



Agenda Item No. 11.

Staff Report

Date: March 8, 2018

To: Mayor Robbins and Council Members

From: Roger Meagor, Ross Valley Fire, Acting Fire Chief
Joe Chinn, Town Manager
Heidi Scoble, Planning Manager
Sal Lucido, Consulting Building Official

Subject: Designating Wildland-Urban Interface Fire Areas

Recommendation

That the Council consider the proposed options for the designation of Wildland-Urban Interface (WUI) Fire Areas in the Town of Ross, and that the Council directs staff to bring back a preferred option for Council adoption of a map and related codes. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town.

Background and Discussion

The Council last discussed Wildland-Urban Interface (WUI) maps and code amendments on December 5, 2016 (staff report and minutes attached). The discussion included that staff would come back with multiple options for a WUI map and code amendments for Town Council to decide between with no consensus on a preferred alternative. In addition, there were questions to get more clarity to reduce the ambiguity in the understanding and interpretation of the codes when possible. The reason for the long delay in bringing this item back to Council is that shortly after the December 2016 Council meeting, then Fire Chief Mark Mills went out on disability and ultimately retired. Town staff believes it would be good to have the WUI map and codes resolved while Acting Fire Chief Roger Meagor, who was the long-time Fire Chief of the Fire JPA before retiring, is at the helm of the Fire JPA.

To provide a framework for the Council decision on WUI regulations some of the factors requiring a decision on are:

1. Adoption and extent of a WUI Map. The Town does not have a current WUI Map. The Town Council should consider adopting a map that covers the entire town and/or a map designating select areas of the Town. Currently, approximately 304 existing parcels fall within areas designated by the Town's Hillside Lot Regulations (Ch. 18.39 of the Ross Municipal Code) where WUI regulations may be applied when a Hillside Lot Permit is being requested. This staff report provides multiple options for maps.

2. WUI Triggers related to substantial remodels (yes or no). The Council will need to determine whether the WUI regulations should apply to new construction or both new construction and substantial remodels. Currently the State only requires WUI regulations be applied to new construction, however, some municipalities in Marin and Marin County (seven or twelve) have adopted regulations to apply to substantial remodels as is recommended by the Ross Valley Fire Department and by Town staff. If WUI triggers are applied to substantial remodels, then clear definitions are needed on what level of remodel triggers what type of WUI improvements (Attachment 1 Frequently Asked question on page 2 shows a proposed list of the WUI requirements related to various types of remodels).
3. Vegetation Management Plans. When a parcel is located within designated WUI area as defined by a WUI Map and the project is either new construction or a substantial remodel as defined in the Town codes, the Ross Valley Fire Department would require a Vegetation Management Plan (VMP). A VMP is essentially an expanded landscape plan whereby fuel clearance (vegetation and tree removal and trimming), defensible space, and new non-pyrophytic landscape plantings would be shown.
4. Defensible Space. All parcels in a designated WUI zone must maintain a 100' defensible space around the home and accessory structures (proper defensible space is described in the WUI Frequently Asked Question Attachment on the bottom of page 1 and top of page 2).

Assuring the health and safety of the community is one of the overarching goals of the General Plan. Specifically, the General Plan recognizes in Goal 5, Protecting Community Health and Safety, and Preparing for Emergencies, that one of Ross' greatest assets, its unique and woody tree-covered landscape, could also one of its greatest hazards when it comes to fires. The vision of the General Plan is to create policies to minimize the risks of fire danger by emphasizing responsible landscape practices, especially on hillside lots. Accordingly, the following General Plan policies have been developed to address fire safety:

5.3 Fire Resistant Design. Buildings should be designed to be fire defensive. Designs should minimize risk of fire by a combination of factors including, but not limited to, the use of fire-resistant building materials, fire sprinklers, noncombustible roofing and defensible landscaping space.

5.4 Maintenance and Landscaping for Fire Safety. Ensure that appropriate fire safety and landscaping practices are used to minimize fire danger, especially in steeper areas. Due to the high fire hazard in the steeper areas of Town, special planting and maintenance programs will be required to reduce fire hazards in the hills and wildland areas, including removal of invasive nonnative vegetation such as broom, acacia and eucalyptus.

5.5 Fire Safety in New Development. New construction will adhere to all safety standards contained in the Building and Fire Code. Hazards to life and property shall be minimized by such measures as fire preventive site design, fire resistant landscaping and building materials, and the use of fire suppression techniques and resources."

The background information concerning the adoption of a Wildland-Urban Interface (WUI) Zone requires the explanation of several critical terms. These definitions are provided by the California Office of the State Fire Marshal (OSFM) and the California Department of Forestry and Fire Protection (Cal Fire).

A *wildfire*, as defined by the State of California, is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. A *wildfire exposure* is a combination of radiant heat,

convective heat, direct flame contact and burning embers being projected by a vegetation fire to a structure and its immediate environment. *Fire Hazard Mapping* is a way to measure the physical fire behavior and predict the damage a fire is likely to cause. Fire hazard measurements include the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front.

A *Fire Hazard Model* considers the wildland fuels, topography, weather, and ember production. Fuel is that part of the natural vegetation that burns during the wildfire. The vegetation component of the model predicts the potential fire impact on the vegetation only. The model also considers topography, with consideration to the steepness and aspects of the slopes. Fires have been proven to spread faster as they burn up-slope. The weather (temperature, humidity, and wind) component has a significant influence on fire behavior and spread. Fires spread faster and with more intensity when air temperature is high, relative humidity is low, and the winds are strong.

Finally, the model considers the production of burning firebrands. Firebrands are blown ahead of the main fire, spreading the fire to nearby structures and igniting them from the inside. Firebrands have been recorded being blown over a half mile ahead of the flaming front.

Several factors lead to the ignition of homes during a wildfire event. Research indicates that wildland fires progress from a fire involving wildland vegetation only, to embers and wildland vegetation igniting domestic vegetation, which then ignites the adjacent structure(s). Subsequently, the fire morphs in to a series of structure fires, with involved structures igniting other structures.

In addition to the defensible space available around structures, other factors that lead to structure ignition include the configuration of building elements and the type of construction materials used. For example, Cal Fire's study of the Santa Barbara Paint Fire (5000 acres, 440 houses, 28 apartment complexes) found an 86% survival rate for homes with non-combustible roofs and 30 feet of defensible space. Similarly, research indicates that home ignitability, rather than wildland fuels is the main cause of home losses during WUI fire events. Studies have shown that at the Witch and Guejito fires (San Diego County, 197,000 acres & 1,500 homes destroyed), two out of every three structures destroyed were ignited by embers.

Over the last decade, numerous communities throughout the western United States have been devastated by extreme wildland fires that have destroyed thousands of homes, damaged public infrastructure, disrupted private business, and caused billions of dollars in property damage, suppression and rehabilitation costs. The fires have continued to increase in intensity and frequency as evident in our local geographic area, including the Lake County fires in 2015 and 2016 and the devastating October 2017 Napa-Sonoma fires which resulted in burning 164,004 acres, destroying 7,804 structures and resulted in 44 deaths. The Sonoma County Tubbs is now the most destructive wildfire in California history, 38,807 acres, 5,643 structures destroyed and 22 deaths.

As a result of the 1991 Oakland Hills fire, the "Bates Bill" legislation was approved and required Cal Fire to identify Fire Hazard Severity Zones (FHSZ) in which to implement ignition resistant building standards, defensible space standards and seller's disclosure standards to mitigate the rate of spread and reduce the intensity of uncontrolled fires. In conjunction with identification of Moderate, High, and Very High Fire Hazard Severity Zones, maps were authorized via Title 14 CCR § 1280 and developed depicting the Very High Fire Hazard Severity Zones, as such zones exist both in State Responsibility Areas (SRA) and Local Responsibility Areas (LRA), such as the Town of Ross. The location of the boundaries was developed with recommendations from Cal Fire and the Marin County Fire Plan based on the evaluation of fire history,

fuel growth, density of housing, proposed developments, access, and water supply considerations. It is important to note that the FHSZ maps developed by the State included Moderate to High FHSZ for almost the entire of Town of Ross.

A *Wildland-Urban Interface* (WUI) Fire Area is a geographical area identified by the State as a Fire Hazard Severity Zone in accordance with the Public Resources Code sections 4201 through 4204 and Government Code sections 51175 through 51189 and/or other areas designated by the enforcing agency to be at a significant risk from wildfires following a finding supported by substantial evidence in the record pursuant to the California Fire Code Section 4904.2. The WUI is a combination of structures and wildland areas that could result in a fire crossing over from either format. The fire response requires specific equipment and tactics due to the complexity of the multiple fuel types and topography.

In 2008, in order to address the new requirements of the California Building Standards Commission Wildland Urban Interface Code, the Town Council approved recommendations from staff in the form of Ordinance 611. Ordinance 611 codified and amended Chapters 12.12 (Weeds, Trees, and Vegetation), 15.32 (Report of Residential Building Record), 18.39 (Hillside Lot Regulations), 18.40 (General Regulations), and 18.41 (Design Review) of the Ross Municipal Code relative to either prescriptive WUI standards for those parcels in Town that have an average slope of 30% or greater and are located either wholly or partially within a Slope Hazard Severity Zone 3 or 4 or guidelines to address health and safety hazards related to fire.

Today, building standards relating to the “Hardening of Surfaces”, such as roofs, exterior walls, structure projections and structure openings of new buildings located in a Wildland-Urban Interface Fire Area are set forth in the 2016 California Building Code Chapter 7A and the 2016 California Residential Code Chapter 337 (see Attachment 1 for a complete list of WUI required materials). Additionally, Vegetation Management Plans, defensible space, as well as building standards relating to fire and public safety for roofs, exterior walls, structure projections and structure openings located in a Wildland-Urban Interface are set forth in 2016 California Fire Code Chapter 49. The purpose of these regulations is to establish minimum standards for the protection of life and property by increasing the ability of a new building located in any area designated as a Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contribute to a systematic reduction in conflagration losses.

In consideration of the adoption of a WUI Map, staff has prepared the following options for consideration:

Option 1:

This option would leave the requirements as they are today as shown in Attachment 3 relying on the Hillside Lot Ordinance map with no separate WUI map. It would not require any amendments to the Municipal Code. Town staff would continue to enforce WUI related provisions through the following regulations of the Municipal Code:

1. The Town/Ross Valley Fire would be able to enforce defensible spaces around each building and structure in accordance with the vegetation clearance requirements prescribed in California Public Resource Code 4291 and California Government Code 51182 on hillside areas having a slope of thirty percent or greater or partially or wholly within Hazard Zones 3 or 4.
2. Mandatory WUI compliance for Hillside Lot Permits (new construction and additions adding more than 200 square feet of new floor area) per Chapter 18.39 for parcels that are wholly or partially

located within a slope hazard stability zone 3 or 4 and/or having an average slope of 30% or greater. WUI compliance includes compliance with the California Building/Residential Building Codes, Chapter 49 of the California Fire, such as defensible space and the submittal of a vegetation management plan.

3. Title 14 and Title 15 requires fire sprinklers for new construction and substantial remodels and Title 15 requires Class A roofing or Class A by assembly in the entire Town per current Town codes.

Option 2:

This option would include the adoption a modified WUI Map that would include those parcels that are classified Hillside Lots (Slope Hazard Stability Zone classifications 3 and 4 and 30% or greater slopes) and parcels that are geographically adjacent to Hillside lots where incorporation into the map make geographical sense (e.g., may be located on narrow private roads) as shown as Attachment 4

Make local code amendments to require compliance with Building Code Chapter 7A and Residential Code Chapter 337, Materials and Construction Methods for Exterior Wildfire Exposure for new constructions and substantial remodels for all properties in the Town. Adding the amendment would be similar to having the entire Town designated a WUI for construction purposes but would not require Vegetation Management Plans or defensible space requirements for projects not located in the WUI map area.

This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations and also include local code amendments to Title 15 (Building Code) and Title 14 (Fire Code)

Option 3A:

This option would include the adoption of a WUI map for the entire Town as shown in Attachment 5. This would be consistent with the draft WUI maps that were developed for Marin County in 2005. It would apply to both new construction and substantial remodels

This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations.

If the Council is concerned with this option, an alternative to option 3A would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3A.

Option 3B:

Similar to option 3A, option 3B would include the adoption of a WUI map for the entire Town, less the properties adjacent to the Ross Common right-of-way (e.g., Ross Common, the school, the Post Office and the properties within the CL Zoning District). It would apply to both new construction and substantial remodels, as well as require vegetation management plans for all ministerial and discretionary projects. This option would also require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only.

If the Council is concerned with this option, an alternative to option 3B would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3B.

Conclusion

The Town of Ross already enforces the Hillside Lot Regulations, which requires compliance with California Building Code 7A and California Fire Code Chapter 49, in areas of the Town that exceed 30% slope. Option

1 would leave the requirements as they are today. Options 2 and 3 would expand requirements to additional portions of the Town. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town.

Fiscal, resource and timeline impacts

Apart from the staff time to prepare the staff report and letter, there are no fiscal impacts associated with this agenda item.

Alternative actions

Multiple options are presented in this report and staff is available to discuss other alternatives that exist.

Environmental review (if applicable)

N/A

Attachments

1. WUI Frequently Asked Questions
2. WUI Fact Sheet
3. Option 1 – No WUI Map, rely on Hillside Lot Ordinance (HLO) Map
4. Option 2 – WUI Map of Portion of Town
5. Option 3A – WUI Map of Whole Town
6. Option 3B – WUI Map without Ross Common and Downtown
7. Cal Fire Very High Fire Severity Zone Map
8. Staff report and minutes for December 5, 2016

ATTACHMENT 1

WILDLAND URBAN INTERFACE "WUI" FREQUENTLY ASKED QUESTIONS

What is a Wildland Urban Interface Zone?

Answer: The Wildland Urban Interface is a geographic area identified by the State as a "Fire Hazard Severity Zone" or other area designated by the enforcing agency (Town of Ross and RVFD) to be at a significant risk from wildfires.

The map is used to determine where the fire-resistive construction requirements of Chapter 7A of the California Building Code and the vegetation-management requirements in Chapter 49 of the California Fire Code apply.

What is a "Fire Hazard Severity Zone," or FHSZ?

Answer: California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail there. These areas, or "zones," are based on factors such as fuel (material that can burn), slope and fire weather. There are three zones, based on increasing fire hazard...moderate, high and very high.

How are the Hazard Zones determined?

Answer: The Fire Hazard Severity Zone maps were developed using a science-based and field tested computer model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. There are three hazard zones: moderate, high and very high.

What are the uses of Fire Hazard Severity Zones?

Answer: The zones serve several purposes. They are used to designate areas where exterior wildfire exposure protection building codes apply to new buildings. It can be a factor in real estate disclosure. Local government considers fire hazard severity in the safety element of the general plan.

What are my requirements if I live in a designated WUI Zone?

Answer: You must maintain 100' of Defensible Space around your home and accessory structures. (***This does not mean the clear cutting of trees or landscaping.***)

Proper Defensible Space is achieved by accomplishing the following:

- Cutting dry grass regularly within 100 feet of your home. Rake and remove clippings.
- Use irrigated, fire-resistant plants where possible.
- Make decks fire safe by clearing vegetation and combustibles like lumber and firewood from underneath.
- Keep trees limbed up 10' from the ground or from the tops of plants below (or 1/3 the height of trees shorter than 30')
- Cut back at least 10' from your chimney and roof. Remove all dead limbs.
- Clean all needles and leaves from the roof and rain gutters regularly during fire season.

- Maintain your landscaping by mowing, watering, weeding and removing dead needles and leaves.
- Maintain fire engine access to your home by clearing vegetation 10' from the sides of roads and driveways and 14' vertically.
- Make your address visible from the street in both directions, with 4" (minimum) reflective numbers on a contrasting background.

(Defensible Space inspections currently occur in the Town of Ross)

What is a Vegetation Management Plan "VMP"?

Answer: In a VMP the landscape designer provides a plant list; a bibliography of the document or publication in which the plants are stated to be fire resistant; a site assessment detailing the slope, aspect (direction in which the slope faces), and existing plant material; and defensible space maintenance standards — guidelines for keeping the property fire safe.

Is a VMP the same as Defensible Space?

Answer: A VMP is a defensible space plan that is used for substantial remodels and new construction projects.

How will the new WUI building codes affect me as a property owner?

Answer: Building Codes related to WUI would only apply for new construction and improvements to your home.

What are the WUI building requirements if I want to remodel my home?

Answer: The scope of work for your project will determine the requirements. For example:

- Minor Interior Remodel (less than 50% of the existing square feet of your home).
 - Maintain and/or create adequate defensible space.
- Substantial Interior Remodel (more than 50% of the existing square feet of your home).
 - Fire Sprinklers
 - VMP
- Small Additions (Less than 50%).
 - Addition built with approved WUI construction materials
 - Defensible Space
- Major Additions (Greater than 50%).
 - Addition built with approved WUI construction materials
 - Fire Sprinklers
 - VMP
- Exterior Residing
 - New siding built to WUI construction standards
 - Maintain adequate Defensible Space
- Minor repairs
 - Like for Like
 - Maintain adequate Defensible Space

ATTACHMENT 2

WUI FACT SHEET

What Ross Valley Fire Currently CAN Enforce without a WUI Map?

- Defensible Space per California Public Resource Code 4291 and California Government Code 51182 for properties within an SRA, Very High Fire Hazard Severity Zone, or properties within a locally approved WUI
 - ✓ One property located in Very High Severity Zone (APN 073-011-26- Berg)
- Defensible Space per Section 12.12.16 of the Ross Municipal Code for Hillside Lots (properties that have an average slope of 30% or greater or partially or wholly located within a slope hazard stability zone 3 or 4) consistent with California Public Resource Code 4291 and California Government Code 51182.
- Fire Hazard Reduction Zone from roadways- clear vegetation within 10 feet of each side of the road- Exception for specimen trees when not causing a conflict to fire hazard.
- Class A Roofing or Class A by assembly
- Fire Sprinklers
- All State WUI requirements for projects that trigger a Hillside Lot Permit per Ch. 18.39 of the Ross Muni Code (for new construction, additions of more than 200 square feet, adding more than 1,000 square feet of new impervious surfaces, grading more than 50 cubic yards of soil, constructing a retaining wall that is taller than 4 feet, constructing a retaining wall that is more than 100 feet long, or having a site improvement within 25 feet from a creek)

What Ross Valley Fire CANNOT Enforce without a WUI Map?

- Vegetation Management Plans for parcels in Ross that are not triggering a Hillside Lot Permit or considered a Hillside Lot per Section 12.12.16 of the Ross Municipal Code
- Fire Hazard Reduction Zones (removal of combustible vegetation) for all other parcels in Ross that are not triggering a Hillside Lot Permit

What can the Ross Building/Planning/Public Works Department Enforce without a WUI Map?

- Defensible Space on Hillside Lots per PRC 4291 & California Government Code 51182 (Section 12.12.016).
- Require full State WUI compliance for projects that trigger a Hillside Lot Permit
- Class A roofing or Class A by Assembly
- Fire Sprinklers

Specific list of building permit plan check requirements Ross requires during plan check for properties within a designated WUI Area (Hillside Lot Permits and Very High Fire Hazard Severity Zones):

- Metal Gutters
- Eave protection and attic ventilation
- WUI compliant Windows (tempered glass or triple pane glazing)
- Ignition resistant decking material
- Fire resistant exterior wall coverings
- 20 minute fire protection rating solid core wood doors
- Vegetation Management Plan
- Class A roofing material or Class A by assembly (Required for all properties in Ross when proposing a new roof)
- Fire Sprinklers Plan (Required for all properties in Ross when triggering a substantial remodel per the code)

What are the estimated costs of complying with WUI? (Based on information from the City of Los Altos Hills)

- For typical large new homes- \$20-\$50K in additional costs (depending on design)- approximately 2% of the cost of construction at the high end
- Most expensive upgrade is glazing- 20% more for WUI compliant windows
- Design choices by owner are the biggest contributor to increased WUI compliance costs
- Numerous WUI compliant materials and not excessive in cost

Summary of Marin WUI Mapping by Jurisdiction

Adopted Cal Fire WUI Maps

- | | |
|---------------------|---|
| 1. Larkspur: | New Construction and Substantial Remodels |
| 2. Novato: | New Construction and Substantial Remodels |
| 3. County of Marin: | New Construction and Substantial Remodels |

Adopted Modified Cal Fire WUI Maps (less than Cal Fire recommendation)

- | | |
|-----------------|--|
| 1. Fairfax: | New Construction and Substantial Remodel |
| 2. San Anselmo: | New Construction and Substantial Remodel |
| 3. Tiburon: | New Construction |
| 4. San Rafael: | New Construction |

Adopted Modified Cal Fire WUI Maps (more than Cal Fire recommendation)

- | | |
|------------------|---|
| 1. Mill Valley: | New Construction and Substantial Remodels |
| 2. Corte Madera: | New Construction and Substantial Remodels |

Have not adopted any WUI Map

1. Sausalito
2. Belvedere
3. Ross

Ross Parcel Statistics

- 957 parcels within Town of Ross
- 913 parcels privately owned
- 44 parcels owned by Town of Ross or other government entity
- 304 parcels considered to be a Hillside Lot (30% or greater slope, and/or partially or wholly located within a slope hazard stability zone 3 or 4)

What is Defensible Space?

Defensible Space refers to an area around the perimeter of structures or developments in the wildlands where the flammable vegetation has been modified to reduce the potential for the structure and/or structures to ignite in the event of a wildfire. Defensible space is required per Public Resources Code (PRC) 4291. Purpose to maintain space of 100 feet from all sides of a structure to the property line. Intensity of fuel management varies with the feet from the structure being the most important.

Single specimens of trees, ornamental shrubbery or ground covers are permissible provided that they do not form a means of rapidly transmitting fire from the native growth to any structure. Such specimens shall be spaced a minimum of 10-15 feet, both horizontally and vertically, from other specimens, structures or surrounding native brush. All trees and shrubs shall be maintained free of deadwood and litter.

What is a vegetation management plan?

In compliance with PRC 4291, a Vegetation Management Plan is a plan that shows fuel modification distances, type of vegetation and topographic features are factors in determining adequate green belts and fire fuel modification around structures to determine the minimum defensible space requirements.

What is the Town's current definition of a "Substantial Remodel" per Title 14 and 15 of the Ross Muni Code?

Substantial Remodel shall mean the renovation of any structure, which combined with any additions to the structure, affects a floor area which exceeds fifty percent of the existing floor area of the structure within any 36 month period. When any changes are made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor area of all rooms affected by such changes shall be included in computing floor areas for the purposes of applying this definition. This definition does not apply to the replacement and upgrading of residential roof coverings.

What are the State Laws pertaining to WUI?

2017 California Residential Code

- **§R337 Materials and Construction Methods for Exterior Wildfire Exposure**
 - Definitions: R337.2
 - Application: NEW buildings only, when in a designated and defined WUI Area.
 - Exceptions – does not apply to:
 - Remodels and/or Additions *to buildings originally constructed prior to July 1, 2008*
 - Accessory structures when located 30 feet from the main residence, is 120 square feet or less in size, and has a “U” occupancy.
 - Class U buildings for agricultural uses when located 50 or more feet from a residence
 - Requires a Vegetation Management Plan
 - Requires specific approved building materials and assemblies (SFM BML Listing)
 - Requires enhanced roof covering, valley construction and gutter protections
 - Requires enhanced ventilation opening protection for soffits and attics
 - Requires Ignition resistant exterior coverings for walls, soffits, ceilings, decks, edges, appendages and eaves
 - Require enhanced exterior door and window requirements (tempered glazing)
 - Requires enhanced ignition resistance in deck construction and other walking surfaces such as balconies
 - Requires all of the above for Accessory structures (arbor, trellis, gazebos, etc.) closer than 50’ to the applicable building (except awnings and canopies)
- **§R902.1.4** Roofing requirements in a Wildland-Urban Interface Fire Area (*point back to R337*)

2017 California Building Code

- **CBC Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure**
 - Definitions (See Chapter 702A and Chapter 2)
 - Same as CRC R337 above
 - §1505.1.4 Roofing requirements in a Wildland-Urban Interface Fire Area point back to Chapter 7A

2017 California Historical Code

- §8-408 – Roof Covering required to be Class A in WUI (*already a Non-WUI requirement in Ross*)

2017 CALGreen

- A5.106.7.2 Opaque wall area exception: Exterior wall shading in the Energy Code allows modeling with vegetated shade when in a WUI Area.

CA Fire Code CH 49

- Requires Vegetation Management Plan
- Requires Defensible Space
- Requires Materials and Methods of Construction (e.g., roofing, attic ventilation, under eave, exterior wall siding and sheathing, tempered windows, and decking)

PRC 4290

- Allows creation of WUI maps

PRC 4291

- Defensible space requirements (100 feet on each side of property line, but not beyond property line)

CA Code of Regulations Title 14- Natural Resources

- Access, signing, water standards, fuel modification standards.

What are Ross' regulations pertaining to WUI?

- **Chapter 12.12 of the Ross Muni Code- Weeds, Trees, and Vegetation**
 - 12.12.16- Maintenance of Defensible Space on Hillside Lots

- **Chapter 14.04 of the Ross Muni Code- Fire Code**

- **Chapter 15.05 of the Ross Muni Code- Building Code**
 - 15.05.025 §701A.5 Vegetation management compliance – amended.
 - 15.05.030 §702A Definitions – Hillside Lot Regulations – added
 - 15.05.035 §702A Definitions – Wildland Urban Interface Fire Area – amended

- **Chapter 15.06 of the Ross Muni Code- Residential Building Code**
 - 15.06.035 §R337.2 Definitions – Hillside Lot Regulations – added
 - 15.06.040 §R337.2 Definitions – Wildland Urban Interface Fire Area – amended

- **Chapter 15.32 of the Ross Muni Code- Report of Residential Building Records**
 - 15.32.040 – Health, Safety, and Hazards disclosures in Resale Building Record Report

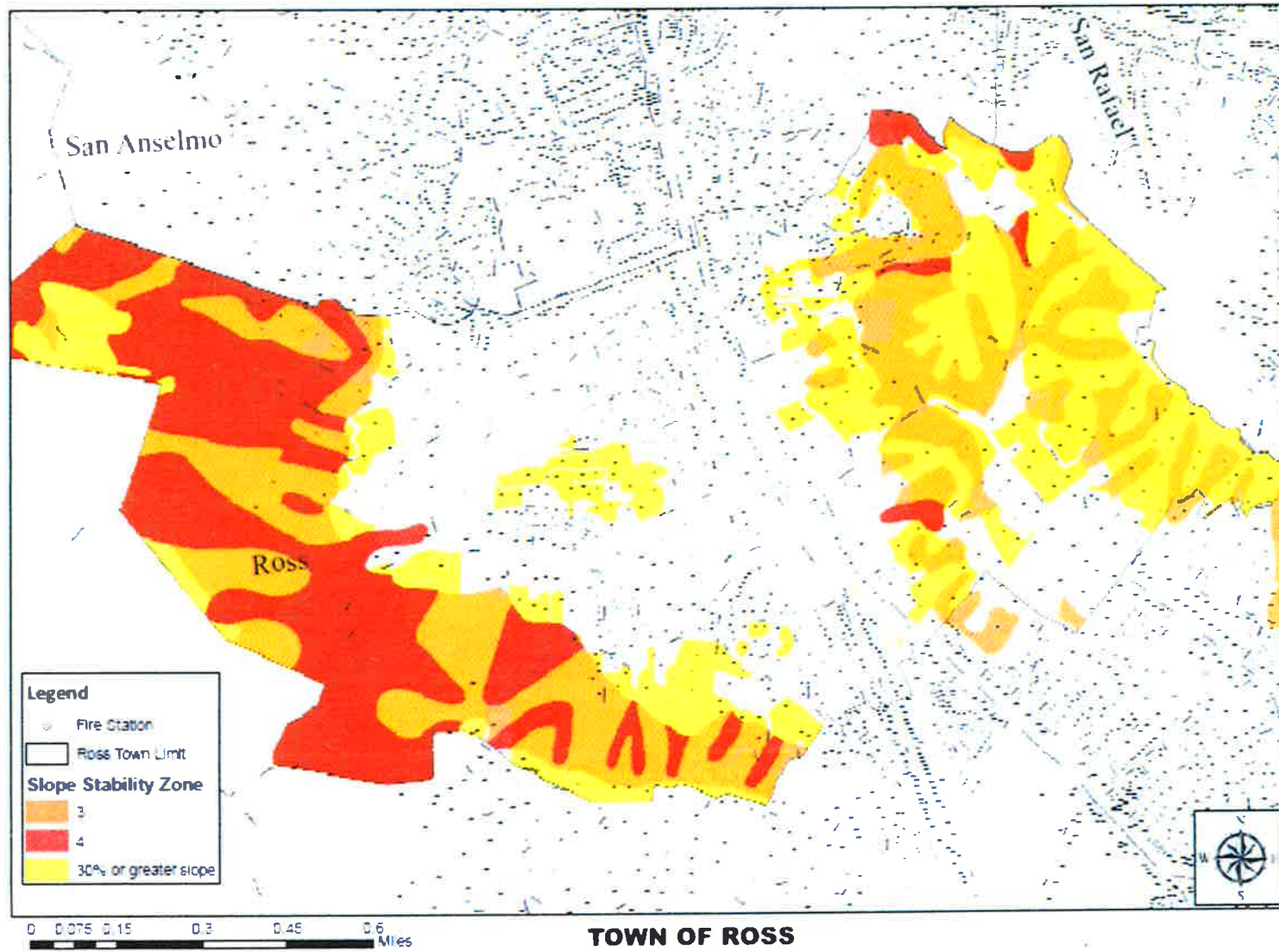
- **Chapter 18.39 of the Ross Muni Code- Hillside Lot Permit**
 - 18.39.090(e) WUI related requirements

- **Chapter 18.40 of the Ross Muni Code- General Regulations**
 - 18.40.95 – Driveway and emergency access

- **Chapter 18.41 of the Ross Muni Code- Design Review**
 - 18.41.100(k) – Health and safety design review criteria and standards guidelines

ATTACHMENT 3

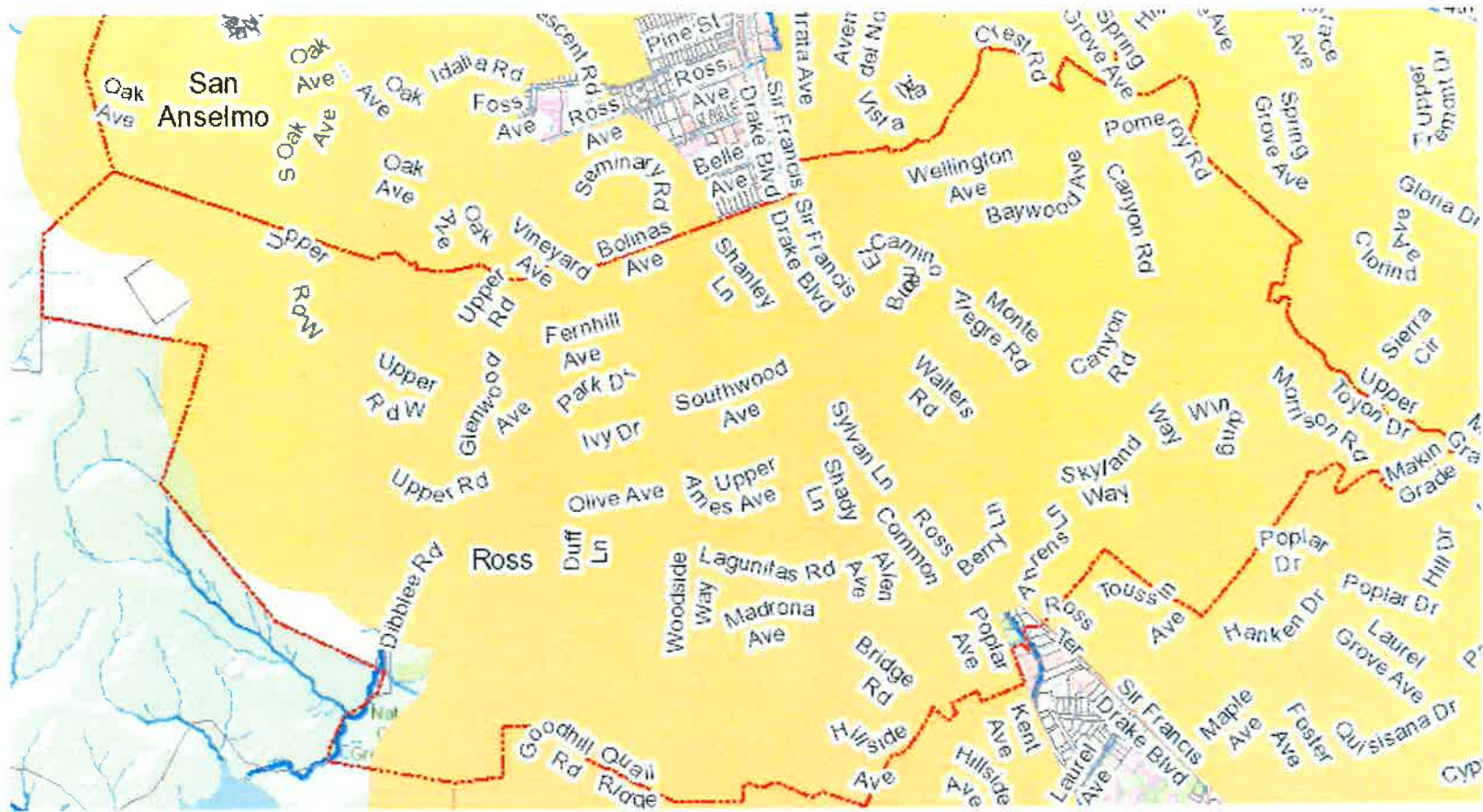
OPTION 1- NO WUI MAP- RELY ON HILLSIDE LOT ORDINANCE MAP



ATTACHMENT 4

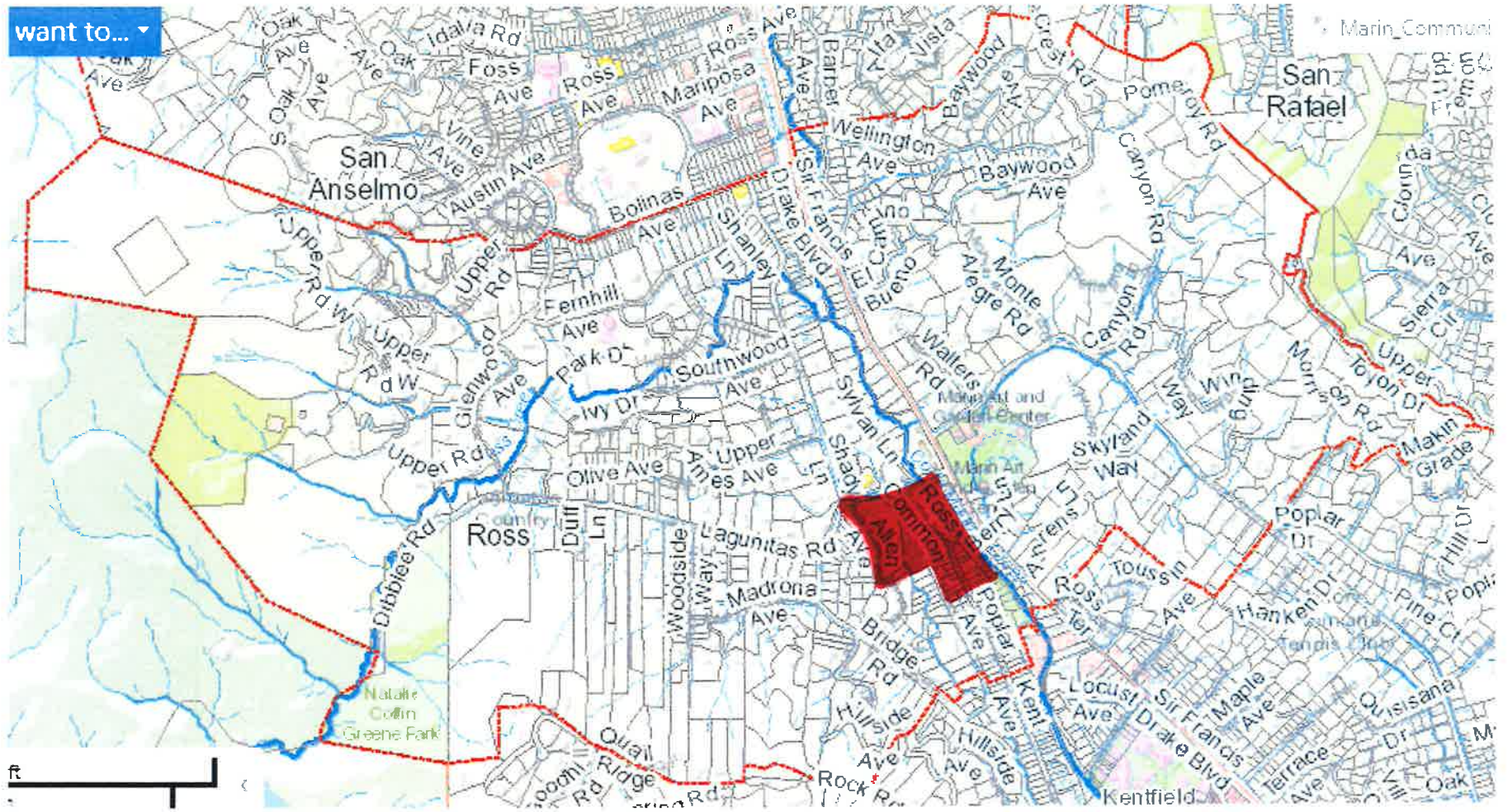
ATTACHMENT 5

OPTION 3A- WHOLE TOWN



ATTACHMENT 6

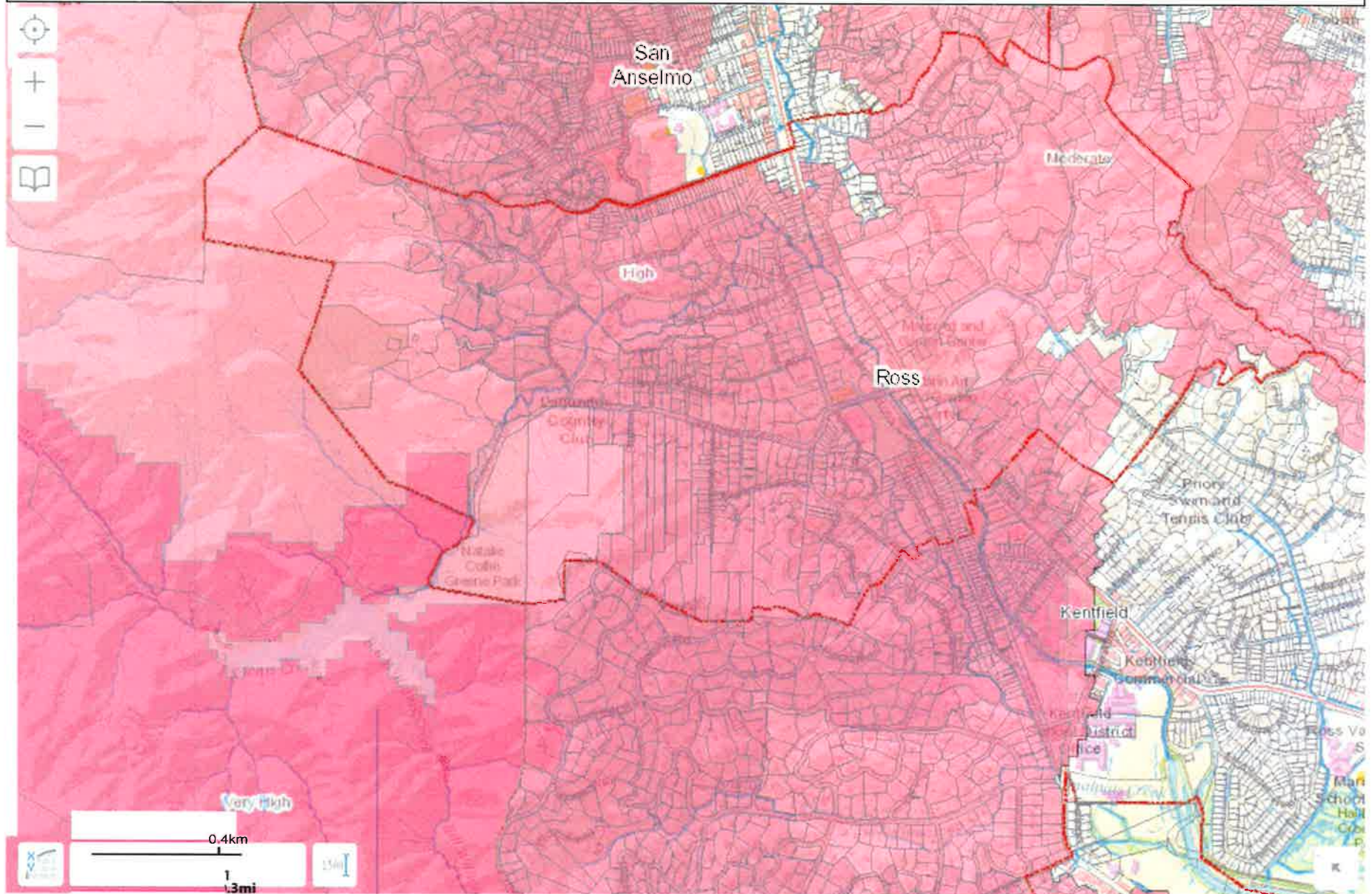
OPTION 3B- WHOLE TOWN WITHOUT ROSS COMMON OR DOWNTOWN



ATTACHMENT 7

Fire Hazard Severity Zones

Source: MarinMap



ATTACHMENT 8



COVER SHEET

Date: December 5, 2016

To: Mayor Hoertkorn and Council Members

From: Joe Chinn, Town Manager

Subject: Wildland Urban Interface Code Amendment Discussion

Purpose and Objective

The purpose and objective of the discussion is to provide background information for consideration regarding the Wildland Urban Interface (WUI). Attached is a Staff Report prepared by Chief Mark and a WUI Fact Sheet that provides a combined summary of the current State and local regulations as well general information regarding all items considered relevant to the discussion regarding the WUI.

When reading through the Staff Report and the WUI Fact Sheet, as well as the presentation presented by the Ross Valley Fire Department on December 5, 2016, the issues the Town Council should consider relative to potential code amendments would be the following:

1. WUI Regulations. The Town Council should gain an understanding of the who, what, where, why, and how of the State WUI regulations as well as any proposed regulations and consider how any new WUI regulations best fit the Ross Community.
2. Adoption and extent of a WUI Map. The Town does not have a current WUI Map. The Town Council should consider adopting a map that covers the entire town and/or a map designating select areas of the Town. Currently, approximately 304 existing parcels fall within areas designated by the Town's Hillside Lot Regulations (Ch. 18.39 of the Ross Municipal Code) where WUI regulations may be applied when a Hillside Lot Permit is being requested.
3. WUI Triggers. The Council will need to determine whether the WUI regulations should apply to new construction or both new construction and substantial remodels. Currently the State only requires WUI regulations be applied to new construction, however, some municipalities in Marin and Marin County have adopted regulations to apply to substantial remodels.

4. **Vegetation Management Plans.** When a parcel is located within designated WUI area as defined by a WUI Map and a discretionary or ministerial permit is being requested, the Ross Valley Fire Department would be able to request a Vegetation Management Plan (VMP). A VMP is essentially an expanded landscape plan whereby fuel clearance (vegetation and tree removal and trimming), defensible space, and new non-pyrophytic landscape plantings would be shown.

Attachments

1. December 5, 2016 Staff Report prepared by Chief Mark Mills
2. WUI Frequently Asked Questions
3. WUI Fact Sheet

ROSS VALLEY FIRE DEPARTMENT

STAFF REPORT

For the meeting of: December 05, 2016

To: Town of Ross Council

From: Ruben Martin, Fire Inspector
Mark E. Mills, Fire Chief

Subject: DESIGNATING WILDLAND-URBAN INTERFACE FIRE AREAS

RECOMMENDATION:

It is recommended by the Ross Valley Fire Department that the Council introduce an ordinance designating the Wildland-Urban Interface Fire Areas in the Town of Ross Local Responsibility Area pursuant to the Wildland-Urban Interface Fire Area map, as Attachment A.

BACKGROUND:

The background information concerning the adoption of a Wildland Urban Interface (WUI) Zone requires the explanation of several critical terms. These definitions are provided by the California Office of the State Fire Marshal (OSFM) and the California Department of Forestry and Fire Protection (CALFIRE) and are accepted throughout the state.

A *wildfire*, as defined by the State of California, is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. A *wildfire exposure* is a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by a vegetation fire to a structure and its immediate environment. *Fire Hazard Mapping* is a way to measure the physical fire behavior so that people can predict the damage a fire is likely to cause. Fire hazard measurements include the speed at which a wildfire moves, the amount of heat the fire produces and most importantly, the burning fire brands that the fire sends ahead of the flaming front.

A *Fire Hazard Model* considers the wildland fuels, topography, weather, and ember production. Fuel is that part of the natural vegetation that burns during the wildfire. The vegetation component predicts the potential vegetation fire impact. The model also considers topography, especially the steepness and aspects of the slopes. Fires have been proven to burn faster as they burn up-slope. The weather (temperature, humidity, and wind) component has a significant influence on fire behavior and spread. Fires burn faster and with more intensity when air temperature is high, relative humidity is low, and the winds are strong.

Finally, the model considers the production of burning firebrands. Firebrands are blown ahead of the main fire, spreading the fire and getting into buildings and igniting the structures from the inside. Firebrands have been recorded being blown over a half mile ahead of the flaming front.

A wildland-urban interface (WUI) fire area is a geographical area identified by the state in any Fire Hazard Severity Zone.

Several factors lead to the ignition of homes during a wildfire event. Recent research indicates that wildland fires progress from a fire involving wildland vegetation only, to embers and wildland vegetation igniting domestic vegetation, which then ignites the adjacent structure(s). Subsequently, the fire morphs in to a series of structure fires, with involved structures igniting other structures.

In addition to the defensible space available around structures, other factors that lead to structure ignition include the configuration of building elements and the type of construction materials used. For example, CALFIRE's study of the Santa Barbara Paint Fire (5000 acres, 440 houses, 28 apartment complexes) found an 86% survival rate for homes with non-combustible roofs and 30 feet of defensible space. Similarly, research indicates that home ignitability, rather than wildland fuels is the main cause of home losses during WUI fire events. Studies have shown that at the Witch and Guejito fires (San Diego County, 197,000 acres & 1,500 homes destroyed), two out of every three structures destroyed were ignited by embers.

Over the last decade, numerous communities throughout the western United States have been devastated by extreme wildland fires that have destroyed thousands of homes, damaged public infrastructure, disrupted private business, and cost hundreds of millions of dollars in property damage, suppression and rehabilitation costs. The fires have continued to increase in intensity and frequency as evident in our local geographic area.

As a result of the 1991 Oakland Hills fire, the "Bates Bill" legislation was approved that required the State (Cal Fire), to identify Fire Hazard Severity Zones in which to implement ignition resistant building standards, defensible space standards and seller's disclosure standards to mitigate the rate of spread and reduce the intensity of uncontrolled fires. In conjunction with identification of Moderate, High, and Very High Fire Hazard Severity Zones, maps were authorized via Title 14 CCR § 1280 and developed depicting the Very High Fire Hazard Severity Zones, as such zones exist both in State Responsibility Areas (SRA) and Local Responsibility Areas (LRA) such as the Town of Ross. The location of the boundaries was developed with recommendations from CALFIRE and the Marin County Community Wildfire Protection Plan (CWPP) based on the evaluation of fire history, fuel growth, density of housing, proposed developments, access, and water supply considerations.

A Wildland-Urban Interface (WUI) Fire Area is a geographical area identified by the State as a Fire Hazard Severity Zone in accordance with the Public Resources Code sections 4201 through 4204 and Government Code sections 51175 through 51189 and/or other areas designated by the enforcing agency to be at a significant risk from wildfires following a finding supported by substantial evidence in the record pursuant to the California Fire Code Section 4904.2. Simply defined, a wildland urban interface area is any area containing structures within 1500 feet of open space or forested areas. The WUI is a combination of structures and wildland areas that could result in a fire crossing over from either format. The fire response requires specific equipment and tactics due to the complexity of the multiple fuel types and topography.

The State designated three levels of hazard zones; Moderate, High and Very High Fire Hazard Severity Zones. All three areas require application of the new building standards relating to fire and panic. In the Town of Ross Local Responsibility Area, the State has designated one type of hazard zone: Very High Fire Hazard Severity Zone (only one parcel within the town). The Fire Department is recommending that the Council designates the Wildland-Urban Interface Fire Area, which would provide the Ross Valley Fire Department and the Town of Ross, the legal authority to enforce WUI building code regulations throughout the Town. Currently, the WUI standards would only apply to areas contained in the Hillside Lot Ordinance.

Building standards relating to fire and panic for roofs, exterior walls, structure projections and structure openings of new buildings located in a Wildland-Urban Interface Fire Area are set forth in the 2016 California Building Code Chapter 7A and the 2016 California Residential Code Chapter 337 (*effective 01/01/2017*). The purpose of these regulations is to establish minimum standards for the protection of life and property by increasing the ability of a new building located in any area designated as a Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and to contribute to a systematic reduction in conflagration losses.

The Ross Valley Fire Department and the Town of Ross Building Official are responsible for the enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety via Health & Safety Code § 13146. The Fire Department has recommended designated areas at significant risk from wildfires in the Town of Ross (please see attachment A: Map-Wildland-Urban Interface Fire Area Map). The WUI boundaries for the Town of Ross were determined based on structure density and proximity to areas with a high density of burnable fuels and by the Marin County Community Wildfire Protection Plan (CWPP) using a combination fire modeling data (FlamMap), vegetation data from local land management agencies, and recent LiDAR measurements.

Homes and structures located anywhere in and around the WUI are at a higher risk for exposure to wildland fire. Fire can spread rapidly throughout WUI areas through adjacent structures and/or vegetation, or by ember dispersion. Property owners in the WUI have a responsibility to prepare their property for structure defense by providing adequate defensible space and complying with WUI building codes and ordinances. It is the responsibility of the property owner to provide the necessary protection for their individual property which in turn, better prepares the entire community for defense from a wildfire incident.

By adopting an ordinance designating the Wildland-Urban Interface Fire Areas, the Town of Ross will provide the community with building standards consistent with those being enforced throughout the Ross Valley Fire Department's jurisdiction and the County of Marin. The Town of Ross General Plan specifically states in Part IV, *Assuring the Health and Safety of the Community*, Goal 5.3, 5.4, and 5.5:

"5.3 Fire Resistant Design. Buildings should be designed to be fire defensive. Designs should minimize risk of fire by a combination of factors including,

but not limited to, the use of fire-resistant building materials, fire sprinklers, noncombustible roofing and defensible landscaping space.

5.4 Maintenance and Landscaping for Fire Safety. Ensure that appropriate fire safety and landscaping practices are used to minimize fire danger, especially in steeper areas. Due to the high fire hazard in the steeper areas of Town, special planting and maintenance programs will be required to reduce fire hazards in the hills and wildland areas, including removal of invasive non-native vegetation such as broom, acacia and eucalyptus.

5.5 Fire Safety in New Development. New construction will adhere to all safety standards contained in the Building and Fire Code. Hazards to life and property shall be minimized by such measures as fire preventive site design, fire resistant landscaping and building materials, and the use of fire suppression techniques and resources."

The Town of Ross already enforces the Hillside Slope Ordinance, which requires compliance with California Building Code 7A and California Fire Code Chapter 49, in areas of the Town that exceed 30% slope. The adoption of the WUI Zone map will identify the additional areas of the Town that need to provide proper landscape and vegetation management, as well as, hardening of new structures and substantial remodels. The adoption will bring the Town into alignment with the goals set forth in the General Plan. The adoption of the WUI Zone will allow the Town of Ross Building Official and the Fire Code Official to consistently upgrade the Town's protection from wildfire.

Fiscal, resource and timeline impacts

There are no immediate fiscal impacts for the Town of Ross. Building construction costs will increase in order to comply with the additional California Building Code Chapter 7A and California Fire Code Chapter 49 requirements.

Attachments:

Town of Ross WUI Map

**SPECIAL MEETING of the ROSS TOWN COUNCIL
MONDAY, DECEMBER 5, 2016**

1. 8:00 a.m. Commencement.

Mayor Katie Hoertkorn; Mayor Pro Tempore Elizabeth Robbins; Council Member Elizabeth Brekhus; Council Member Beach Kuhl; and Council Member Rupert Russell (*arrived@8:15 a.m.*)

2. Posting of agenda.

Town Manager Joe Chinn reported that the agenda was posted according to government requirements.

3. Town Council discussion on Wildland Urban Interface (WUI) standards and requirements, WUI maps and application of such standards in the Town with Fire Chief Mark Mills, Ross Valley Fire Department.

Town Manager Joe Chinn explained that the purpose and objective of the discussion is to provide background information for consideration related to Wildland Urban Interface (*WUI*); there are multiple layers of requirements related to this topic. There are WUI regulations, fire codes, building codes, and state regulations and local regulations. The Council Community Protection Committee has met several times to discuss WUI, most recently on September 20, 2016. At the September 20th Committee meeting it was determined that there should be a Council Workshop so the entire Council would have the background information and opportunity to ask questions related to the WUI regulations. It is anticipated that following this meeting, the item will be brought to a regular Council meeting for action in the early part of 2017.

Fire Chief Mark Mills appreciated the opportunity to make this presentation. He said Ross Valley Fire (RVF) are looking at the WUI codes and building codes already approved as part of the 2017 Fire Code adoption. They are reviewing the actual map that the WUI codes would affect. The WUI codes will affect the Hillside Lot Ordinance (*HLO*).

Council Member Kuhl pointed out that currently WUI only applies to hillside lots, so there is another issue to consider extending the WUI regulations to more than just hillside lots. Town Manager Chinn added that the Vegetation Management Plan (*VMP*) will be part of WUI in regard to defensible space, so what is being considered is not only the extent of the WUI boundaries, but also requirements to harden the structure and VMP's.

Mike Gutierrez, Engineer, provided a presentation describing his experience in fighting the Clayton Fire that occurred on August 13, 2015. He stated the condition was very dry. The fire started burning northeast toward Lake Berryessa and Highway 29. Ross Valley Fire Department was dispatched to the Clayton Fire. The fire escalated due to all the vegetation and within 20 minutes from the initial spot fire the fire was well off. During the process the firefighters were told to move out because the fire was moving across the roadway. Spot fires began developing quickly and it was like it was raining fire. Fire fighters tried to save as many homes and animals as they could. It was very chaotic. There was a lot of livestock. After a few hours they were told

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to back out and head to the City of Lower Lake. He then provided several photographs to the Council to better understand the incident.

Council Member Kuhl asked if there is a way to estimate how long the Town's water supply would last. Fire Chief Mills added that it depends on the number of fire engines and how much water is applied. Typically, the Town's water supply should last between four and six hours.

Council Member Brekhus asked what are the three designations in terms of moderate, high and very high. Fire Chief Mills explained that the Town of Ross is located in a local responsibility area, and that the State has designated one parcel in Town a very high fire hazard severity zone. RVF is recommending that the Council designate the entire Town a WUI fire area, which would provide the RVF and the Town of Ross, the legal authority to enforce WUI building code regulations throughout the Town. Currently, the WUI standards only apply to lots subject to the HLO. The Town has the choice to apply this map to the entire Town or modify the WUI designation area, similar to what has been previously done with the HLO. Chief Mills suggest that the Council should not only be concerned with vegetation clearing, but also ember cast, so buildings should be hardened to make them more fire resistant, hence that is where WUI comes into place.

Todd Lando, Executive Director of FireSafe Marin, explained that the State of California fire hazard severity zone maps were created in 2005. Those maps only address the State responsibility areas (SRA). The State published maps that showed some of the hazards in the local responsibility areas. The State of California is revising those maps and a tremendous change will occur when published in 2017. The State is more willing to address the issues they see in the SRA. The current State fire severity zones are available online. Todd Lando also explained that in 2015, CALFIRE awarded FIREsafe Marin a \$123,200 grant from the SRA Fire Prevention Fee Fund to update the 2005 Marin County Community Wildfire Protection Plan (CWPP), and integrate it with the Marin County Fire Department Unit Strategic Fire Plan. With the grant money and over the last two years, a science-based hazard, asset, risk assessment was performed using up-to-date, high-resolution topography and fuels information combined with local fuel moisture and weather data. The assessment focused on identifying areas of concern throughout the county and beginning to prioritize areas where wildfire threat is greatest. Hazard mitigation efforts can then be focused to address specific issues in the areas of greatest concern. They worked with every community to develop this plan that was adopted by all five board of supervisors. He encouraged everyone to review the CWPP. Marin County will reduce wildland fire hazard using a collaborative and integrated approach that includes pre-fire planning; public education and outreach to promote and implement fire adapted community practices; vegetation management and fuel reduction at the county and community levels; and reducing structure ignitability by promoting and enforcing building codes, ordinances, and statutes. For more information and maps visit: www.FireSafeMarin.org/cwpp

Fire Chief Mills stated that several factors lead to the ignition of homes during a wildfire event. Recent research indicates that wildland fires progress from a fire involving wildland vegetation only, to embers and wildland vegetation igniting domestic vegetation, which then ignites the adjacent structure. Mills stated that the fire would then morph in to a series of structure fires, with involved structures igniting other structures. If there is a fire in Ross there will be ember cast and they want to preserve the Town and the best way to preserve is to strengthen the

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structures. Homes and structures located anywhere in and around the WUI are at a higher risk for exposure to wildland fire. Fire can spread rapidly within WUI areas through adjacent structures and/or vegetation, or by ember dispersion. Property owners in the WUI have a responsibility to prepare their property for structure defense by providing adequate defensible space and complying with WUI building codes and ordinances. It is the responsibility of the property owner to provide the necessary protection for their individual property, which in turn, better prepares the entire community for defense from a wildfire incident. By adopting an ordinance designating the WUI fire areas, the Town will provide the community with building standards consistent with those being enforced throughout the Ross Valley Fire Department's jurisdiction and the county.

Mayor Hoertkorn asked if they adopt the WUI map for the Town, what would be the VMP requirements for tree and vegetation removal. Fire Chief Mills stated that the VMP is done on a case-by-case basis. It is a landscaping plan. For a remodel, existing vegetation would be required to be trimmed back and up from the ground.

Council Member Kuhl asked how far could an ember cast travel. Fire Chief Mills responded that an ember cast that creates spot fires can travel up to three miles, but a quarter to a half-mile is very common.

Fire Inspector Ruben Martin explained that with a remodel, they review the plant species and make recommendations on what vegetation should be removed and the type of vegetation being planted. The goal is to create a "park like" setting.

Council Member Brekhus noted confusion in regard to the VMP. They have such a low threshold for substantial remodel in Ross which would then require VMP's for those projects. In Fairfax, they wanted to encourage second units they modified their sprinkler requirements for new construction or second units. She pointed out that her review of Novato, San Anselmo and Larkspur, jurisdictions are trying to make sense of what the fire departments are recommending and what are good policy decisions. Every jurisdiction within the county is close to open space. The argument that has been made is that every single spot in Marin County should be within a WUI. From the standpoint of preserving the appearance of the Town, design review, increased cost of construction and existing landscaping the Town wants to preserve, it can potentially be argued that the Town should not be designated to be within a WUI.

Mayor Pro Tempore Robbins believed the wind and the water changed everything in regard to the Clayton fire. She wondered if there is data about communities that have implemented all of the regulations, and with a bad fire, will all these implementations really save the Town. Fire Chief Mills explained that as noted in the staff report, in addition to the defensible space available around structures, other factors that lead to structure ignition include the configuration of building elements and the type of construction materials used. For example, CALFIRE's study of the Santa Barbara Paint Fire (5000 acres, 440 houses, 28 apartment complexes) found an 86% survival rate for homes with non-combustible roofs and 30 ft. of defensible space.

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Council Member Kuhl believed their obligation is to provide the maximum protection possible with respect to applying WUI. He stated that they should provide whatever protection they can in terms of how they apply the WUI rules.

Council Member Russell asked if this has to be addressed this year or can it be addressed next year. Fire Chief Mills responded that it should have been addressed in 2007, which is when the original maps were done. They are now trying to catch up. The farther they go down the line, the more scientific data and more extreme fire seasons become, it all points to having stricter and stricter fire codes and implementing more regulations for new construction and remodels. The fire seasons within California are getting worse. It depends on the weather, topography and fuel types that will dictate what takes place.

Mayor Hoertkorn opened the public comment period on this item.

Sandy Gould, Marin County resident, asked that Marin Municipal Water District (*MMWD*) implement an integrated pest management program (*IPM*). She felt MMWD has given up on trying to control the broom. Ross is vulnerable due to the massive infestations of broom in Ross. It would be in Ross' interested to ask MMWD board to change their position and adopt IPM so they can start doing some effective broom control just outside the Town of Ross.

There being no further public testimony on this item, the Mayor closed the public portion and brought the matter back to the Council for discussion.

Town Manager Chinn stated this is a complex level of building codes, fire codes and WUI ordinances, and wanted to make sure the Council completely understands the VMP.

Mayor Hoertkorn felt more clarification is needed in regard to what is allowed and what is not. In her view, the landscaping issues are not easy to understand. Fire Chief Mills noted that VMP is involved when there is a construction project. A property owner would work with a landscaper to develop a fire safe landscape plan. The Fire Department would be very selective on what is planted. The issue of defensible space is creating 100 ft. of defensible space to prevent that ember shower to land on dead vegetation. Proper Defensible Space is achieved by accomplishing the following:

- Cutting dry grass regularly within 100 ft. of your home. Rake and remove clippings.
- Use irrigated, fire-resistant plants where possible.
- Make decks fire safe by clearing vegetation and combustibles like lumber and firewood from underneath
- Keep trees limbed up 10' from the ground or from the tops of plants below (or 1/3 the height of trees short than 30')
- Cutback at least 10' from your chimney and roof. Remove all dead limbs.
- Clean all needles and leaves from the roof and rain gutters regularly during fire season.
- Maintain your landscaping by mowing, watering, weeding and removing dead needles and leaves.
- Maintain fire engine access to your home by clearing vegetation 10 from the sides of roads and driveways and 14' vertically.
- Make your address visible from the street in both directions, with 4" (minimum) reflective numbers on a contrasting background.

Fire Chief Mills agreed to work with Town staff to develop definitions that clearly apply, so there is not so much ambiguity in the interpretations by the individuals inspectors to be applied across the board, and then bring back at a later date to be approved by the Council. Town Manager Chinn believed between fire, planning, and building they will think through the scenarios.

Mayor Pro Tempore Robbins asked why they want to legislate more than what the State requires. If this is adopted, it will inconvenience several located in the hillsides. She felt they are making laws that will impact several residents.

Council Member Brekhus stated that when everything is put into a WUI they go from having the authority to review and decide on landscaping meeting Ross standards to giving it to the fire department. Then the fire department has the authority and the Council no longer has the ability to enforce what was in place in terms of a landscaping plan. She did not believe if they translate certain landscaping into the ordinance would create local control. They should see if the entire Council supports WUI. She would like to see WUI in the HLO areas, but not in the flats.

Town Manager Chinn discussed the following:

What can Ross Building Department enforce without a WUI Map:

- Defensible Space on Hillside Lots per PRC 4291 & California Government Code 51182
- Require full State WUI compliance for projects that trigger a Hillside Lot Permit.
- Class A roofing or Class A by Assembly
- Fire Sprinklers

Specific list of building permit plan check requirements Ross requires during plan check for properties within a designated WUI Area (*Hillside Lot Permits and Very High Fire Hazard Severity Zones*):

- Metal Gutters
- Eave protection and attic ventilation
- WUI compliant Windows (tempered glass or triple pane glazing)
- Ignition resistant decking material
- Fire resistant exterior wall coverings
- 20 minute fire protection rating solid core wood doors
- Vegetation Management Plan
- Class A roofing material or Class A by assembly (*Required for all properties in Ross when proposing a new roof*)
- Fire Sprinklers Plan (*Required for all properties in Ross when triggering a substantial remodel per the code*)

Council Member Kuhl asked what is the definition of "*ignition resistant decking material.*"

Fire Chief Mill responded that it would be similar to the "Trex" composite material or solid wood based on the thickness, which is considered timber and ignition resistant. Mayor Pro Tempore Robbins asked if a redwood deck would be included. Fire Chief Mills responded in the affirmative, based on its thickness. With shingled houses, they would use pressure treated shingles, and it would be based on how the contractor assembles the wall.

Council Member Brekhus asked where is the *"like for like"* expression defined in the code. Fire Chief Mills added that is one of the amendments being requested through the WUI code.

Council Member Kuhl is in favor of following the fire departments regulations, but agreed they need to have more specificity put in the code for a better understanding.

Mayor Pro Tempore Robbins agreed to apply the WUI to the HLO areas, and nowhere else. Council Member Brekhus agreed to leave "as is" and not extend out to other areas in Ross.

Council Member Russell wondered if it possible to adopt a WUI, but give some ability to gain exemption for specific items where the costs are exponentially high or difficult to make the changes. He desired some mechanism to build in some flexibility or process to result in this not being a complete absolute.

Mayor Hoertkorn is concerned about protecting the Town, but desired some sort of ability to appeal or have exemptions in place. She is not sure if there is some sort of middle ground. She suggested another meeting in order to receive answers and more specificity to their questions.

Building Official Lucido pointed out that there is an appeals process. This is subject to interpretation. He believed the Council adopts the codes as written since the experts took the time to develop and then the Council can implement the policies. They are asking fire, building and planning to get well-written policy statements, so they are enforcing the codes in a way the Town likes to enforce the codes. Any time staff makes an interpretation, an applicant can appeal and then it would go to the Council to hear both sides.

Council Member Brekhus expressed concern for the number of residents that would know about the appeal process. Practically, this is not a good solution in her view. The encroachment permit is a perfect example. She did not feel it is a good idea to have such a discretionary ordinance.

Council Member Kuhl wanted some discretion to alleviate a provision that turns out to be harsh in particular instances. They must protect against unintended consequences.

Town Manager Chinn noted that those projects that come before the Council for approval, the Council can be the ultimate approver of the VMP for those projects. They need another workshop to answer all the Council's questions. In the end, we need to adopt a WUI map which will help applicants, residents, and staff moving forward.

Fire Chief Mills agreed to review the neighboring towns, the history and how it was adopted in regard to the carve outs.

Town Manager Chinn agreed to schedule another meeting to further discuss.

4. Adjournment.

Mayor Hoertkorn moved to adjourn the meeting at 10:10 a.m.

Kathleen Hoertkorn, Mayor

ATTEST:

Linda Lopez, Town Clerk