



Banner Mountain Firewise Community



FIREWISE USA™
Residents reducing wildfire risks

Please Sign In.

Please Visit Our Neighborhood Contact Table.

If You Sign Up as a Neighborhood Contact You Have a Chance to Win a Prize.

You have a Question/Comment Card on your seat.

Meeting Begins at 5:00pm and Ends at 6:30pm



**Banner Mountain
Firewise Community**



PROGRAM AGENDA 5:00pm - 6:00pm

Welcome and Overview

Mo Graber, Banner Mountain Firewise Steering Committee - Moderator

Fuels Reduction Techniques

Jo Ann Fites-Kaufman, Resource Conservation District - Fire Scientist

Defensible Space Laws

Steven Renz, Office of Emergency Services - Defensible Space Inspector

Marcus Karlin, CAL FIRE - Defensible Space Inspector

Neighbor Helping Neighbor - A Call for Neighborhood Contacts

Jeff Peach, Banner Mountain Firewise Community - Leader

Thank You and Closing

Mo Graber, Banner Mountain Firewise Steering Committee - Moderator




Maureen "Mo" Graber
Friends of Banner Mountain &
Banner Mountain Firewise Steering Committee

Housekeeping:

- Welcome!
- Restrooms and exits
- Questions/Comments Card
- All the material covered, including links to resources are posted to our Friends of Banner Mountain website <https://www.bannermountain.org/>
- Please consider joining the Friends of Banner Mountain for \$25/year
- Please see George for information on Neighborhood Contacts
- The importance of preparing a "Go Bag." Checklists available at:
 - <https://www.nccoalitionfwc.com/learn-what-to-do-education-resources>
 - <https://www.nevadacountyca.gov/2773/Go-Bags-Back-Up-Plan>
- A lot to cover in a short period of time - Let's get started!



Jo Ann Fites-Kaufman
Nevada County RCD
530-798-5529

A group of people, including several men and women, are gathered in a forest. In the foreground, a man in a plaid shirt and blue jeans is using a tool, possibly a chainsaw or brushcutter, on the ground. The ground is covered with dry leaves and some small fires are visible. The background shows a dense forest of tall trees.

Tools to Reduce Fuels *surface fuels*



Jo Ann Fites-Kaufman
Salmon Mine-East Sages FWC Leader
Board Director Nevada Co Resource Conservation District
Retired USFS Fire Scientist, CA Burn Boss

Fuels & Wildfire: past and present

Fuels: types and layers

- how they affect wildfire*

Tools to treat

- Pros and Cons*
- What's right for you?*



Past Fire Regimes – Shaped Vegetation Landscape

Regular, low intensity fire



*Maintained low fuels
Patchy, variable forests*



*Promoted fire-adapted
native plants*



Big Changes in the Last Century

1909



1948



1958



1968



Current Condition

- Dense forests, heavy tree, ladder
And surface fuels
- Vulnerable to high-intensity wildfire,
drought, insects, pathogens
- Deep duff suppress native plants
reduces water infiltration into soil



Fire Behavior Basics

- **How do we get safer? Less damage to homes and landscapes**
- **Know what affects fire**
- **Know how to change wildfire behavior**



Fire Type – What is Burning?

Surface Fire



Passive Crown Fire
Or Torching



Crown Fire



Ground Fire – Creeping or Smoldering



Amount & height = flamelength & intensity



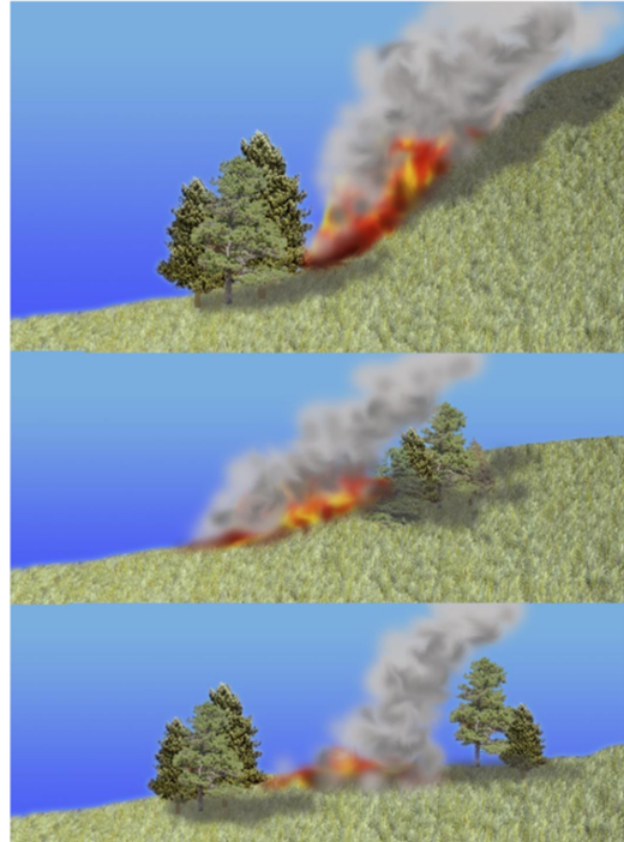
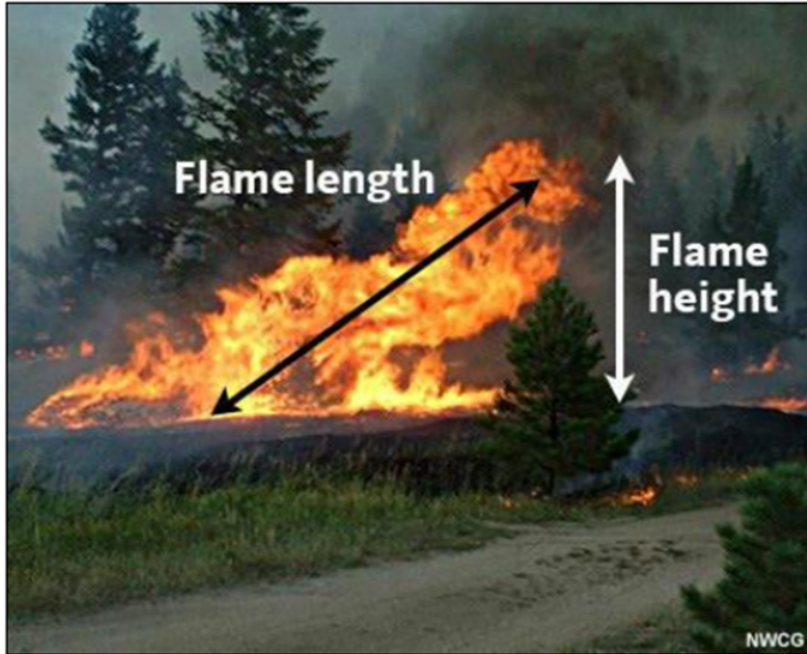
***DURING WILDFIRES – HOT, DRY, WINDY
Flames 2-3 times height of fuels***

More Fuels = hotter and bigger flames



How much is there?

Slope & Wind



55%
slope

30%
slope

0-5%
slope

Fuel Layer

what carries the fire?

Surface



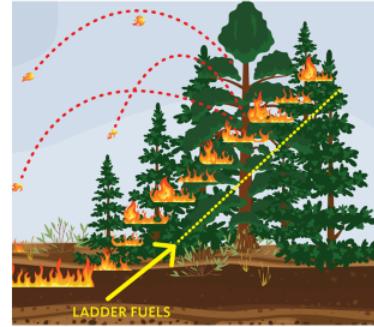
Dead



Live understory



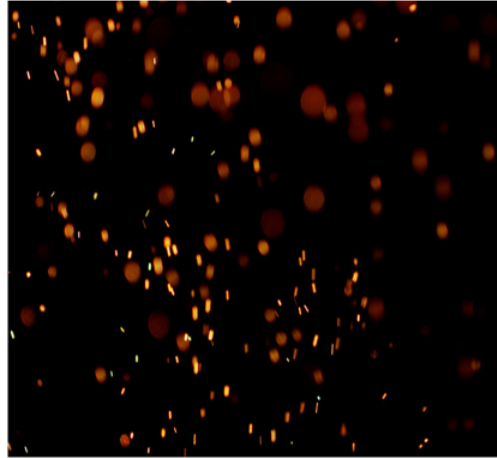
Ladder



Crown

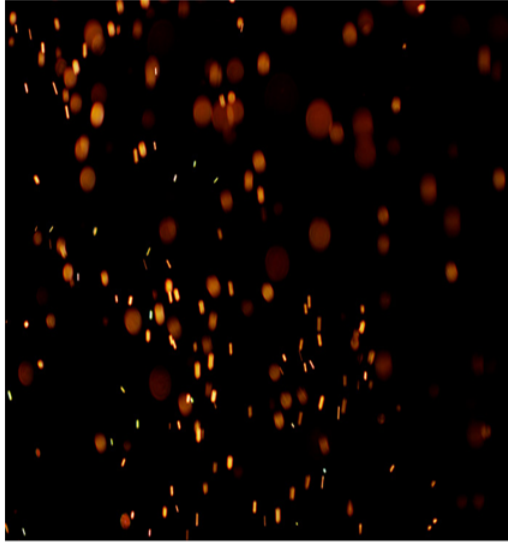


IT ALL STARTS AT THE SURFACE



WE HAVE THE CHOICE

how it burns



King Fire

Treated
prescribed fire and thinning

untreated

*Risk of high intensity fire reduced 64%
in areas burned at low intensity
Science Advances 2023*

Treatment varies by vegetation type

Forest



Shrub/Chaparral



Grass



KNOW YOUR SURFACE FUELS

best treatment varies by type



dead



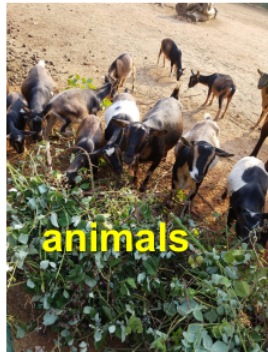
alive



both

Tools to Reduce Fuels

create defensible space reduce hazard and restore forests



EFFECTIVENESS: RE-ARRANGE VS REMOVE



***Flames somewhat shorter
Still burns very hot
Easily catches fire
Can kill trees***

***Flames shorter
Burns lower intensity
Less likely to catch fire***

GRASS FUELS



weedeating
Shorter - stays



Animals
remove



mowing
Shorter - stays



Burn (advanced)
remove



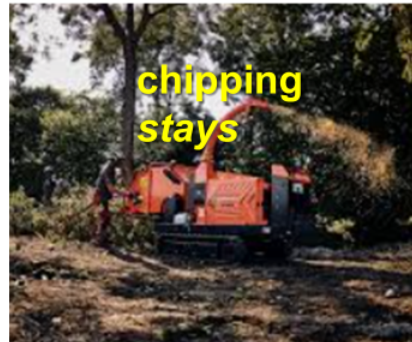
Animals then burn
remove

Shrubs and Vines (i.e. Blackberry)

- Sprouting (regrows)
 - Pull –scotch broom
 - Graze
 - Spray (if allowed and accepted)
 - Repeat, repeat, repeat!
- Non-sprouting
 - Cut and pile
 - Chip or burn
 - Haul to green waste dump site
- Scotch broom
 - Tractors, trucks, masticators & mowers etc can spread seeds



FOREST FLOOR



*takes effort & time
(lots!)*

fast, expensive

*cheap maintenance
best for healthy forest*

Pros & Cons of Chipping or Mastication



- Effective at
 - reducing fuel height
 - reduce flamelength
- Fast over large areas
- Can be cheaper than hand cut/pile remove or burn
- Adds to surface fuels
- Does not break down fast in our dry climate
- Readily ignites and in wind makes flying embers
- Can cook tree roots and soil
- Requires maintenance – sprouters, new growth
- Suppresses native wildflowers, sucks nitrogen from soil
- Makes it harder to pull scotch broom

What's best for you?

- **REMOVE** as much as possible!
- **In city limits – no burning**
- If you can access **green-waste---USE IT**
- **Thin** your forest – you'll get **less surface fuels added each year**
- **Animals and prescribed fire are great maintenance tools**
- If you've removed ladder fuels, property is not too steep, have neighbors and friends to help...Consider prescribe burning safely, legally and responsibly! **Learn to Burn**

RX FIRE: Careful Use of Low Intensity Fire

BEFORE

plan, prepare, permits



DURING

*burn slowly, carefully
mild weather
permissible burn day*



*watch & control
“holding”*



AFTER

*Make sure its out
Mop up*



***WHY?* Reduce Wildfire Intensity, Smoke Safer Homes, Communities, Firefighters**

REDUCE WILDFIRE INTENSITY

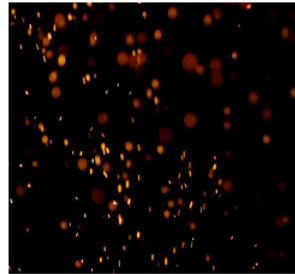
untreated

after prescribed fire



REDUCE SURFACE FUELS

Most effective tool



MAKE SAFER

*homes, community,
health. firefighters*



WHY? – Restore Forests and Native Plants

*thin little trees before
they become dense
forests*



*resilient forests, restore meadows
reduce wildfire smoke
recycle nutrients, fertilize soil
stable carbon storage*



*enhances native plants
Improves habitat*



RISK

Manage & Reduce:
plan, permit, control

Simple Negligence

**Perceived Vs Actual
Risk**

- Risk of escape/liability from prescribed fire is <1%
- Demonstrating due diligence



Nevada Co RCD Programs

Education & Technical Support for Private Landowners

RX Fire Education

Courses and Training

Organizing:



Site Visits

*is it the right tool?
advice on plans & prep*



Grazing and fire safety

*Around schools
List of local vendors*



Ground and Surface Fuels

Litter and Duff



Dead or Alive



Size and Arrangement

Fine - < 1/4" - 1 hr Small - 1/4 - 1" - 1 hr



Medium - 1-3" - 100 hr Large/logs > 3" - 1000 hr



WHAT IT MEANS

Our Current Problem

Camp Fire viewed from space



Ways to do Fuel Reduction Treatments

By Hand



Machine - Mechanical



Prescribed Fire





Thank you!

Contact information:
NEVADA COUNTY RCD
530-798-5529
manager@ncrcd.org
www.ncrcd.org



**NEVADA
COUNTY**
CALIFORNIA

**Office of Emergency
Services**

Steven Renz
Defensible Space Inspector
530-557-5678



Marcus Karlin
Defensible Space Inspector
530-889-0111 ex 1024



**Banner Mountain
Firewise Community**



**NEVADA
COUNTY**
CALIFORNIA

**Office of Emergency
Services**
Steven Renz
Defensible Space Inspector

OES Defensible Space Program

- At the County level.
- Does defensible space inspections in unincorporated Nevada County.
- Observes defensible space conditions along county roads and neighborhood parcels.
- Responds to calls regarding non-compliant neighborhood parcels.
- Mediates concerns between neighbors regarding defensible space requirements.
- Utilizes [Public Resources Code 4291](#) when conducting an inspection:
 - Zone 0 - Ember Resistant Zone from 0 to 5 feet from home
 - Zone 1 - Keep It Lean, Clean, and Green within 30 feet
 - Zone 2 - Reduce Potential Fuels Within 100 feet



Office of Emergency Services
Steven Renz
Defensible Space Inspector

Defensible Space Laws, Regulations, and Ordinances:

[California Public Resources Code \(PCR\) 4291](#)

Provides minimum defensible space requirements.

[Title 4: Fire Safety Regulations-Nevada County Ordinance](#)

Provides authority for Defensible Space Inspection, abatement, and citation in unincorporated Nevada County.

[California Building Codes and Nevada County Building Ordinances](#)

Provides Home Hardening, Wildland-Urban Interface (WUI) and setback requirements.



**Office of Emergency
Services**
Steven Renz
Defensible Space Inspector

What are the main differences between Nevada County's Ordinance and Public Resources Code 4291?

The County's ordinance encompasses all of the same regulations found in Public Resources Code 4291, but also addresses hazardous vegetation and combustible material abatement beyond the property line of a parcel on which a building and structure is located in order for property owners to achieve their 100 feet of defensible space.

The County's ordinance also contains hazardous vegetation maintenance requirements for private roadways in the unincorporated areas of the County that are not included in Public Resources Code 4291.



**Office of Emergency
Services**
Steven Renz
Defensible Space Inspector

What Has Changed? [SB 504](#). Approved by the Governor September 29, 2024.

Existing law [PRC 4291] requires fuels to be maintained and spaced in a condition so that a wildfire burning ***under average weather conditions*** would be unlikely to ignite the structure.

This bill would instead, *without reference to weather conditions*, require fuels to be maintained and spaced in a condition so that a wildfire *would be unlikely to ignite the structure*. The bill would require a person who owns, leases, controls, operates, or maintains a building or structure in the state responsibility area, regardless of location or forest and vegetation cover, to maintain defensible space of 100 feet from each side. *The bill would authorize regulations to alter the fuel reduction required between 5 and 30 feet to integrate the ember-resistant zone*, and would provide that the requirement for the ember-resistant zone shall instead take effect for existing structures 3 years after the effective date for new structures, as specified.



Office of Emergency Services
Steven Renz
Defensible Space Inspector

What is an Ember Resistant Zone?

The ember-resistant zone is the area within five feet of a home, including the structure, decks, patios, and stairs. It also includes the area under attached decks and stair landings.

The goal of the ember-resistant zone is to reduce the amount of combustible materials so that embers and radiant heat can't ignite them and spread the fire.

New construction will be subject to the rules in 2025, and existing homes will be subject to them in 2028.



**Office of Emergency
Services**
Steven Renz
Defensible Space Inspector

To create an ember-resistant zone, you can:

- ✓ Use non-combustible materials like gravel, concrete, or pavers instead of mulch
- ✓ Remove dead weeds, grass, and debris
- ✓ Trim Branches at least 10 feet away from chimneys and stovepipes.
- ✓ Minimize combustible items like furniture and planters on decks
- ✓ Move firewood and lumber to a safer area
- ✓ Replace combustible fencing and gates with fire-resistant materials
- ✓ Relocate garbage and recycling containers to a safer area
- ✓ Move boats, RVs, and vehicles away from this zone



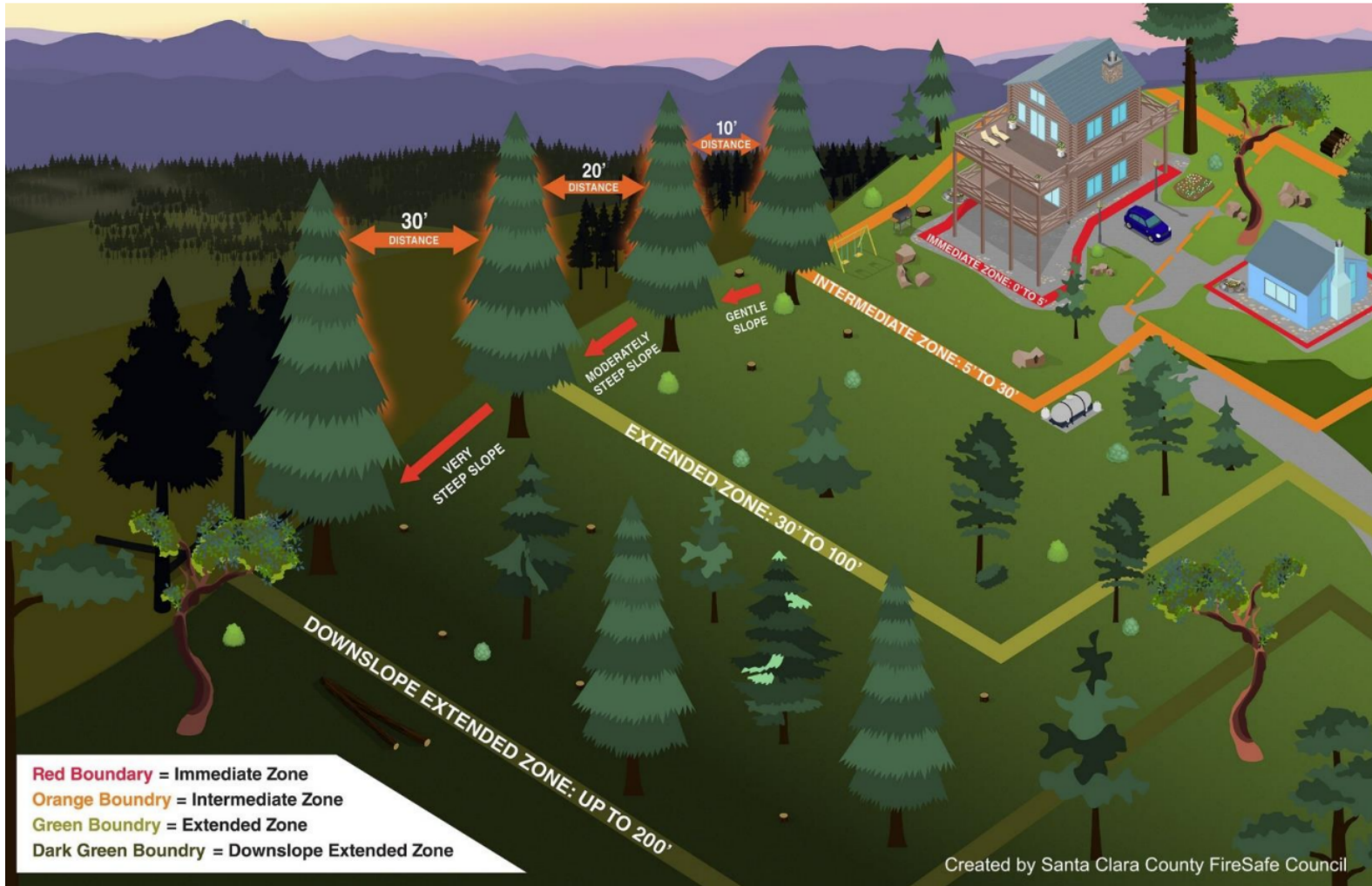
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Residents reducing wildfire risks

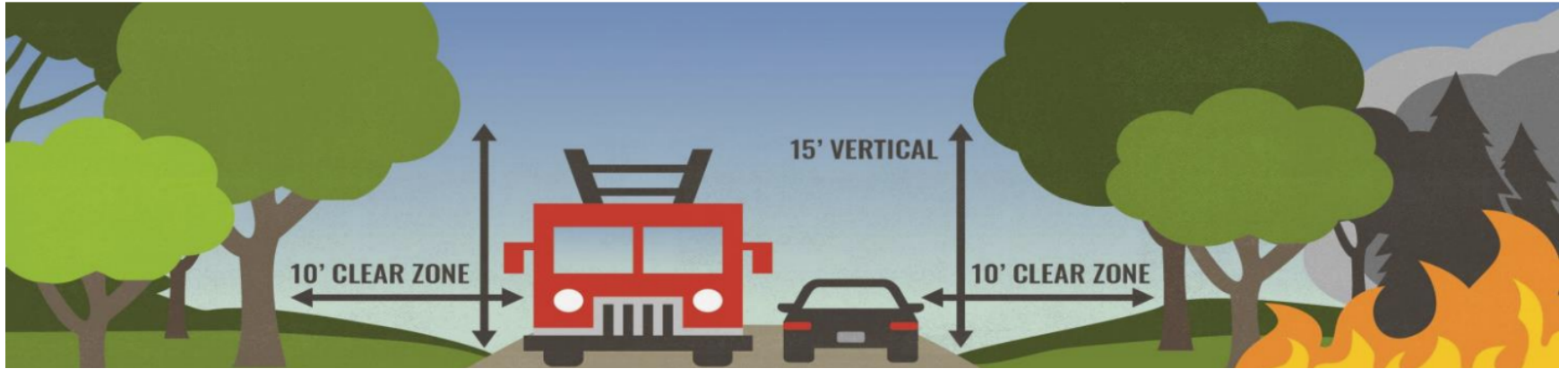


Marcus Karlin
Defensible Space Inspector

CAL FIRE Defensible Space Program

- At the State level and addresses both Federal, State, and County requirements.
- Does defensible space inspections and home hardening advisements.
- Issues compliance certificates for Homeowner's Insurance requests.
- Issues compliance certificates for Real Estate sales.
- Utilizes [Public Resources Code 4291](#) when conducting an inspection:
 - Zone 0 - Ember Resistant Zone/Immediate Zone. Clear from 0 to 5 feet from home
 - Zone 1 – Intermediate Zone. Keep It Lean, Clean, and Green within 30 feet
 - Zone 2 - Extended Zone. Reduce Potential Fuels Within 100 feet







**Banner Mountain
Firewise Community**



Marcus Karlin
Defensible Space Inspector

Who to Contact?

[Fire Safe Council of Nevada County](#)

Provides **Free Defensible Space Advisories (DSA)**. These are educational in nature and assist homeowners in identifying areas that need improvement. Advisories do not result in an enforcement action. Two of our members are advisors: Ric Cameron and Bob Hanna.

[Nevada County Defensible Space](#)

Provides formal defensible space inspections, and abatement action, to address adjacent properties and ingress/egress routes in unincorporated areas. May result in enforcement action.

[CAL FIRE Defensible Space](#)

Provides formal defensible space and home hardening inspections. May result in enforcement action. Provides certificates for insurance purposes and inspections for Real Estate transactions.

[Nevada County Consolidated Fire District](#)

Enforces Fuel Modification Standards that apply to vacant parcels within its district.



**NEVADA
COUNTY**
CALIFORNIA

**Office of Emergency
Services**



We're Here to Help!

- Educate
- Assist with neighborhood properties that do not comply with defensible space laws
- Obtain grants to help with vegetation abatement
- Explore Biochar and Biomass options
- Support our Firewise Communities
- Keep our neighbors and first responders safe during a wildfire



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***Banner Mountain
Firewise Community***

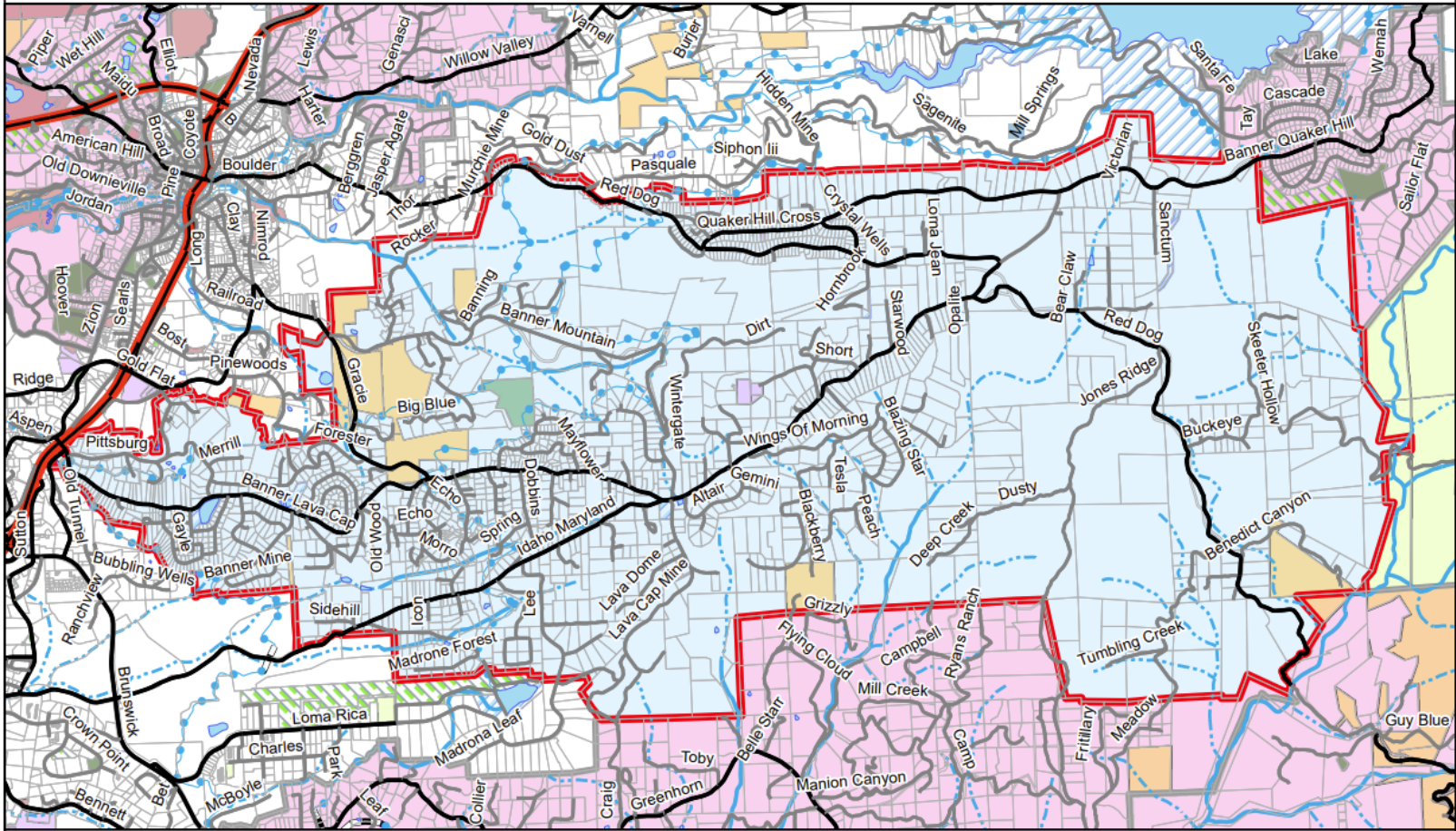


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Residents reducing wildfire risks

Jeff Peach
Banner Mountain Firewise Leader



Banner Mountain Firewise Community





**Banner Mountain
Firewise Community**



Jeff Peach
Firewise Leader

Status of Our Firewise Community

Pre-COVID:

Energized; Active Neighborhood Contacts; Developing a map of engaged homeowners; and, Planning an Evacuation Drill.

Today:

Not enough Active Neighborhood Contacts to get our messages out; Struggling to identify volunteers to assist with projects; and, Reaching a decision making point in 2025.



**Banner Mountain
Firewise Community**



Jeff Peach
Firewise Leader

The Importance of a Healthy Neighborhood Contact Network

- Neighbor Helping Neighbor:
 - Addressing defensible space across property lines/roads
 - Preparing for evacuation (know your 5)
 - During approaching wildfire
 - During snowstorms
- Building Community
- "Bench Strength" to support available grants and projects
- Sharing community information as it becomes available

Information Flow

NFPA-Cal Fire
County OES
Fire Safe Council
Information

Banner Mountain Firewise
Steering Committee

Neighborhood
Contact

Neighborhood
Contact

Neighborhood
Contact

Neighborhood
Contact

Neighborhood
Contact

Neighborhood
Contact

Lots of Peeps

Lots of Peeps

Lots of Peeps

Lots of Peeps

Lots of Peeps

Lots of Peeps

Information form a trusted neighborhood source



**Banner Mountain
Firewise Community**



FIREWISE USA™
Residents reducing wildfire risks



Jeff Peach
Firewise Leader

What Does a Neighborhood Contact Do?

1. Identifies the neighborhood street name(s) and addresses he or she will represent.
2. Develops an easy way to communicate with the identified neighborhood group.
3. Attends BMFWC meetings or reviews the meeting minutes.
4. Shares provided information with their neighborhood group.
5. Encourages communication, cooperation, and self-reliance among the neighborhood group for emergency preparation.



**Banner Mountain
Firewise Community**



Jeff Peach
Firewise Leader

Together:

- ✓ We can make Banner Mountain more wildfire resistant.
- ✓ We can keep our families and neighbors safe.
- ✓ We can have a safe and early evacuation:
 - Read your "Ready, Set, Go!" handbook
 - Sign up for CodeRed
 - Know Your Zone
 - Know Your 5
 - Please work on your Defensible Space!

Parting Thoughts

Trees as straws
in the ground

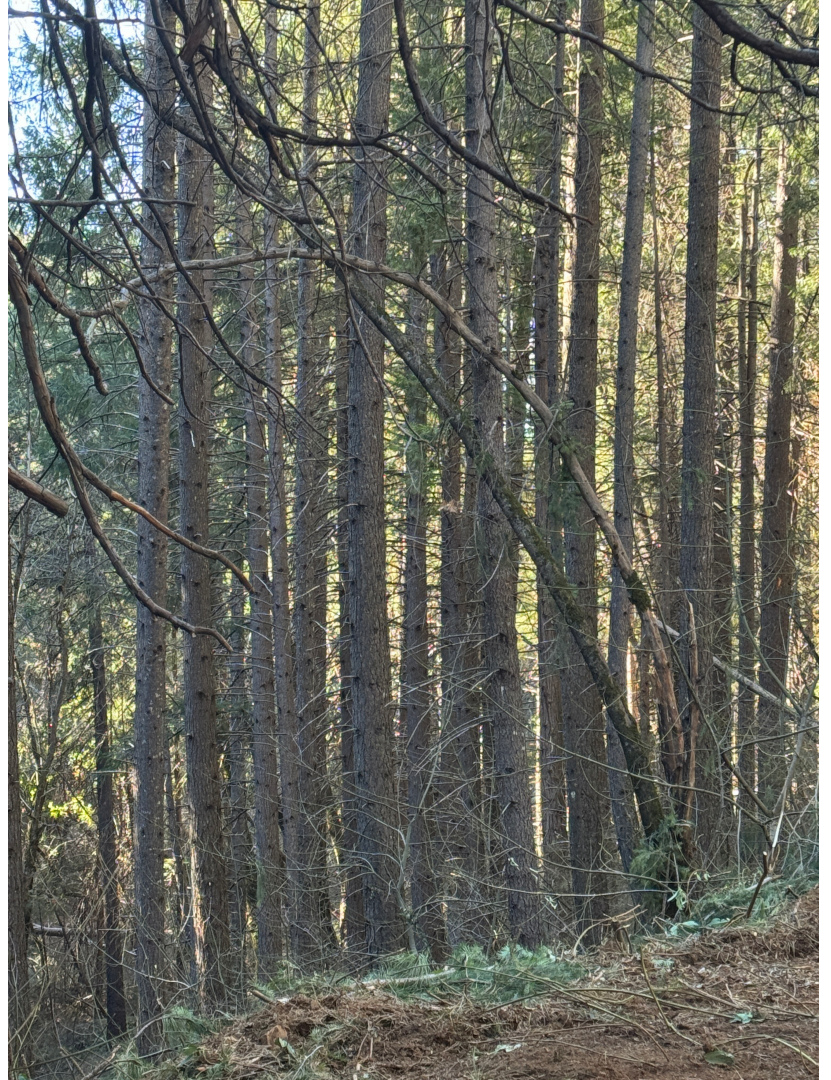
Black oak tree cut
last week
January 2025



Parting Thoughts Part 2

TMT Syndrome

Too Many Trees





Banner Mountain Firewise Community



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Residents reducing wildfire risks

THANK YOU FOR COMING!

Please Leave Your Question/Comment Card in the Basket

Please subscribe to the Friends of Banner Mountain email service

<https://www.bannermountain.org/>