as the ninth circuit court ruling on Martin versus the city of Boise, how does the city of San Rafael intend to keep homeless fires down?

**Name**

Arthur Feidler

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 4007****Action Item/Objective**

General Comment

**Feedback**

-Where is the money going to come from for this plan?

-Who will additional staff be supervised by?

-Will any part of this plan be used to increase staffing on San Rafael Fire Engines?

-I heard the Fire Department is already facing budget cuts, and potentially eliminating 1 Battalion Chief position. If the city has enough money to fund this wildfire plan, then they should have money to fill the current public safety positions. The city should be focused on increasing public safety, not asking for volunteers and CERT members to go pull scotchbroom on the weekends.

**Wildfire Action Plan Feedback : Entry # 3977**

**Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

What is the approval process of the Action Plan? After the community feedback, what is next?

**Name**

Digne de Lenea

**Email**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3932****Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

One thing that stood out to me in yesterday's meeting was that the Fire Dept. was considering fire shelters at certain locations for the community. This seemed much more realistic than the 30-some recommendations such as vegetation management. Let's face it, in the event of a wildfire, it's going to be city-wide chaos, traffic snarls, abandoned cars, people will be out and about wondering what to do. Shelter-in-place won't do if you've seen the videos of buildings incinerated to the foundations. The only thing standing was the brick chimney. One gentleman mentioned air raid shelters in London during WWII, where sirens signaled people to head for the shelters underground. Wildfires moving a football field distance a minute leaves little time to find shelter. Even if you have a house and landscaping to manage you could be caught shopping or whatever; then it's shelter that you'll need. Government resources should focus on that.

**Name**

Digne

**Email**

**Wildfire Action Plan Feedback : Entry # 3921****Action Item/Objective**

2- Citywide vegetation standards

**Feedback**

I have concerns regarding vegetation that already exists. While I understand standards for new planting, many of my (elderly, limited income) neighbors have hillsides covered with the plants on the list. It's not always as simple as pulling out a shrub. Asking people to rebuild their hillsides seems excessive. As a scientist I also have concerns about the data backing up this decision. How much does/will this actually help? Asking people to make what can be drastic changes for small likelihood changes seems unwise and an over reach, not to mention costly. Seems like a misuse of resources.

**Wildfire Action Plan Feedback : Entry # 3920****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

Many homes in San Rafael have mature, week-irrigated landscaping that includes some of the “red-tagged” plants on your list. These plants are well-established and would be extremely difficult, if not impossible to remove. Not only that, but the cost to replace the offending plants with other non-offending plants would be extremely high. This doesn't even take into account the detrimental effect to the aesthetics of the neighborhood.

- I would like to provide feedback on a second item

**Action Item/Objective**

2- Citywide vegetation standards

**Feedback**

Requiring home-owners to remove vegetation around houses and structures on their property is going too far. I know we all want to protect our community, but we mustn't let our fear dictate our actions to the point of destroying well-established, well-irrigated landscaping and changing the entire aesthetic of our neighborhood - not to mention the decrease in property value. We purchased homes in this area precisely because of the gardens and the old growth plantings adjacent to all the homes. Let's put our efforts into other areas of fire protection!

**Additional feedback**

- I would like to provide feedback on additional items

**Action Item/Objective**

37- Effectively remove vegetative debris

**Feedback**

Allowing each home to have up to 5 or 6 cans of green waste would help people to maintain their healthy gardens and expedite the removal of dry, dead and potentially hazardous garden debris.

**Action Item/Objective**

General Comment

**Feedback**

Let's not let the fear of fire push us into punitive and rash choices that will potentially harm our homeowners' investments and change the very landscape of our community. There is a reason why we all choose to live here .... a variety of lush, green foliage surrounding our homes and making our neighborhoods and properties a beauty to behold. Please DON'T require us to change the very landscape we worked so hard to attain!

**Action Item/Objective**

General Comment

**Wildfire Action Plan Feedback : Entry # 3919****Action Item/Objective**

General Comment

**Feedback**

GREGORY W. POULOS

February 11, 2019

City of San Rafael

The following comments are submitted in response to the City of San Rafael's proposed "Wildfire Prevention and Protection Plan" as it is currently drafted for public comment on February 11, 2019. Given the complexity of the issues presented, this initial letter is only a partial response to the City's plan covering sections 1 through 10. Additional comments will be submitted under separate cover.

**EXECUTIVE SUMMARY OF COMMENTS:**

The plan as currently drafted is ill-conceived, overly broad, largely unnecessary and extraordinarily expensive. If implemented it would require the removal of thousands of trees and shrubs from around the homes and streets of San Rafael while raising property taxes, city fees and homeowner insurance rates. At least 22 of the 37 proposals require "additional funding sources". In addition the plan, if implement, would impose unwarranted and unnecessary burdens on home sellers including making some homes "ineligible" for resale without expensive upgrades and creation of a "Vegetation Management Plan" (VMP). Even remodeling a small portion of a home or building (even in the business district) will require creation and submission of VMP and bringing of the entire structure up to Statewide fire code standards.

Another problem with the plan is that it proposes to make every home and building subject to State laws that are specifically written only for "Wildland Urban Interface" properties. This would result in massive insurance rate increases for every home or building in San Rafael. It does not make sense to take State laws designed to apply to specific remote environments and make them wholesale applicable within a modern city.

**COMMENTS BY SECTION OF PROPOSED PLAN:**

**SECTION 2:** This section proposes to amend the City Code so that all requirements in the current Wildland-Urban Interface (WUI) provisions of the Fire Code apply to every parcel in the City. There are two obvious problems and one potentially significant "hidden" cost. First, the summary provided by the City does not tell anyone what those current standards are. Second, as noted above, it is clear that the City plans to adopt ordinance changes but hasn't said what those changes are. Before adopting an ordinance change the specific wording of the proposed change must be included in the City Council's proposal and the public given the opportunity to comment on the precise wording.

One change that is partially spelled out is that the City intends to garner more income through "additional building permit fees." The building permit fees are already extraordinary in San Rafael so adding to them will be burdensome and make San Rafael housing even less affordable. Before adopting this proposal the City must spell out exactly what the proposed fees will be and allow public comment.

Reviewing the current WUI standards in Chapter 4.12 of the San Rafael Municipal Code there are numerous provisions that should NOT be made applicable to every home in San Rafael. These include:

- a. Homeowners must maintain 100' of "defensible space" around any structure on the property including houses and sheds. Creating "defensible space" around homes in well established neighborhoods like Gerstle Park, Loch Lomond, Glenwood, Peacock Gap, Dominican, etc. would result in a massive reduction in trees and substantially change the character of the City and its neighborhoods. It would also impose a very high cost of homeowners. Tree removal by professional services can run into the thousands of dollars.
- b. The current WUI plan requires that trees be trimmed either 1/3 of the way up from the ground or 10' from the ground. This would again impose a significant cost of homeowners and change the character of the neighborhoods.
- c. Remove all "combustible vegetation" (anything that "ignites readily and burns intensely"). See comments under Section 4 (below). In summary almost every home in San Rafael would be required to change their current landscaping much of which is well established.
- d. All bamboo and juniper plants must be removed. The city has already run into problems enforcing the current requirements for

**Wildfire Action Plan Feedback : Entry # 3919**

removal of juniper around homes and has even failed to remove it from city owned property. This is yet another major expense for homeowners.

e. Homeowners will be required to keep roofs and gutters free of any leaves or debris...or face fines. There is no question that regular maintenance of homes is an important part of home ownership. On the other hand we do not live in a "police state" where city patrols should be going around determining who's roof is sufficiently clean to avoid a fine. There are no specifics of how the "clean is clean" or how long after a storm or windy day the homeowners will have to address the recently fallen leaves or twigs. One potential "unintended consequence" of this and other proposed ordinance changes is that they create potential additional liability issues for homeowners. Failure to comply with a law can be "negligence per se" under California law. Thus in the event of a fire homeowners can start suing each other for failing to comply with the ordinances and they can also sue the City for failing to properly enforce its ordinances.

f. The proposal would allow the fire chief or his designee to enter private property at any time to enforce the provisions of the code and failure to comply with the code can be a misdemeanor or infraction punishable by a fine up to \$500 and / or imprisonment for up to six months. This would give expansive and unwarranted authority to an unelected official to come onto private property virtually "at will" under a threat of fine or imprisonment. As such it is highly objectionable.

g. The proposal would permit the to undertake abatement actions after "reasonable notice" and assess the homeowner for all costs plus administrative fees and put a lien on your house. There is no provision defining what is considered "reasonable notice" or what "administrative fees" would be.

There are also potentially "hidden" cost of these change (and also the changes outlined below). The most significant likely hidden cost is the increases in homeowner insurance costs resulting from having property designated as part of a Wildlife Urban Interface. This is suggested by section 23 ("Potential insurance and code compliance changes for property owners being added to the WUI. Even though the City is aware that homeowner insurance rates will rise, there has been no study done by the City (at least none disclosed to the public) regarding how much those rates will rise for the average homeowner in San Rafael. The cost of a new ordinance to the tax payers should be researched and considered before a new ordinance is adopted.

SECTION 3: This section states that "at a minimum" the city will adopt ordinance changes to incorporate and meet the standards of the California State Public Resources Code sections 4290 and 4291 and apply them citywide.

There are many problems with this proposal. The most obvious problem with this concept is that those code provisions were not written to be applied to urban areas; they are specific to mountainous areas and forest covered lands. It does not make sense to apply those State code provisions to areas of San Rafael that are, for example, in the canal or downtown business district. Adopting them wholesale is just lazy legislation. Moreover, if the ordinance is drafted so that it simply incorporates them, together with any future changes, then the citizens of San Rafael will be saddled with obligations that are not currently foreseen and we will be at the mercy of whatever lawmakers in Sacramento decide are future standards for mountain and forest lands. Are we represented by Sacramento or our own city council?

SECTION 4: This section contains what is, arguably, the most significant overreach in the plan. Section 4 outlines requirements to reduce "ember ignitions" by eliminating all vegetation that could be an ignition source from within five feet of a building. Any property that has trees, shrubs or anything growing taller than 3 inches and within five feet of a home / building must be cut down. The allowance for a variance from the Fire Chief does not save this provision. First, there is no information on what standards the Fire Chief will apply in determining whether to grant a variance. Second, there is no information provided regarding what cost the City will impose for requesting a variance. Currently the City imposes very large fees for requesting variances from the City's building codes, and any appeal beyond the City Planning Department to either the Planning Board or the City Council is prohibitively expensive running into the thousands of dollars. What similar fees are being contemplated for disagreeing with the unelected Fire Chief?

The further requirement that any variance request be accompanied by a "Vegetation Management Plan" further complicates the issue and creates significant burdens and expenses on homeowners. A quick review of the current template of a Vegetation Management Plan shows that it must be a very detailed plan listing all the types of vegetation on a property, how it is watered and maintained etc. Preparation of a proper VMP as it is currently set forth would require the services of professional landscape designers resulting in a further expense for home owners.

The City proposal also admits that this part of the plan cannot be completed with current funding levels. This is a short hand for the plan to raise property taxes. There is nothing in the City's current plan that spells out how much the City intends to add by way of a parcel tax or other revenue creation model to fund this and other provisions of the plan. Tax measures must be specifically set



**Wildfire Action Plan Feedback : Entry # 3919**

forth with adequate notice and an opportunity for public hearing.

SECTION 5: No comments at this time.

SECTION 6: This section addresses a requirement for replacement of all shake roofs by 2029. The draft plan acknowledges that there is no data on how big a problem this is in San Rafael. Common sense suggests that one ought to know if there is a "problem" before adopting ordinances to "fix" it. In addition, there is substantial overreach in the proposal to make homes with shake roofs "ineligible" for sale until the roof is replaced. Roof replacement should be addressed between the seller and buyer much as other code provisions currently are

A further objection is to the provision that would make the ordinance changes effective within 30 days of adoption. Many homes may already be in 60 – 90 day escrows or will be by the time the ordinance change is adopted (if it is). There is no provision for how these homes will be effected by the adoption of an ordinance? nance taking effect in the middle of a property sale.

SECTION 7:

This proposal states that the plan is to "increase funding sources." No comments at this time.

SECTION 8:

This proposal is for immediate seizure of flammable material from homeless encampments. As noted this proposal will require additional funding sources that are not specified. While the proposal is laudable, the lack of specificity as to the planned funding sources is problematic. Before being adopted the City must disclose it proposals for revenue sources.

SECTION 9:

This proposal is the increase City staff with a position costing \$76,000 per year (with our without pension contributions). As the summary notes, additional funding is required and must be put to a vote.

SECTION 10:

This proposal to increase funding for a temporary ranger position. As with other provisions this would require additional funding from unspecified sources. Before adoption the City must identify the sources or taxation that it intends to seek to fund this position.

SECTION 23:

This proposal is closely aligned with the proposal in Section 2 and this comment should be read to reference the comments in Section 2. As noted by the "Concerns" statement, there are "potential insurance and code compliance changes for property owners being added to the WUI." What isn't stated is that those changes will be significant cost increases in the cost of home owner insurance premiums and compliance costs. As noted above, the City should conduct a study to determine what those increased costs are likely to be.

SECTION 24:

This proposal is to make California Fire Code Section 7A applicable to any building that gets a new roof, a new window, installs a Tesla charger or remodels more than 25% of the home. Section 7A, however, includes many provisions that would require very significant costs on the homeowner such as changing roof vents and even replacing outdoor decks with fire retardant materials depending on what they are currently constructed of and whether they attach to the structure. These requirements are a regulatory overreach and would impose significant cost burdens of residents of San Rafael.

SECTION 27:

This would require the creation of Vegetation Management Plans for all home sales. See discuss in Section 4 above.

SECTION 29:

This section would require owners of short-term rentals to post as yet unknown emergency procedures and also to create Vegetation Management Plans. See comments regarding VMPs in Section 4 above.

SECTION 32:

The proposal to remove vegetation on public land that is located within 30 – 50 feet of private property is an extraordinary undertaking that will forever change the character of properties that abut City owned parks. Houses that are near every park in the City will be substantially impacted. Before adoption the City should map out exactly what vegetation it plans to remove and how the removal will effect the nature and value of neighboring parcels.

CONCLUSIONS:

San Rafael has submitted a "Wildfire Prevention and Protection Plan" for comment. The plan is ill-conceived, overly broad and extraordinarily expensive. If implemented it would require the removal of thousands of trees and shrubs from around homes and streets while increasing city staff and raising property taxes, city fees and homeowner insurance rates. At least 22 of the 37 proposals require "additional funding sources". Some homes would be "ineligible" for resale without incurring substantial costs and the plan would impose further restrictions on short-term rentals and remodels including a requirement for creation of "Vegetation

**Wildfire Action Plan Feedback : Entry # 3919**

Management Plans” and compliance with provisions of the State Fire Code that are not designed to apply in an urban environment. An example of the overreach is the proposal to require homeowners to cut down any vegetation higher than 3 inches within 5 feet of a home. Look around your home and others just in Glenwood and you’ll see how many trees will be lost. It also proposes to make parts of the California Public Resources Code and California Fire Code applicable to every home and building. Those laws currently only apply to homes in limited areas designated by the State. Imposing them on all of San Rafael would increase costs on homeowners particularly when selling or remodeling. It is illogical to apply to San Rafael the State laws specifically written for remote areas.

The potential for wildfires in areas adjacent to wildlands is a legitimate concern for city government. Reasonable planning is important but must be specifically targeted. The broad brush, overreaching and overtaxing approach of San Rafael should be rejected.

Gregory Poulos  
San Rafael, California

**Wildfire Action Plan Feedback : Entry # 3918**

**Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

Will there be funds to help 'pay' for this new action plan?

Like help me pay? I'm wondering how I will pay for this and how it will effect my ability to sell

Thanks

**Name**

DM

**Email**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3917****Action Item/Objective**

4- Establish structure ignition zone standards

**Feedback**

If enforced strictly this will alter the character of our neighborhood in a dreadful way. Many houses have beautiful mature plantings that are not particularly combustible. I understand that a fire would alter the character of our neighborhood in a horrible way too, but I feel this action item should be set aside in favor of many of the other suggested actions. Perhaps there is a more nuanced approach that won't decimate these beautiful old houses and their grounds.

**Wildfire Action Plan Feedback : Entry # 3916****Action Item/Objective**

General Comment

**Feedback**

I have a watered lawn, azaleas, rhododendron, dogwood and Japanese maples, clematis vines, and hedging along property lines. I have 125 year old elm trees, roses and summer flowers. None of this is a fire risk, and yet you will require that I spend tens of thousands of dollars to change my landscaping when I am only two blocks from downtown San Rafael where the chance of a wild fire is nearly zero?

**Wildfire Action Plan Feedback : Entry # 3915****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

I have a home which backs up to open space and has 10-12 Black Acacia trees which line the perimeter of the lot along the street front. One of these trees is 60'+ . To require removal of all Acacia trees would be a tremendous expense, totally expose my house to the street and undermine the stability of the very steep hillside uphill of the street which the roots from these trees holds in place. The resulting dirt slides would be significant and be an ongoing expense for the City since this area is part of the road right of way. I hope you are making a distinction between different types of Acacia trees in your proposed plan. Also, I have a shake roof which was chemically treated at the factory to be fire resistant, so that I have a what I believe is called a Type A roof. Homeowners who have gone to the extra expense of installing this special fire resistant shake roof should not be required to remove it.

**Wildfire Action Plan Feedback : Entry # 3914****Action Item/Objective**

General Comment

**Feedback**

Everyone agrees that mitigating fire risk is important in light of the recent devastation across the state. However, many of the proposals in this draft seem to put financial strain on both the City and residents. The targeting of certain plants and trees and the offer to provide "chipping" days is insulting. Would eliminating juniper, bamboo, etc done anything to decrease the fire devastation of the past few years? Where is the data? The fact is these generational fires will devastate the area whether we have juniper or not. To force residents to remove plants (many of which were part of the initial construction that was no doubt approved by the City at that time!) seems like a giant government overreach. Our money is better spent in other places.

**Wildfire Action Plan Feedback : Entry # 3913****Action Item/Objective**

10- Additional Police Rangers

**Feedback**

The most fire risk in San Rafael is the homeless encampments. That is where SR needs to spend their resources for the biggest bang for the buck. Also, the Rangers should have portable fire suppression/hose/tanks in their trucks. Not sure if they still do, but they need them. Need more Rangers. Two is clearly not enough Rangers based on the number of encampments and the resulting fires. Increase funding for Public Works so that they can collect and dump the trash/fuel the encampments create. In the old days, SR would use SQ Inmates to help with trash removal. What happened to that program?

Why aren't eucalyptus trees, the most fuel intense tree not included with junipers/bamboo/cypress/acacia? Makes no sense, you should explain reasoning here.

So the two most important items are Increase number of Rangers and include the removal of eucalyptus trees.



**Wildfire Action Plan Feedback : Entry # 3909****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

"Highly flammable vegetation will have to be removed from your property":  
I am opposed to this being grandfathered. ok for new landscaping or major landscape re-do

"Limitations on vegetation on the perimeter of your residence":  
I am opposed to this being grandfathered. ok for new landscaping or major landscape re-do

- I would like to provide feedback on a second item

**Action Item/Objective**

2- Citywide vegetation standards

**Feedback**

"Wildfire building codes will apply to all parcels":  
What does WUI stand for?

**Additional feedback**

- I would like to provide feedback on additional items

**Action Item/Objective**

General Comment

**Feedback**

I used the "How Does This Wildfire Prevention Plan Impact Me?" list to generate my feedback. It was hard to provide feedback because the category numbers in the "Action Item/Objective" box on the on-line feedback form did not correlate w/ the numbered items in the "How Does This Wildfire Prevention Plan Impact Me?" section... Didn't know which drop down # applied to my comment!

**Action Item/Objective**

28- Require 2 gates in fences

**Feedback**

"Requiring 2 gates in any fence in designated areas":  
Do not require in cases of fence repair.

**Action Item/Objective**

27- Incorporate Vegetation Plans into property sales

**Feedback**

**Wildfire Action Plan Feedback : Entry # 3909**

"Vegetation management plans required for some remodel projects and property sales or transfers":  
Eliminate trigger if roof or windows are replaced.

**Wildfire Action Plan Feedback : Entry # 3906****Action Item/Objective**

4- Establish structure ignition zone standards

**Feedback**

All of the illustrations of homes I have seen in the material are on large lots - 1/2 acre was the smallest one, and the others are on even larger lots, with no nearby neighbors. Can you provide illustrations which actually represent the majority of homes in San Rafael, ie homes on 1/4 acre lots, with homes also on 1/4 acre lots on both sides of them?

**Wildfire Action Plan Feedback : Entry # 3904****Action Item/Objective**

30- Review and expand evacuation plans

- I have a question requiring a response

**Feedback**

1. Many seniors take off their hearing aids at night and would not hear a Nixle alert by phone. What about a siren alert that can be heard neighborhood wide and is not dependent on phones? Hearing a loud siren would prompt me to check my phone for further information.

Also, alert TV stations that evacuations, etc. are happening in a certain area. Someone watching may get the message that way either for themselves or for a friend or relative that they can then check on.

What if PG&E decides to cut off electricity to an area due to high fire danger. What plans are in place to make sure that alert systems work even without electricity?

**Name**

Cynda Vyas

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

- I would like to provide feedback on a second item

**Action Item/Objective**

30- Review and expand evacuation plans

**Feedback**

Freitas Pkwy is one of the main Terra Linda feeders onto the freeway. In an evacuation, it will be jammed. If Hwy. 101 is also jammed because of others who have driven onto it in other places, it will be almost impossible to flee Terra Linda. What are backup plans for such cases? (Two years ago a fire at the Spencer Ave. exit on 101 closed 101 south. Traffic backed way up into Mill Valley. Had the fire been also in Mill Valley, people would be trapped).

**Wildfire Action Plan Feedback : Entry # 3903****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

Dear City Council. Thank you for taking the lead on this issue.

We live at [REDACTED] Terra Linda next to the open space/hill on the Sears end of Northgate mall. There was a fire in that open space in 2018 that was suppressed – thanks again!

Among the biggest complications and expense in removing flammable brush surrounding our properties on streets like this is COLLECTION and DISPOSAL of the brush material. I began removing brush last fall; I spent \$450 on three dumpsters of compressed brush and barely made a dent in what was needed. I and many of my neighbors are very capable of cutting down the brush or hiring gardeners to do so, however bundling and getting it off the hill to the street is a nightmare, and then is the expense of renting trucks and or dumpsters to get it to the waste site, disposal fees etc.

Another major hurdle is that 50% or more of the flammable brush actually sits on CITY LAND and we are not able to get permits to remove it, or they want us to obtain bonds and develop a fire plan and go through a lot of other red tape. It would be far more efficient if City crews or a City hired contractor to come on to the open space from behind the property at appointed times via the access routes – in our case the access on Nova Albion.

The city needs to do its also in this matter part if this is going to be effective. I am sure you will find someone on each block like myself ready to coordinate the effort with neighbors.

Regards

Keith Granger

**Wildfire Action Plan Feedback : Entry # 3901**

**Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

On page 4- do you really want a word "ascetics"? Perhaps you wanted "esthetics" instead.

**Wildfire Action Plan Feedback : Entry # 3899****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

My wife and I support strongly the requirement that property owners in San Rafael remove all juniper and other highly flammable plants. We urge strong enforcement of this requirement, including fines for property owners who do not comply.

**Wildfire Action Plan Feedback : Entry # 3895****Action Item/Objective**

4- Establish structure ignition zone standards

**Feedback**

I have to say, it is hard news after one has ripped out grass to promote water savings to now hear that only grass and small succulents will be acceptable. Our home itself is modern with concrete hardie board siding, which is much more fire-resistant than wood siding. To quote Home Advisor: "Fire Resistance: Hardie board siding is 90 percent sand and cement which makes it fire-resistant. Case in point, a St. Paul Minnesota house fire torched two fire trucks parked 60 feet away, but the cement board siding home next door, 50 feet away, remained unscathed."

I wonder whether exceptions will be made for cases like ours.



**Wildfire Action Plan Feedback : Entry # 3894****Action Item/Objective**

Question (please provide contact information)

- I have a question requiring a response

**Feedback**

How will the Action Plan apply to our property, which is a large currently vacant WUI property in Santa Venetia neighborhood that is technically in "unincorporated Marin County," not strictly in the City of San Rafael.

James Higgins

Property: [REDACTED]  
[REDACTED]  
[REDACTED]

P.S. We fully endorse this entire plan. Thank you for your work to date. Since purchasing our 27.8 acres in mid-2016, we have spent a hefty six-figure \$um on brush clearance, defensible space near neighbors' structures, and broom removal, and we're not yet finished because overgrowth on this parcel was neglected for many years before we came along. We have received many thanks from our neighbors.

**Name**

James & Jill Higgins

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

- I would like to provide feedback on a second item

**Action Item/Objective**

9- Additional Vegetation Management staff

**Feedback**

Item 9 mentions the "Marin County Model." what is this? If available, please provide me a link to any County description or illustration of this Model.

**Additional feedback**

- I would like to provide feedback on additional items

**Action Item/Objective**

11- Increase fire-safe landscaping education

**Wildfire Action Plan Feedback : Entry # 3894****Feedback**

Consider making brief public education videos on relevant "Prevention and Protection" topics )like how to manually open an electric garage door when power is interrupted. Perhaps videos could be produced by local students - perhaps through a "contest" process? - who may be studying video production. These videos could be tweeted, podcast, and/or emailed to neighborhood and homeowner associations' mailing lists.

James Higgins

Property: [REDACTED]  
[REDACTED]  
[REDACTED]

**Action Item/Objective**

17- Improve vegetation management plan accessibility and functionality

**Feedback**

To engage a wide variety of property owners, use lots of photos of before and after, illustrating various terrains, front, side and rear yards, types of vegetation, etc. to increase engagement of folks with varying levels of imagination.

**Action Item/Objective**

19- Reduce fuels along roadways

**Feedback**

FIVE (5) ITEMS IN THIS BOX

Item 19. - Reluctant residents should be encouraged to do this clearing (i.e. "privacy fencing") for the good of the community. It's actually a "small price to pay" to prevent loss of home and/or life.

Item 20 - (Reduce Fuels Around Critical Infrastructure): to reduce confusion of responsibility, create billboard campaign, or other public advertising. Also see suggestion for tweeted videos in Item 11 response above.

Item 30 - ("Evacuation Planning"): Promote Neighborhood and Homeowner Associations to develop actual real-time practice evacuations, especially where cul-de-sacs and narrow access roads exist.

Item 34 (page 26) - [Editing suggestion] In the "costs" section, replace the word "recuperated" (wrong word) with "recouped."

Item 37 (page 28) - "Remove Vegetative Debris" [Editing suggestion] In the "What This Means" section, replace the phrase "...discussion will help determine is..." with "discussion will help determine if..."

Pages 29 & 30 Action Plan - Consider adding the phrase "See Page \_\_\_" at the end of each Column 1 description, so that a reader can quickly refer back to it. For example: "19. Reduce Fuel Along Roadways (See page 16.)"

**Wildfire Action Plan Feedback : Entry # 3892****Action Item/Objective**

General Comment

**Feedback**

Thank you for working on such a comprehensive plan.

I have a comment regarding the upcoming presentation, Feb 11 at City Hall. I believe there is only 1 hour currently slated for review and public comments. Obviously there are many, many aspects of the plan that will impact home and land owners. I think it's fair to assume that the majority of people who may attend and have comments are homeowners concerned about the physical and financial impacts on their own homes. It's one thing to say "Remove all potentially dangerous vegetation from around the home" and quite another to tell someone they have to rip out their expensive arbor supporting a prized wisteria. Obviously, people will have concerns when best practices have personal impacts--it's human.

Since homeowner's concerns will likely be the biggest draw for this meeting, I suggest that the City focus on these aspects of the draft plan, and segregate out the other issues--staffing needs, improved department communications, goat grazing, etc. All of those "other" issues are important, but it's just way too much to cover and comment on in a 1-hour meeting.

Thanks.

**Wildfire Action Plan Feedback : Entry # 3891****Action Item/Objective**

22- Establish additional Firewise communities

- I have a question requiring a response

**Feedback**

This is a critical item in Plan. There needs to be considerably more effort to encourage people to create FW communities in the entire city. Has anyone in Terra Linda expressed an interest in doing it here? What is ideal size of a Firewise community? Terra Linda is 1300 homes. That's too big.

**Name**

Stephen Bingham

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3888****Action Item/Objective**

General Comment

- I have a question requiring a response

**Feedback**

I've quickly read through the document and am very favorably impressed by the amount of work and thought that has gone into its preparation. I live just outside the city limits in the Country Club neighborhood and I'm wondering if the Action Plan covers our neighborhood or if Marin County is preparing a similar document?

I imagine you will get a lot of pushback particularly regarding removal of highly flammable vegetation.

Re shake roofs, as these roofs represent a hazard to entire neighborhoods, it would be a benefit to all to provide financial assistance for those who can't afford to replace them with the requirement that the cost of replacing the roof should be repaid when the property is sold.

Thank you for preparing and distributing this document.

**Name**

Linda L Garb

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3883****Action Item/Objective**

37- Effectively remove vegetative debris

**Feedback**

If you look at other County plans in Northern California, (Placer, etc.) you will see they have something called a "BioBox" whereby they drop off a 7-20CuYd dumpster for 7 days, and you fill it up with vegetation. Free. It reduces pollution, reduces vegetation, helps people comply with Defensible Space, minimizes Green Waste truck pickups, etc. Also, many other cities in Northern California allow multiple Green Waste carts (up to maybe 5) for free as part of the service.

**Wildfire Action Plan Feedback : Entry # 3882**

**Action Item/Objective**

General Comment

**Feedback**

Please make sure idle cars are also eliminated. They are sitting giant gas cans. LOVE adding Acacias to list of trees.

**Wildfire Action Plan Feedback : Entry # 3881****Action Item/Objective**

2- Citywide vegetation standards

**Feedback**

Applying WUI codes citywide seems like OverKill. WUI codes are there for a reason; high-risk properties. Applying that to all of San Rafael will substantially increase costs for any type of upgrade or remodel, or even basic maintenance of structures, unnecessarily.

I would like to provide feedback on a second item

**Action Item/Objective**

19- Reduce fuels along roadways

**Feedback**

The concern with "Reduce fuels along Roadways" is that much of this effort needs to be done by the City, not property owners. Yes, there are some concerns that private property owners have become "attached" to city-owned property and vegetation (trees, bushes, etc.), but ultimately, most land along roadways and streets is owned by the city or city has easement. Unfortunately, the city has Not been proactive in maintaining the city-owned and managed "forest" and "land". There are many trees that need to be trimmed and/or removed. There is a substantial amount of roadway land that needs regular weed/brush abatement. And it is just not happening. And there certainly is not a regular maintenance plan in place.

**Additional feedback**

I would like to provide feedback on additional items

**Action Item/Objective**

24- Increase fire resistant construction techniques (7A applications)

**Feedback**

Applying WUI codes to non-WUI areas makes no sense. It substantially increases costs for owners and builders for very little reason. We have to weigh the costs against the benefits.

**Action Item/Objective**

26- Increase number of Vegetation Management Plans

**Feedback**

An unnecessary burden, for anyone contemplating upgrading their home. We already have to do this at 50%. Please leave the existing policies in place and remove this one. Let's make it easier on people, not harder.

**Action Item/Objective**

27- Incorporate Vegetation Plans into property sales

**Feedback**



**Wildfire Action Plan Feedback : Entry # 3881**

The RBR process is already complicated and burdensome. Let's leave this one out. There are plenty of other ways to get compliance through the use of already-mentioned ordinances.

**Wildfire Action Plan Feedback : Entry # 3880****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

The concern with "removing flammable vegetation" is that it has become very easy for the City to offload these responsibilities and costs to private homeowners, especially where roadway and street trees line the private property. If this is to be done, the City must be fair about removing trees that are truly on their property or their easements. Also, in the case of minor property line disputes or ownership disputes, the City needs to step up, for the sake of the community, and get the job done and budget for those costs.

**Wildfire Action Plan Feedback : Entry # 3871****Action Item/Objective**

General Comment

I have a question requiring a response

**Feedback**

Reference to the Wildfire Prevention and Protection Action Plan

I own a home in San Rafael - Northbridge (Santa Ventia) community.

There are 170 homes in Northbridge and if there was to be an evacuation due to a Wildfire (disaster) how would 170 homes (at least 2xs in cars) trying to escape ONE exit? Not to mention trying to spill over into an overloaded road (North San Pedro).

There are 2 back exits (to the Lagoon Park and Madison Street) but we cannot drive through them due to the creek and width of the path. Creating an emergency drive through would relieve the panic(?)

That scares me the most!!

Also there is no mention of clear access to natural gas turn offs at each resident(?)

**Name**

Theresa Smith

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3863**

**Action Item/Objective**

1- Eliminate highly flammable vegetation

I have a question requiring a response

**Feedback**

I have juniper that I have been wanting to get rid of since we bought our home, due to its flammability. However, it is an expensive undertaking we have not yet been able to afford. Will there be a tax break or something available to offset the costs?

**Name**

Kelly Franklin

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3858****Action Item/Objective**

General Comment

**Feedback**

#1 eliminating highly flammable - please include verbiage that requires a replanting requirement for every tree removed.

#4 Ignition zone standards are WAY too restrictive.

#9 = waste of taxpayer dollars - use dollars for #9 to go to #10 police ranger staffing

#14 - do not make fire roads wider - will require cutting down more trees

#28 - gates = gov't overstepping

#32 adding fuel interruptions zones = again cutting down more trees!

Please be very cognizant that San Rafael is celebrating over 36 years as a Tree City, and many residents find value in maintaining the trees that surround us. Having multiple tree removal ordinances will make many citizens irate, and create a PR nightmare. If a tree must be removed, please have a retirement that another less flammable one be planted in its place.

**Wildfire Action Plan Feedback : Entry # 3857****Action Item/Objective**

General Comment

**Feedback**

Dear colleagues-

Thanks so much for all your excellent work on this. I may have missed this in reviewing the draft plan but it appears that the vegetation management plan does not address the undesired effects of increasing moisture evaporation from soil which will reduce resilience to drought and the ability of soil to sequester carbon. In addition, removing vegetation can increase the flow of flood waters. It seems we want to be sure to avoid maladaptation approaches that inadvertently cause other problems. One solution might be to add to the vegetation management plan- not just removal of flammable vegetation but the planting of non-flammable or less flammable, fire adapted, and water- as well as biodiversity- beneficial plants (e.g., deep rooted perennial grasses).

Thanks so much-

Ellie Cohen

San Anselmo Sustainability Commission

[REDACTED]  
[REDACTED]  
[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3855****Action Item/Objective**

4- Establish structure ignition zone standards

I have a question requiring a response

**Feedback**

The potential restrictions on vegetation within 3 feet of the structure and near or beneath doors, windows, decks, and stairs is likely to meet with strong resistance due to aesthetic preferences and architectural/landscape traditions. What is the relative value of this restriction relative to other options? Does living vegetation provide a threat, or is it actually an inhibitor (i.e., a source of moisture) that could impede fire spread?

**Name**

Elizabeth Ridley

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3854****Action Item/Objective**

General Comment

**Feedback**

I support all efforts. Additionally, cars need to park in such a way that emergency vehicles can pass through at any time of day or night. I live at the top of West St and sometimes I can hardly get my car up the hill, let alone an emergency vehicle.



**Wildfire Action Plan Feedback : Entry # 3852****Action Item/Objective**

General Comment

**Feedback**

The plan only addresses one police ranger to patrol open spaces, but does not address the general low police staffing level in the city. During a fire, the fire department focuses on fighting the fire. It is up to the police to conduct evacuations, road blocks, and ensure general safety. The current police staffing levels are far too low to be able to effectively evacuate residents. See the video footage on YouTube of Santa Rosa officers and Sonoma County deputies during the Santa Rosa fire as a reference point.

Additionally, as long as the city encourages a high homeless population there will be an increase in fire hazard due to encampments.

**Wildfire Action Plan Feedback : Entry # 3851****Action Item/Objective**

General Comment

I have a question requiring a response

**Feedback**

What consideration is being given to the importance of vegetation for the positive air quality in Marin and also for preventing hillside soil erosion.? As we severely cut back specific vegetation in San Rafael, what plans are there for replacement vegetation and for helping both the city and also home owners to provide suitable replacements.? Aside from the immediate local issues issues from reduced vegetation, there is the wider spread impact on increasing global warming. How is that entering into the equation?

I also have some more specific questions about types of vegetation : What is the evidence about relative flammability of bamboo and acacia vs other vegetation?. I do not recall hearing anything about either of these being involved in any of the recent fires .

**Name**

Geri allpert

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3849****Action Item/Objective**

31- Hazardous vegetation study

I have a question requiring a response

**Feedback**

We live at [REDACTED] One day last year, in mid-November, we felt a startlingly warm/almost hot breeze/wind coming directly down our street from the west. At varying distances, 3-5 blocks directly to our west, there are untended, vegetation-covered hillsides that were, in mid-November, extremely dry/flammable. These open-spaces are owned both by residents and, I think, the City of San Rafael. How will they be managed to reduce their fire risk ? Thank you for considering my concern.

**Name**

Trout Black

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3848****Action Item/Objective**

13- Improve public alerting capabilities

**Feedback**

If all of this can be done it would be amazing.

Messaging folks of imminent danger is critical especially with the aging population. While I leave my phone on overnight for Nixle purposes, most don't. I seriously think sirens should be considered in hand with Nixle and other electronic methods. It's old fashioned but effective.

Thank you.

**Wildfire Action Plan Feedback : Entry # 3847**

**Action Item/Objective**

General Comment

**Feedback**

I suggest further development of sections regarding local forest management and thinning.

Also, I suggest investigation into large-scale rain harvesting and storage for irrigation use late in the year when vegetation is dry.

**Wildfire Action Plan Feedback : Entry # 3846****Action Item/Objective**

34- Use abatement to reduce hazardous fuels

I have a question requiring a response

**Feedback**

I addressed the Council regarding Objective #34. I requested that you delete the word "unimproved" lots. This should enable you to obtain grants to assist seniors to reduce hazardous fuels. This segment of our community is disproportionately unable to comply with the expense of removing hazardous fuels and deserves financial assistance. The objective of working with seniors will find a receptive response from grantors.

**Name**

Albert Barr

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3843****Action Item/Objective**

1- Eliminate highly flammable vegetation

I have a question requiring a response

**Feedback**

I am a resident of Lincoln/San Rafael Hill. I am grateful for the plans outline of ways to address fire danger. However, I'm very concerned about the large quantity of downed/dead trees and brush on the south and west sides of the hill, along a walking path between the water tank at the top of Chula Vista Drive and the water tank southwest of the highest small paved portion of Rober Dollar Drive. Who will clear this area? What part of the Plan covers this area?

**Name**

Judith Pomeroy

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

I would like to provide feedback on a second item

**Action Item/Objective**

30- Review and expand evacuation plans

**Feedback**

I would like to have more detail and advice about evacuation from my neighborhood- the northeast portion of Lincoln Hill. There are many houses and few exit roads. Thank you for your work!

**Wildfire Action Plan Feedback : Entry # 3842****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

this ordinance should also require the City not just property owners and/or HOAs. We spent hundreds of thousands to remove all the junipers and had to replace with new landscaping.

San Rafael never removed the juniper in the middle of Freitas Pkwy at our HOA near open space! And other places.

We were also required AND COMPLIED for a 100 feet defensible space around our property - including Open Space adjacent to the property. Spent over \$100,000 on that. We now have a special assessment coming.

I would like to provide feedback on a second item

**Action Item/Objective**

13- Improve public alerting capabilities

**Feedback**

1. please remember not everyone has a smart phone and can receive "texting"!
2. We need Fiber Optics in San Rafael!!! It's not impacted by infrastructure damage.

**Additional feedback**

I would like to provide feedback on additional items

**Action Item/Objective**

General Comment

**Feedback**

1. PG&E is bankrupt and cannot be counted on to give any grants!
2. MMWD passes the buck and is unresponsive!
3. The City needs to re-paint red curbs at the end of Freitas, at the entrance of open space trails! Cars always park illegally because they can't see the red curbs.
4. Fire roads and Open Space maintenance is neglected in many areas!

**Action Item/Objective**

15- Expand goat grazing

**Feedback**

Best idea ever!!!

**Action Item/Objective**

32- Additional fuel interruption zones

**Feedback**



**Wildfire Action Plan Feedback : Entry # 3842**

How come San Rafael is only required 30-50 feet of interruption zones?? HOA and property owners are required 100 feet!

**Wildfire Action Plan Feedback : Entry # 3841****Action Item/Objective**

General Comment

**Feedback**

Utilizing the resources of the fire dept to generate burn piles and do controlled burns is the best use of money. It is not necessary to outsource fuel reduction since we as tax payers spend a lot on putting out fires, why not use the fire dept during the winter months to start fires eliminating the fuel load. This is how native Americans regenerated their environment. If the Fire Union doesn't like it then the city council should insist otherwise it is their fault the town burns. The fire dept doesn't need a gym in the new public safety building they have hills to clear and burn. Same goes for the BAAQMD. You can breathe smoke during the winter or you can breathe smoke when the shit hits the fan. How about some leadership and less outreach and ass covering? Just do it, cut down the eucalyptus first and move up the hill and get moving. Now!

**Wildfire Action Plan Feedback : Entry # 3840****Action Item/Objective**

General Comment

**Feedback**

I read the entire document and found it thoughtful and thorough. One comment I have is that, though a great deal of thought is evident in the draft, in the end it will only be as good as the follow-through. On my block alone, there are 4-6 houses where maintenance does not seem to be a priority. One house has been un-lived in for over a year, with vegetation gone wild--along with dried wood fencing, damaged venting, and massive cypress trees no more than 30 ft. from another, well-maintained home. These sorts of things need to be paid attention to when performing visual inspections. Finally, beware the municipality trap--reducing enforcement to fines and mandatory regulations (the my way or the highway syndrome). I would remind all that we are in this together, and that the 'partner' approach is always the best approach. Thank you.

P.S. Thought should be put towards elderly people, who for any number of reasons, cannot maintain their properties. Special outreach and services need to be provided in such cases.

**Wildfire Action Plan Feedback : Entry # 3839**

**Action Item/Objective**

General Comment

I have a question requiring a response

**Feedback**

- Which of these points would have the greatest impact on protecting our city from wildfires?
- Which point would be the easiest to achieve?
- Which point would be the least expensive to achieve?
- Which point(s) would have the greatest "bang for the buck"?
- Which points are one-time projects and which points are on-going?
- What points MUST be done immediately and what points can wait?
- What is the current greatest vulnerability or threat to our protection?
- What part(s) of the city are most likely to be involved in the next wildfire?
- What does the government have to do and what do property owners have to do?

**Name**

Rich Rusdorf

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3838****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

It amazes me that San Rafael chooses vegetation common in many yards such as bamboo but refuses to add Eucalyptus to the list. My guess would be that it is easier to penalize home owners than take care of actual land management in the open spaces that border our neighborhoods and city.

Typical over regulation and more cost to homeowners. Why make it the city's problem when we can make it the residents.

**Wildfire Action Plan Feedback : Entry # 3837****Action Item/Objective**

34- Use abatement to reduce hazardous fuels

**Feedback**

during the last round of concerns, there was not real neighborhood inspection and encouragement, much less forced abatement of bamboo, for example. one of our neighbors has more than 100' of 3-4' thick bamboo along the street. this endangers our houses, plus may block one of our exit routes. This new program must force this type of danger to be cleaned up; especially when some neighbors may comply voluntarily, but still be in danger from non-complying nearby neighbors.

**Wildfire Action Plan Feedback : Entry # 3836**

**Action Item/Objective**

General Comment

I have a question requiring a response

**Feedback**

8 - Removal of encampments.

Expand homeless shelter availability to offset Martin v. Boise 9th Cir. dictum.

**Name**

Bill Hale

**Email**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3835****Action Item/Objective**

General Comment

**Feedback**

My main question after reading this action plan is what are firefighters doing when not responding to an emergency? It appears this 'crisis' is being used to expand bureaucracy and city costs when it may already have the resources to implement many of the suggestions. Although it may be below pay grade or against union rules, is there a way to use employees more flexibly?

Other specific comments:

Eucalyptus and Acacia trees can be eliminated and broom better kept in check. These are alien species so there is also an environmental benefit to removal. Creating a 6 ft space between all city trees in the canopy is unfeasible and will decimate the character of tree city USA. San Rafael seems to be in a favorable position of having coastal humidity and wildlands without extensive fir and pine stands. Of course it can always be safer but this plan lacks common sense and ignores good science by escalating WUI definitions to encompass all of San Rafael to a high hazard. The State Fire Marshall has WUI definitions and resulting levels of fire resistant construction for all areas of the state- these definitions should be followed and inform decisions. How can authors of this plan have better knowledge and resources than the State Fire Marshall? One fire resistant construction standard does not fit all areas of San Rafael. Peacock Gap is cooler and more humid than Terra Linda, and Central San Rafael falls in between.

Increasing fire resistant requirements for both new and existing homes makes housing less affordable. The remodel thresholds that trigger expensive fire resistant measures will result in un-permitted construction possibly increasing fire danger to occupants. Again, use common sense - fire resistant roofing is easy to incorporate on new homes and when reroofing. Requiring fire sprinklers has a greater cost impact and is difficult to retrofit an existing structure. Requiring fire resistant material upgrades for installing solar roof panels or Tesla roofing will discourage energy saving reduction in greenhouse gases, counter productive if you consider climate change as contributing to increased fire danger.

Homeless encampments pose the greatest danger and have caused all wildfires in recent memory. The city should enforce no camping period. The city is going to monitor cooking and camping- what about smoking?



**Wildfire Action Plan Feedback : Entry # 3834**

**Action Item/Objective**

15- Expand goat grazing

**Feedback**

More goats less fuel. Go with the goats.

L

**Wildfire Action Plan Feedback : Entry # 3833**

**Action Item/Objective**

General Comment

**Feedback**

Great plan. Lets make it happen.

**Wildfire Action Plan Feedback : Entry # 3832****Action Item/Objective**

General Comment

**Feedback**

Thank you for your efforts to reduce wildfire risk.

I have lived on Nye St for 20 years. In this time, I have experienced one mandatory evacuation, and 3 voluntary evacuations due to wildfires in Boyd Park. Every one of these fires was started in a homeless encampment in Boyd Park.

Please address the homeless issue in Boyd Park to minimize wildfire risk.

We appreciate all you do for our wonderful city!

Katherine

**Wildfire Action Plan Feedback : Entry # 3831**

**Action Item/Objective**

General Comment

**Feedback**

Put the electricity cables underground.

**Wildfire Action Plan Feedback : Entry # 3830**

**Action Item/Objective**

General Comment

**Feedback**

**Wildfire Action Plan Feedback : Entry # 3830**

But of course when looking at trees and vegetation that is highly combustable, and puts San Rafael and properties within the city limits at risk we're not talking about clearing open spaces. We should however be applying strict city wide regulatory oversight to properties within the city limits in our densely built hillside residential areas.

Marin County should be applying strict County-wide regulatory oversight to cut cull and thin combustable vegetation creating a fire break in transitional areas between open space heavily built hillside residential areas within the city at large.

I've poured over the plan, I see the additional vegetation that has been tagged as combustable, but that can't be the entirety of the list!

Eucalyptus trees are a non-native species, and have previously been the subject of eradication measures. I don't know which varieties of Pines are native, but this is another species of tree whose oil content makes them highly combustable and should be subject to removal within city limits as well...

NIMBY's who value the combustable trees and vegetation on their "private" lots in heavily populated hillsides within the city limits, and in transitional areas between open space and neighborhoods put the rest of us and our homes at greater risk of fire!

We have a collective responsibility as a city to do what's necessary to protect our collective future!

The City of San Rafael can lead, we need heavy fines for property owners who obstruct fire resistant improvement within city limits!

There should be laws against Nurseries selling combustable species!

We need to get our fiscal priorities straight to reduce our fire risk, and prevent the kind of catastrophic property losses we've seen in Sonoma and Napa Counties recently!

We need our City fathers and representatives to take this seriously and enact bold regulatory changes and take action.

"Smart" is nice as long as we have intact properties and neighborhoods to reside in and commute from, but leaving our residential communities vulnerable to fire is not smart!

We need to fund a citywide / county wide line item budget expenditure, and funding from our existing exorbitant State and City property taxes for;

Citywide and countywide removal memorandums, zoning regulations, the inclusion of regulatory measures in the planning department for mandatory cutting and culling of All Combustable Vegetation from our densely populated hillsides and city parks in the city boundaries, and a wide transitional fire break culled and cleared of combustable vegetation between open space and neighborhoods!

Strict regulatory oversight and enforcement of power lines in the heavily populated hillsides within city limits!

Enforcement of strict loitering laws, that prohibit unlawful camping in city parks, and transitional fire breaks between county open space and residential communities, to reduce camping in our public spaces adjacent to heavily wooded residential hillside communities that are at increased fire risk illegal and enforceable, in conjunction with the aid agencies for the homeless to pull them toward service centers where their basic needs for shelter, warmth, food can be met.

I'd gladly see the tree cover on our densely populated hillsides culled and thinned to improve the land and make room for native non-combustable species within the city limits, and in transitional areas between open space and residential communities.

Get to getting people, our collective future, and the value of our properties depends on it!

**Wildfire Action Plan Feedback : Entry # 3829**

**Action Item/Objective**

General Comment

**Feedback**

I support making our town safe from fire. Yes, it will be costly, but the cost of a fire is worse (an becoming a more likely scenario).  
Let's do it asap.

Sincerely,

Chris Johnson



San Rafael

**Wildfire Action Plan Feedback : Entry # 3828****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

As a homeowner, I have several large trees that would have to be removed under this plan, they are FAR TOO BIG for a chipper program, but need professional arborists to bring down. A grant towards the cost of removing such trees should be added. They will cost thousands of dollars to remove!



**Wildfire Action Plan Feedback : Entry # 3827****Action Item/Objective**

General Comment

**Feedback**

VMP should include a requirement that no property (commercial or residential) can be listed for sale or rental or advertised for sale or rental or have a sign posted that it is for sale or for rent without a VMP and that no real estate commission or fee can be paid to an agent or representative on a property that is sold or rented without a VMP in place and implemented.

**Wildfire Action Plan Feedback : Entry # 3826****Action Item/Objective**

General Comment

**Feedback**

Untended and under-watered properties has troubled me since purchasing my home in Gerstle Park nearly six years ago. This densely populated neighborhood is filled with owner-occupied and rental properties where vegetation is completely ignored. Especially troublesome are the properties that receive no irrigation during our long dry months. Our lots are not large, but negligent owners and landlords are not concerned with water conservation, just water bills.

The City's Action Plan should include aggressive identification and fines, possibly linked to property taxes, to address irresponsible owners.

Lucinda Callaway



**Wildfire Action Plan Feedback : Entry # 3825****Action Item/Objective**

25- Parking Box program

**Feedback**

Because of this, new building must allow for more on-site parking. No more converting garages into residential space.

I would like to provide feedback on a second item

**Action Item/Objective**

31- Hazardous vegetation study

**Feedback**

#1 & #31: need to emphasize eucalyptus on private property and its removal.

**Additional feedback**

I would like to provide feedback on additional items

**Action Item/Objective**

General Comment

**Feedback**

This is long over due. I fear fire possibility above all other disasters. We need to remember the Mill Valley fire of 1929.

**Action Item/Objective**

General Comment

**Action Item/Objective**

General Comment

**Wildfire Action Plan Feedback : Entry # 3824**

**Action Item/Objective**

General Comment

**Feedback**

Thank you for this comprehensive plan which I enthusiastically support.

**Wildfire Action Plan Feedback : Entry # 3821**

**Action Item/Objective**

General Comment

I have a question requiring a response

**Feedback**

Please contact me when there's something I can take action on, including numbers to call or reaching out to landlord to update him. Very interested in prevention

**Name**

Whitney Cameron

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3819****Action Item/Objective**

General Comment

**Feedback**

This is GREAT!! It's probably not perfect and improvements or refinements will no doubt be made, but if ever there was a situation where you should not let "the perfect be the enemy of the good", this is it. San Rafael is leading the way for Marin and the whole Bay Area. Hat's off to San Rafael!!

**Wildfire Action Plan Feedback : Entry # 3817**

**Action Item/Objective**

1- Eliminate highly flammable vegetation

I have a question requiring a response

**Feedback**

I did not see mention of Eucalyptus trees in list of flammable vegetation. These fast growing non-native trees are highly flammable and often close to homes. Can you add them to the list and enforce a set back from residential structures similar to juniper?

**Name**

Kevin

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3814****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

Each mitigation in the plan should comprehensively consider the issue.

For example, Marin plant nurseries/Home Depot is still selling pyrophilic vegetation for landscaping.

Marin Art & Garden may have a valuable role to play as well as the Native Plant Society and environmental groups.

Carrots (and honey) should be implemented before sticks (and vinegar): incentivize by working with insurance companies as well.



## **Wildfire Action Plan Feedback : Entry # 3812**

### **Action Item/Objective**

8- Seize ignitions sources at encampments and remove encampments as quickly as possible

### **Feedback**

One of the greatest risks are the homeless living in our hills.  
We need to support our code enforcement efforts to move/remove them.

**Wildfire Action Plan Feedback : Entry # 3811****Action Item/Objective**

General Comment

**Feedback**

I enthusiastically support the Plan with a few caveats. Unless I issued it, seniors on fixed incomes and others of limited means are not given any consideration - compliance might impose an unmanageable burden on them. As to open space, I see campers with their backpacks entering the Gerstle Park Open Space all the time from where I live. You hear them at night. Consider mounting motion activated security cameras in strategic places so you can identify scofflaws. Inevitably these "campers" will start a fire that will race up the hill and burn down all the houses on the Kentfield Ridge, and that's largely avoidable. Finally, cutting down bamboo and acacia is nice, but unless you dig out all the roots, these evil plants will simply grow back - I see lots of both growing now where the fire department had the property owners cut it all down. Otherwise, you have my wholehearted support for the Plan.

**Wildfire Action Plan Feedback : Entry # 3810****Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

29 Bellevue Avenue San Rafael

Why are Eucalyptus Trees not on the list for removal. These were fire bombs in the Oakland Hills dire and they continue to be overlooked or protected. I have asked the San Rafael Fire Department to remove them and they have declined to do so. What will it take to get these highly flammable trees removed>

**Wildfire Action Plan Feedback : Entry # 3805**

**Action Item/Objective**

17- Improve vegetation management plan accessibility and functionality

I have a question requiring a response

**Feedback**

Does the Hillside Ordinance requirement of 60% natural state min. area of natural landscaping conflicts with Wildfire P&PAP goal of increasing disturbed landscape (firebreak areas, thinning trees, fire-resistant planting, etc.) areas?

**Name**

Digne de Lenea

**Email**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3804****Action Item/Objective**

General Comment

**Feedback**

- 1) Slide 29, fire road, is not really a fire break as the trees arch over the road.
- 2) Most garage doors can be disengaged from the drive and opened manually. Battery backup is expensive and batteries do not last forever.
- 3) It seems to me that the insurance companies should be involved. They could have rate adjustments for wood roofs, many trees, etc. that could make homeowners more aware of their responsibilities.

**Wildfire Action Plan Feedback : Entry # 3803****Action Item/Objective**

General Comment

**Feedback**

It seems like there's a lot of good ideas. My concerns are that there's going to be a lot of increased taxes to pay for a lot of 'studies' and other things that might be helpful but in reality may not be the best use of funds. I think money is best spent on actual prevention which includes vegetation management, working with property owners to protect structures and to make sure infrastructure is maintained. I like the parking box idea for narrow roads, and I would like to see much more maintenance of open space (in some cases open space hasn't been maintained in years!).

I think is incredibly important for San Rafael - I would just like to see money spent on more concrete steps and less studies and assessments.

**Wildfire Action Plan Feedback : Entry # 3790****Action Item/Objective**

General Comment

**Feedback**

You are correct to address encampments. Also there are a few drug production houses around the city where they sell weed and make hash oil and meth. The processes for making hash oil and meth are flammable and explosive. The police dept needs funding to address the problem with various drug houses. I live next to one in the dominican area that has had two successive tenants doing this since 2012. The police department seems unable to do anything. People who run drug houses should be fined and the money used to improve the city.

**Wildfire Action Plan Feedback : Entry # 3789****Action Item/Objective**

General Comment

**Feedback**

1. I am trying to understand the "zone" which you haven't defined. If this means the bush in front of my front porch has to go (it isn't clear if "under" means next to or in front of), it would be helpful to have some ideas of what can go there. Can people leave bulbs like irises or tulips even though they're not "succulents"? Is San Rafael going to start looking like San Quentin?
2. San Rafael already limits fence height so the deer eat everything. If there isn't going to be any vegetation, it would be nice to be able to have a deer fence (so we could have a rose bush) & to outline the safe materials for a fence. Seems to me that golf courses did not burn because they are watered. They certainly have trees, but the trees are watered and didn't burn.
3. I cannot get tree people or pg&e to trim tree branches out of comcast wires. People say comcast is just as bad. It would be good to have someone go around the city and trim trees away from wires to keep streets passable. People just take advantage of me. I pay them and then find they only do half of what they say. The last one said he was afraid to trim around the wires.

Thank you.



**Wildfire Action Plan Feedback : Entry # 3773****Action Item/Objective**

21- Improve staff communication ability (WPS, GETS, etc.)

**Feedback**

I'd like to consider sirens as alerts. They are used in tsunami zones. I often sleep through alerts on my phone. Sometimes I charge the phone in another room and don't hear it. Sirens can be heard by everyone. Once alerted we can then turn on our phones for more info.

I would like to provide feedback on a second item

**Action Item/Objective**

19- Reduce fuels along roadways

**Feedback**

In Terra Linda I am amazed by the amount of vegetation that is growing through the telephone wires that line our streets. It seems that it will be very easy for branches and limbs to fall onto the wires causing damage and possible fires. Inspections need to take place and these hazards need to be removed.

**Wildfire Action Plan Feedback : Entry # 3771****Action Item/Objective**

General Comment

**Feedback**

██████████ It would seem to me that this issue should have been addressed all along , that being said, better late than never. The draft seems quite complete. I think that the education, chipper and outreach part is the best approach followed by stricter enforcement. In addition I think eucalyptus should be added to your list of banned trees as well as standing dead trees.  
Thank you, R Stewart

**Wildfire Action Plan Feedback : Entry # 3764**

**Action Item/Objective**

15- Expand goat grazing

I have a question requiring a response

**Feedback**

Could the goats be scheduled to come munch everything after the wildflowers go to seed, so we will still have wildflowers? I think the goats were a fantastic idea, and feel much safer in my "wui" home because of them.

**Name**

Jan Slavid

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3762**

**Action Item/Objective**

1- Eliminate highly flammable vegetation

**Feedback**

This will be a lot of work for a good number of owners in the area, including needing to replant areas that just got ripped out.

**Wildfire Action Plan Feedback : Entry # 3761****Action Item/Objective**

15- Expand goat grazing

I have a question requiring a response

**Feedback**

I live on open space at [REDACTED] Every year I am concerned about the grass growing on the open space behind me. I keep a defensive area maintained on my property through out the year but I'm concerned about the the tall grass growing during the spring months. We've had sheep and goats for the last few years and I hope they will be brought back. The last time they were behind us, they were not allowed to stay long enough to do and adequate job of clearing the open space. Hopefully they will be brought back this year but allowed to graze longer. Also last year, they were brought in to early and as a consequence the grass grew back after they left. Please help us help you in maintaining our beautiful area.

**Name**

Donald Watson

**Email**

[REDACTED]

**Phone Number**

[REDACTED]

**Wildfire Action Plan Feedback : Entry # 3754****Action Item/Objective**

General Comment

**Feedback**

YES YES YES to the entire report. I agreed with literally every single recommendation. Very thorough - well done!! Especially the parts about overgrown roadways , goats, year-round management -- all of it. I hope San Rafael can make this one of the top 5 priorities for 2019.

**Wildfire Action Plan Feedback : Entry # 3753****Action Item/Objective**

3- Adopt PRC 4209 & 4291

**Feedback**

Yes to ordinance changes please!!! There are no teeth in the current process. SRFD is way too lenient now ("it's too expensive for them to clear all that.... she's sick and can't find anyone to do it") when this is a true public health and safety issue. If a property owner or landowner cannot afford or won't clear their property, San Rafael should do it and put a lien or other charge against the land. This is how it is done in other municipalities in California.

**Wildfire Action Plan Feedback : Entry # 3752****Action Item/Objective**

9- Additional Vegetation Management staff

**Feedback**

There is high turnover in the vegetation management position.. it's a single position and the person always seems overwhelmed. I also don't understand why this position is in the fire department instead of public works -- though I do understand there is an enforcement component. Maybe a headcount in each area with the fire department person writing citations and doing inspections if property owners ignore orders from DPW.



**RESOLUTION NO.**

**RESOLUTION OF THE SAN RAFAEL CITY COUNCIL APPROVING THE WILDFIRE PREVENTION AND PROTECTION ACTION PLAN**

**WHEREAS**, on August 20, 2018, at their regularly scheduling meeting, the San Rafael City Council received an informational report entitled “Update” Regarding Ongoing City Efforts to Prevent and Prepare for Wildfires,” which outlined the City of San Rafael’s then-current efforts regarding wildfire prevention; and

**WHEREAS**, at the August 20, 2018 meeting, the San Rafael City Council directed staff to prepare a documented action plan that outlines goals, objectives, and strategies relating to wildfire prevention; and

**WHEREAS**, on January 22, 2019, City staff presented to the City Council a draft action plan, entitled “Wildfire Prevention and Protection Action Plan,” outlining goals, objectives, and strategies relating to wildfire prevention; and

**WHEREAS**, on January 22, 2019, City staff received feedback from the San Rafael City Council and from members of the public, and integrated their feedback by revising the draft Wildfire Prevention and Protection Action Plan; and

**WHEREAS**, since the January 22, 2019 City Council meeting, City staff has solicited feedback from residents and stakeholders relating to the draft Wildfire Prevention and Protection Action Plan through various community engagement initiatives, including the use of official City social media and digital engagement via the City of San Rafael’s official website; and

**WHEREAS**, at its regularly scheduled meeting on March 18, 2019, the City Council considered and received public comment on City staff’s final draft of the Wildfire Prevention and Protection Action Plan;

**NOW, THEREFORE, BE IT RESOLVED**, that the Wildfire Prevention and Protection Action Plan, incorporated herein by reference, is hereby approved as a framework for wildfire mitigation, prevention, and protection by the San Rafael City Council.

**BE IT FURTHER RESOLVED** that any amendments to the Wildfire Prevention and Protection Action Plan as deemed necessary by the City Manager or his or her designee from time-to-time shall require an amendment to this resolution by City Council action.

**I, LINDSAY LARA**, City Clerk of the City of San Rafael, hereby certify that the foregoing resolution was adopted at a regular meeting of the City Council on the 18<sup>th</sup> day of March 2019, by the following vote to wit:

**AYES: Councilmembers:**

**NOES: Councilmembers:**

**ABSENT: Councilmembers:**

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Lindsay Lara, City Clerk