

A photograph of two firefighters in yellow gear working in a field of tall, dry grass. One firefighter in the foreground is carrying a red hose. The background is filled with a thick layer of white smoke, suggesting a controlled burn or a wildfire. The sky is a pale, hazy blue.

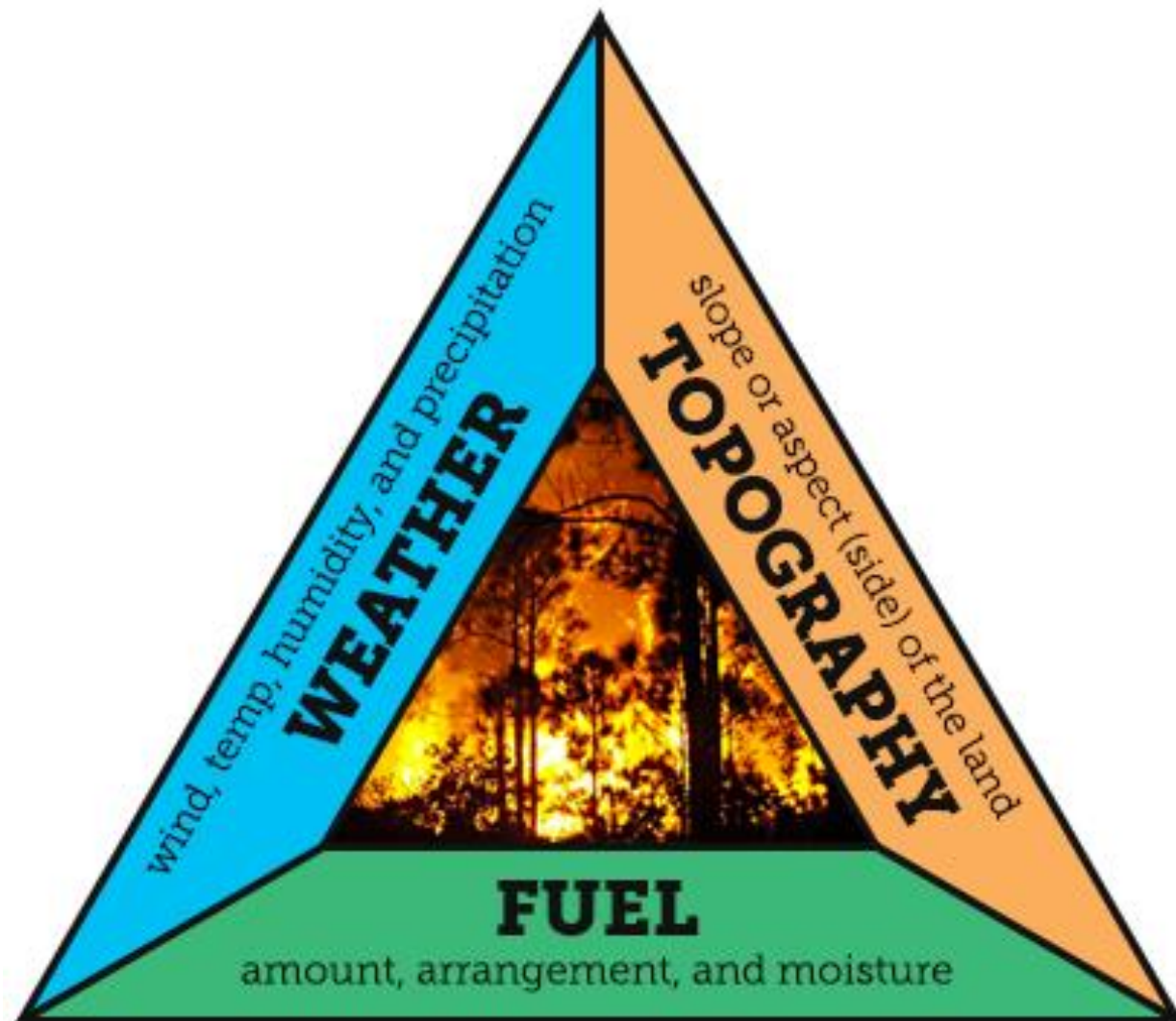
San Rafael Neighborhoods
Association
San Rafael City Council
Mayor Gary Phillips
Fire Chief Christopher Gray
January 17th, 2019

Special Joint Meeting
Wildfire Prevention
Disaster Preparedness
Essential Facilities Update

Wildfire Prevention and Protection Action Plan

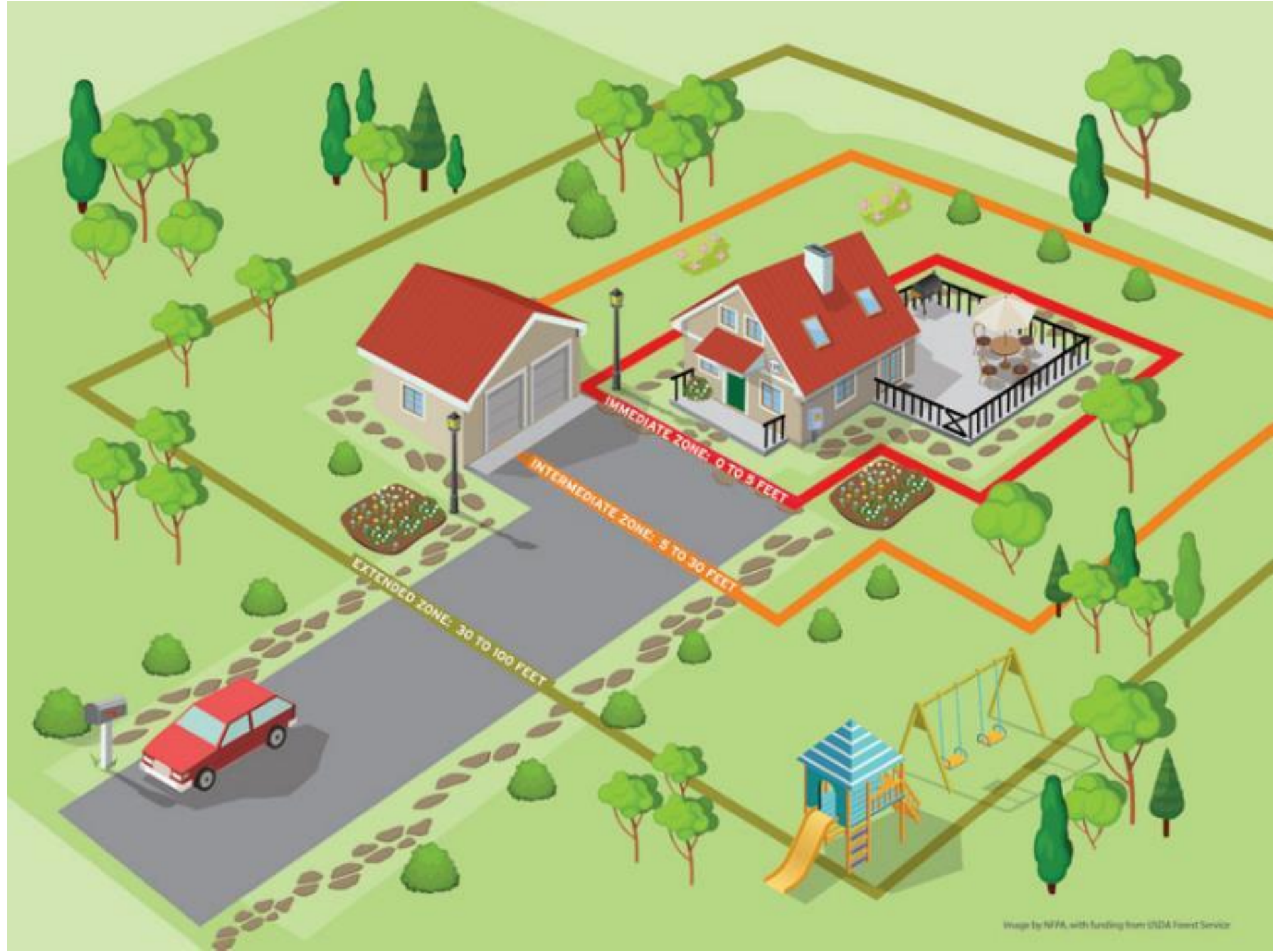


© Pete McBride

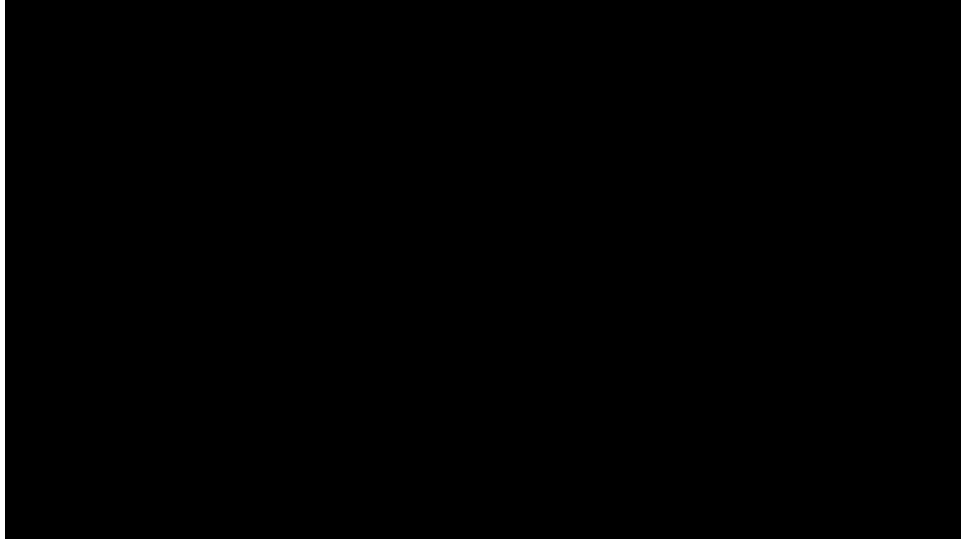


Fire Behavior Triangle

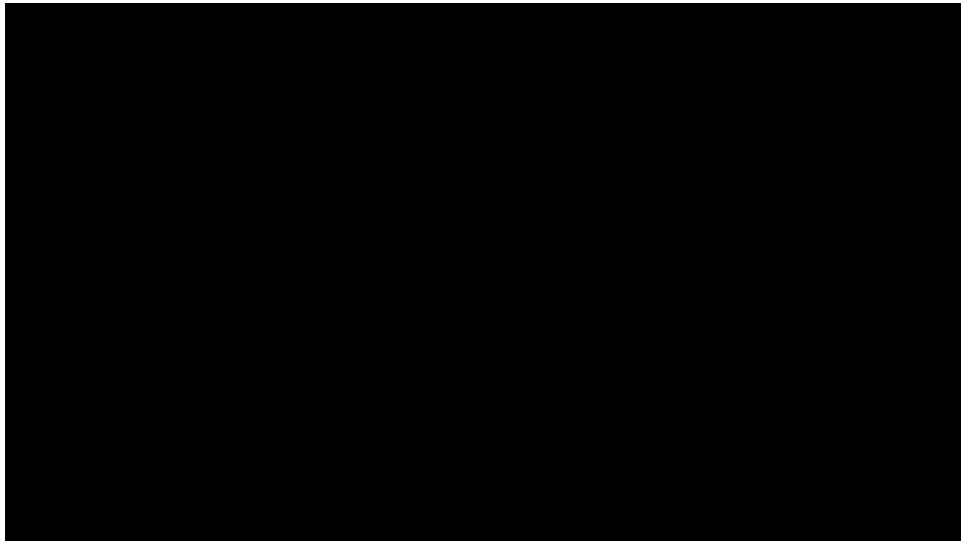
Home Ignition Zone



Ember Storm Videos



- [Canberra, Australia, 2003:](https://youtu.be/amUW2NrA9S8)
<https://youtu.be/amUW2NrA9S8>



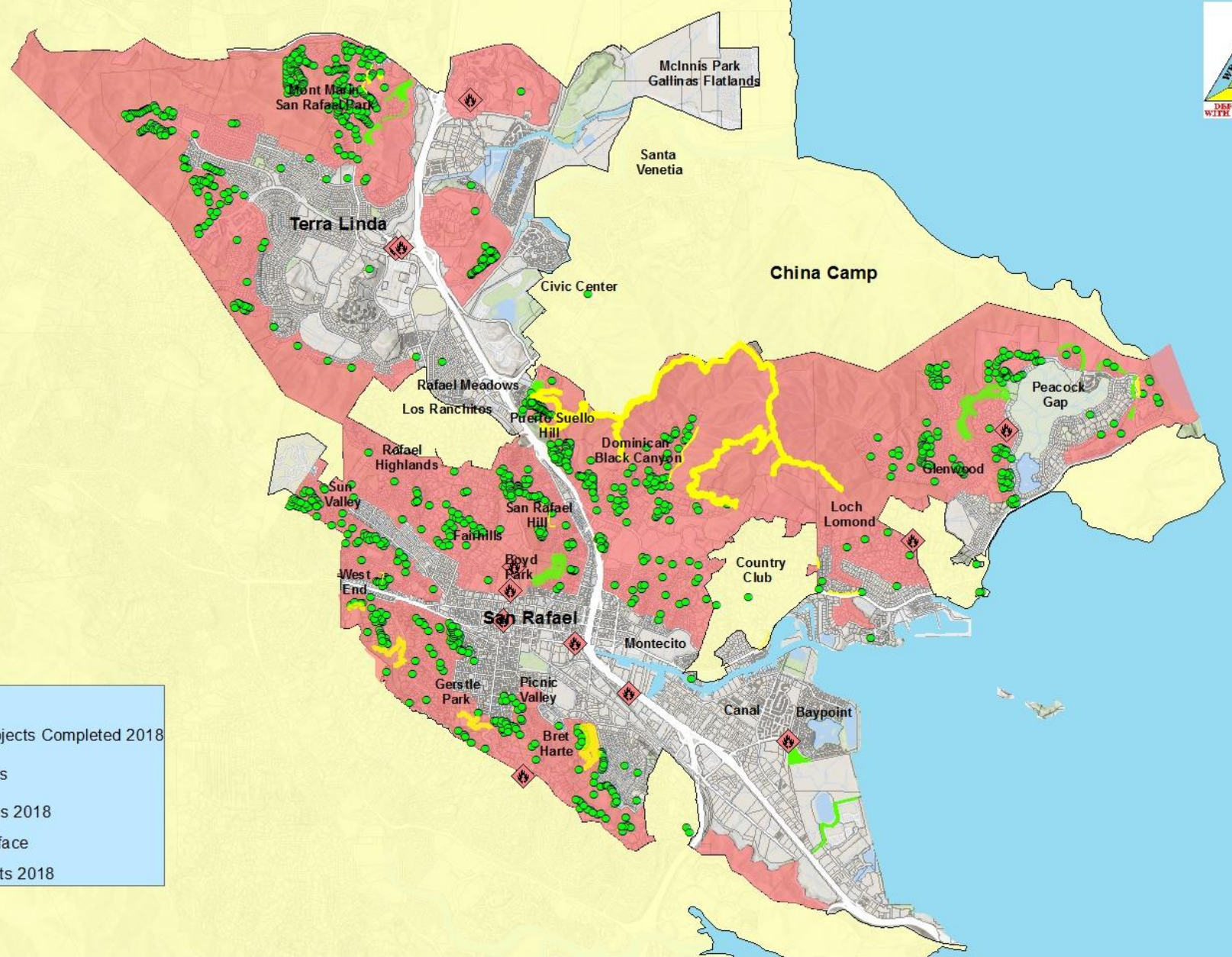
- [Camp Fire, Butte County, 2018:](https://youtu.be/amUW2NrA9S8?t=29)
<https://youtu.be/amUW2NrA9S8?t=29>

SRFD VEGETATION MANAGEMENT INSPECTIONS, PROJECTS & PARKLAND CLEARING FY18



Legend

- City Open Space Projects Completed 2018
- 2018 Vegetation Fires
- Veg Mgmt Inspections 2018
- Wildland Urban Interface
- Goat Clearing Projects 2018



Goat Grazing






Wildfire Safety Action Plan

- Immediate Ordinance Changes
- Immediate Programs and Projects
- Planned Ordinance Changes
- Planned Programs and Projects

Action Plan: Summary of Objectives

Objective	Exists, Plan expands	\$	\$\$	\$\$\$	Additional Staff Needed
1. Eliminate highly flammable vegetation throughout San Rafael	X			X	X
2. Apply vegetation management standards citywide				X	X
3. Adopt Public Resource Code 4290 and 4291	X			X	X
4. Reduce ember ignitions within immediate structure ignition zone standards				X	X
5. Apply fire mitigation codes 365 days a year	X				X
6. Eliminate fire hazard associated with shake and wooden roofs				X	
7. Increase funding and resources available for wildfire mitigation	X		X		
8. Immediately seize ignition sources at encampments and remove encampments as quickly as possible				X	X
9. Provide for additional Vegetation Management staff	X			X	
10. Increase Police Ranger staffing	X			X	
11. Improve public education regarding fire-safe landscaping and planning for a wildfire	X		X		X
12. Increase capability for early fire warnings and detection	X		X		
13. Improve public emergency alerting capabilities and policies	X			X	
14. Complete an analysis of fire roads and strategic fuel breaks				X	X
15. Expand goat grazing for vegetation maintenance	X			X	
16. Assure that residents can evacuate through garage doors if power is out			X		
17. Improve development and implementation of Vegetation Management Plans (VMPs)	X		X		
18. Assure that appropriate staff can send and receive emergency alerts		X			
19. Reduce fuels along roadways	X			X	X
20. Reduce fuels around critical infrastructure				X	
21. Assure that City staff can communicate during an emergency	X	X			
22. Establish more Firewise communities in San Rafael	X	X			
23. Review and update WUI map		X			
24. Apply CA Fire Code 7A (fire resistant building material requirements) to additional structures.	X			X	
25. Establish a residential hillside "parking box" program				X	X
26. Increase the number of completed Vegetation Management Plans	X	X			
27. Incorporate VMPs into residential property sales or transfers		X			
28. Prevent potential entrapments by requiring 2 gates in any fence in designated areas.		X			
29. Reduce fire risk and keep visitors using short-term rentals safe		X			
30. Review and expand evacuation plans	X	X			
31. Develop comprehensive San Rafael hazardous vegetation study and mitigation measures				X	
32. Establish additional fuel interruption zones	X			X	X
33. Engage CERT members in fire prevention		X			
34. Reduce hazardous fuels through an abatement process on privately owned unimproved lots			X		
35. Reengage volunteer "Broom Pull Days"				X	X
36. Improve the public's fire risk awareness with sign improvements and installation	X			X	
37. Effectively coordinate the removal of vegetative debris	X			X	



Immediate Ordinance Changes: Items 1-6

- Eliminate highly flammable vegetation throughout San Rafael
 - Juniper, Bamboo, Acacia, and Italian Cypress
- Require every property owner maintain defensible space
- Establish “house out” ignition zone standards
- Clarify smoking is prohibited in open spaces all year long by eliminating a specific time frame associated with fire season
- Set 2029 (or resale) as the deadline to replace shake and wooden roofs with class A fire resistant material

The Dangers of Juniper



Roof Maintenance





Defensible Space



#7 Increase funding and resources available for wildfire mitigation

- Cal Fire Fire Prevention Grant ~\$993,000 requested. Awards in April, funds available in September
- Submitting a project proposal to receive a National Civilian Conservation Corps (AmeriCorps NCCC) in summer of 2019. Focus on fuel reduction.
- Hazard Mitigation Grants due April 2019



A pair of hands is shown from a top-down perspective, gently cupping a small potted plant. The plant has dark soil and several small green leaves. The background is a soft, out-of-focus light color.

Staffing Requests

- #9 – Additional full time Vegetation Management staff
 - Currently 1 full time fixed term and 1 part time
 - Increase inspections and enforcement
 - Coordinate strategic fuel management on public land
 - Coordinate Community Chipper Days
 - Increase public outreach and education
- #10- Increase Police Ranger Staffing
 - Currently 2 part time Police Rangers
 - Increased staffing would allow for year round patrols and earlier detection of encampments



Ongoing Public Education and Outreach

- # 8 – Coordinated HEAT efforts to reduce fire risk of homeless encampments
- #11 – Improve public education regarding fire-safe landscaping
- #12 – Increase capability for early fire warnings and detection
- #13 - Improve public emergency alerting capabilities and policies
- # 22 – Establish more Firewise communities in San Rafael



New Public Outreach and Education

- #16- Increase knowledge Garage door power backup systems
- #33 – Engage CERT member in fire prevention
- #36 – Improve fire risk awareness through increased signage

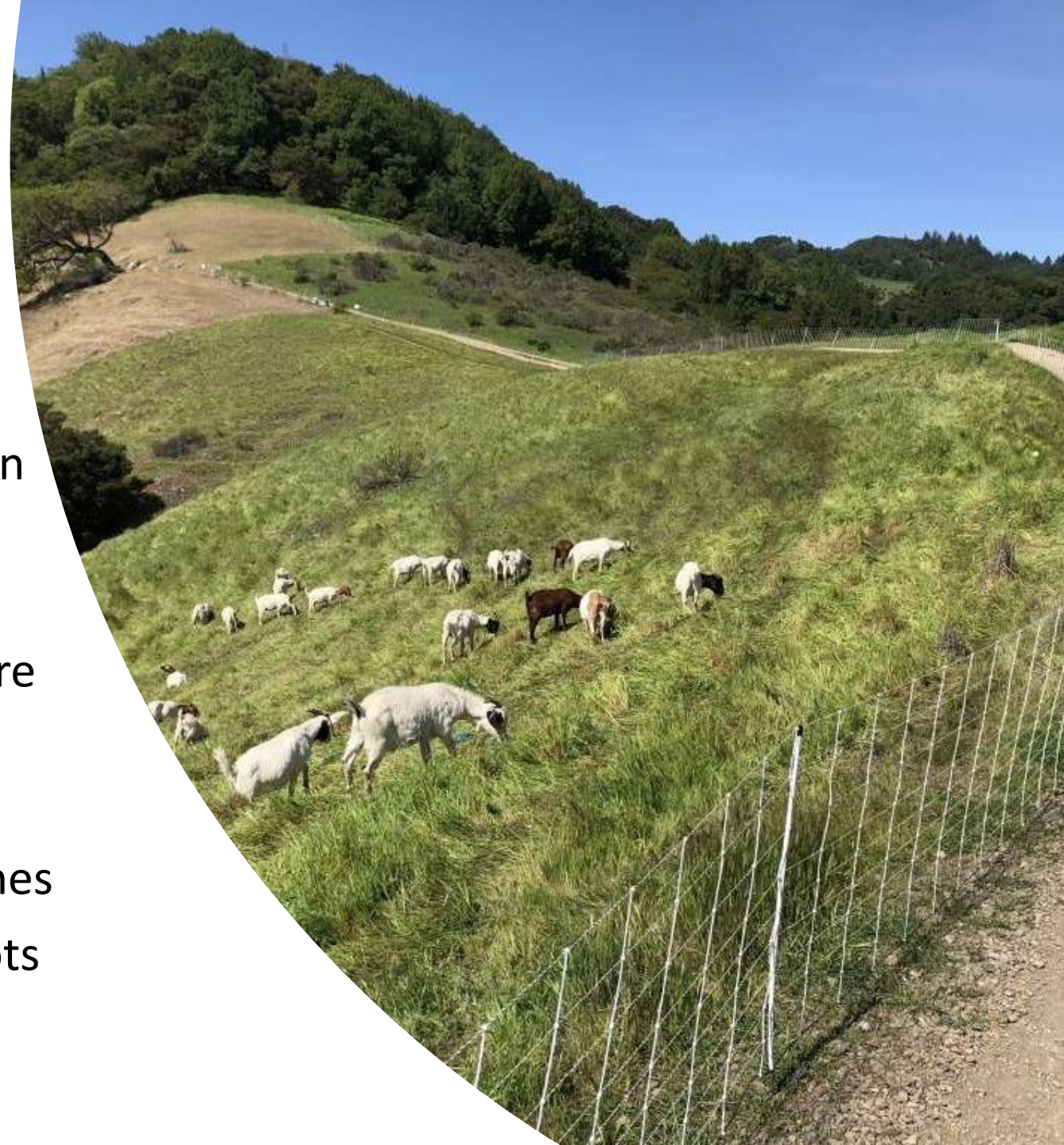
The background of the slide is a photograph of a city built on a hillside. In the upper left, a hill is covered in thick, dark smoke, indicating a fire. The rest of the image shows residential and commercial buildings, trees, and a clear sky with a single bird in flight.

Expansion of projects impacting City Staff

- #14 – Complete an analysis of fire roads and strategic fuel breaks
- #18 – Assure appropriate staff can send and receive notifications and alerts
- #21 – Assure city staff can communicate during an emergency
- #37 - Coordinate vegetative debris with partners

Fuel Reduction: Ongoing, expansion, and new

- #15 Expand use of goat grazing for Vegetation Management
- #19 Reduce fuels along roadways
- #20 Reduce fuels around critical infrastructure
- #31 Comprehensive hazardous vegetation study
- #32 Establish additional fuel interruption zones
- #34 Abate hazardous fuels on unimproved lots
- #35 Reengage Volunteer “Broom Pull Days”



Citywide Projects or Programs: New and Expanded

- #23 – Review and update WUI map
- #24 – Additional application of fire resistant building material requirements
- #25 – Establish a hillside ‘parking box’ program
- #28 – Two gate requirement
- #29 – Establish emergency requirements for short term rentals
- #30 – Expand evacuation plans

Vegetation Management Plans

- Provides templates for property owners to develop Fire Resistant Landscaping
- Planned ordinance changes will require more VMPs are created and submitted
- VMPs will streamline enforcement and serve as reference documents
- #17 - Work to improve the template and submission process
- #26 – Explore and determine best opportunities to require VMPs
- #27 – Incorporate VMPs into resale and transfers

Wildfire Resistant Design



Wildfire Resistant Design



Disaster Preparedness



Disaster Preparedness

- Community Training and Outreach
 - 1 Hour 2 Get Ready
 - CERT
- Collaboration and Coordination
 - County and other Jurisdictions
 - VOAD/MIDC
 - NGOs and Faith Based Organizations
- Planning
 - Emergency Operations Plan update
 - Local Hazard Mitigation Plan
 - Severe Weather Sheltering Taskforce
- Training and Exercise

1 HOUR 2
GET READY



3 steps to Preparedness

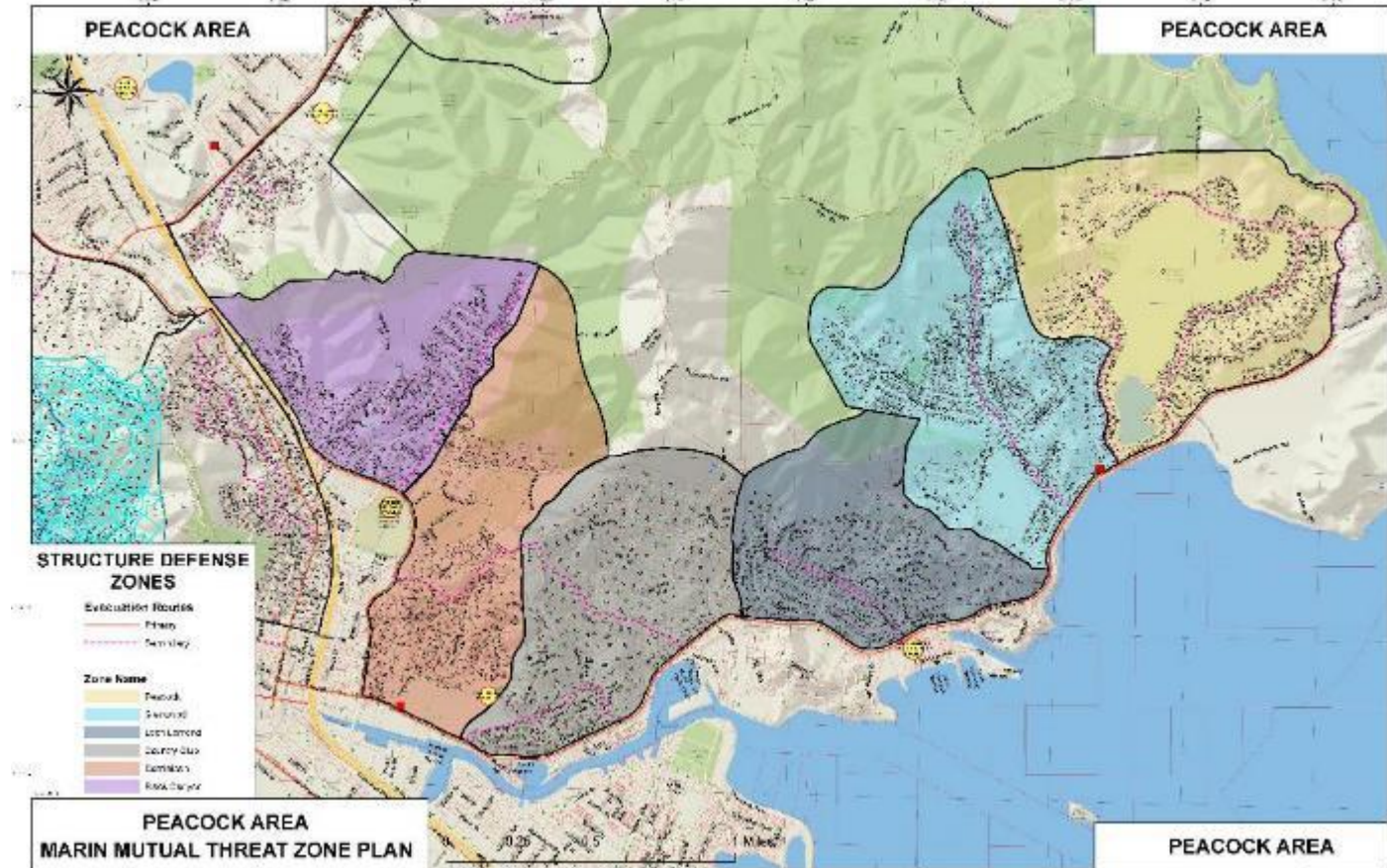
1. Be informed & engaged
2. Have & practice a plan
3. Gather & organize supplies



Collaboration and Coordination

Evacuation Planning

- Countywide Basis
 - Fire
 - Police
 - Office of Emergency Services
- Evacuation Types
- Structural Defense Tactical Actions
- Structural Triage
- Mutual Threat Zone Mapping



Emergency Alerting

- SRPD can issue alerts to those who have opted in using Nixle
- Alert Marin is county warning system
 - Maintained and operated by County OES
 - Can issue messages to San Rafael Residents
 - Opt-in and Tower/Geographic based

Nixle: Text zip code to 888-777
(SRPD)

Alert Marin: alertmarin.org
(SRFD & Marin County)

PG&E Alerts: PGE.com/wildfiresafety



Resident Sign Up

any one of these ways

- 1 Text Zip Code to 888777
- 2 Sign up at www.nixle.com
- 3 Download Nixle Mobile App



• Alerts

Resources

- SROES.org
- ReadyMarin.org
- Ready.Gov
- Earthquakecountry.org
- Firesafemarin.org
- OES@cityofsanrafael.org



@SRFD

@SanRafaelOES



/sanrafaelfd



@sanrafaelfd



Essential Facilities Update

Essential Facilities Projects - Approved by City Council in July 2015

5 TH AVENUE PUBLIC SAFETY CENTER	3 RD STREET FIRE STATION 52: TRAINING CENTER	CIVIC CENTER FIRE STATIONS 53/57	CASTRO STREET FIRE STATION 54	PT. SAN PEDRO RD. FIRE STATION 55	DEL GANADO FIRE STATION 56	CITY HALL RE-PURPOSE
PSC with Shared Facilities Maximized, Station 51 with Single Engine Company and BC. Recovered Monthly Lease Expenditure	Replace Fire Station 52 on the Existing Site with a Two-Company Station; Re-build Training Facility	Replace Fire Stations 53/57 with Two Company Station. Assumes Cost Share with County	Renovate Fire Station 54 Seismic and Operational Upgrades	Fire Station 55 Seismic and Operational Upgrades	Fire Station 56 Maintenance Project – Maintenance Allowance	Scope of Work TBD
Order of Magnitude Budgets Range Per Project						
\$41M – \$43M	\$13.2M – \$14.2M	\$5.5M – \$6.0M	\$3.5M – \$4.0M	\$3.5M – \$4.0M	\$150K – \$250K	\$150K - \$250K
Cumulative Order of Magnitude Total Budget \$63M – \$72M						

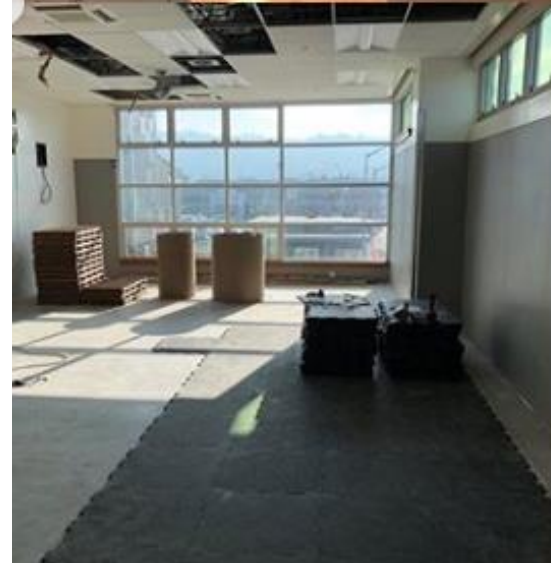
Essential Services Strategic Plan

- Phase 1 (underway):
 - Fire Station 52 replacement
 - Fire Station 57 replacement
 - New Public Safety Center - combined police and fire station (51)
- Phase 2 (proposed):
 - Fire Station 54 renovation
 - Fire Station 55 renovation
 - Fire Station 56 remodel

City of San Rafael
Essential Facilities
FIRE STATION 52

- 210 Third Street (near Montecito Plaza)
- Groundbreaking June 2017
- Expected Completion Early Spring 2019
- Temporary Location: 519 4th Street (city-owned garage)

Station 52 Construction Progress





RENDERING: AERIAL VIEW LOOKING NORTH EAST FROM 3RD and UNION St.

City of San Rafael
Essential Facilities
FIRE STATION 57

- 3530 Civic Center Drive
- Groundbreaking June 2017
- Expected Completion Summer 2019
- Temporary Location: 30 Joseph Court (Fire Station 53)

Station 57 Construction Progress



FIRE STATION NO. 57

SERVING THE COMMUNITY



57



 **KITCHELL**
CONSTRUCTION MANAGER

 MARY MCGRATH | ARCHITECTS
ARCHITECT



GENERAL CONTRACTOR

City of San Rafael
Essential Facilities
PUBLIC SAFETY CENTER

- Combined police and fire station
- Replaces Fire Station 51 (1039 C Street, downtown)
- Groundbreaking January 2018
- Expected Completion Spring 2020
- Temporary Station 51 Location: 1151 C Street (City Hall parking lot)

PSC Construction Progress





RENDERING: FIRE STATION 51 – PUBLIC SAFETY BUILDING

Fire.Department@cityofsanrafael.org

cityofsanrafael.org/fire

QUESTIONS

ANSWERS