



# Create and maintain a **Fire wise landscape**

Alice Cantelow

With special thanks to  
Robin and Mark Stanley

This class will be recorded and posted on our website

[https://ucanr.edu/sites/EDC\\_Master\\_Gardeners/Public\\_Education\\_Classes/Handouts\\_-\\_Presentations/](https://ucanr.edu/sites/EDC_Master_Gardeners/Public_Education_Classes/Handouts_-_Presentations/) and You Tube channel after the class.



**UNIVERSITY OF CALIFORNIA**  
Agriculture and Natural Resources

UC Master Gardener Program  
El Dorado County

Why should you care?

County ordinance, state law

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County ordinance, state law

Your house and property are major investments.

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Your homeowner's insurance may be affected.

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You can rebuild a house; can you recreate a home?



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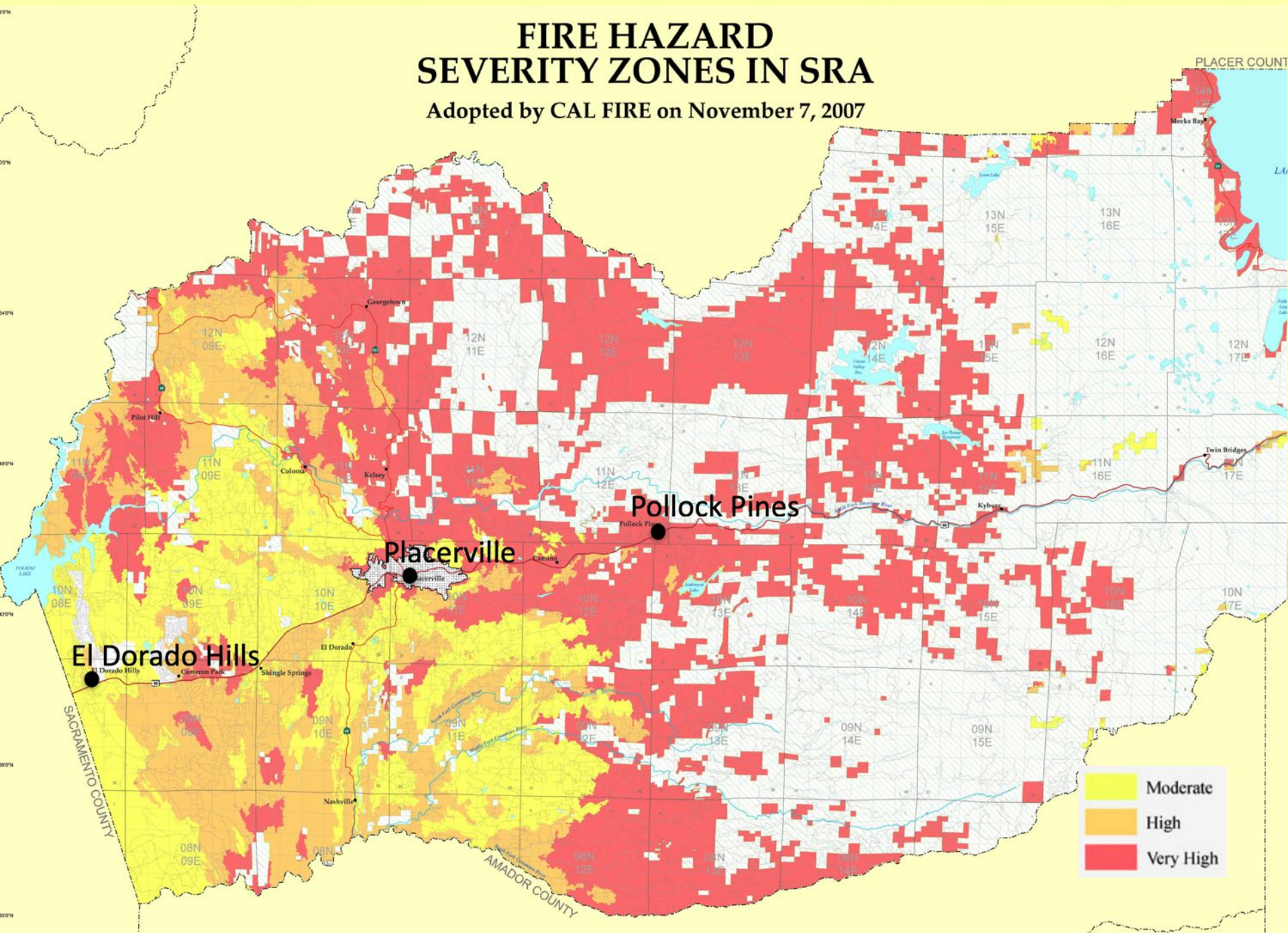


## Today's topics:

- Basic fire science, wildfire behavior
- Landscaping for fire resistance-  
defensible space
- Some nuts and bolts
- Examples- before and after
- Fine-tuning: Your specific property
- Future wildfire trends

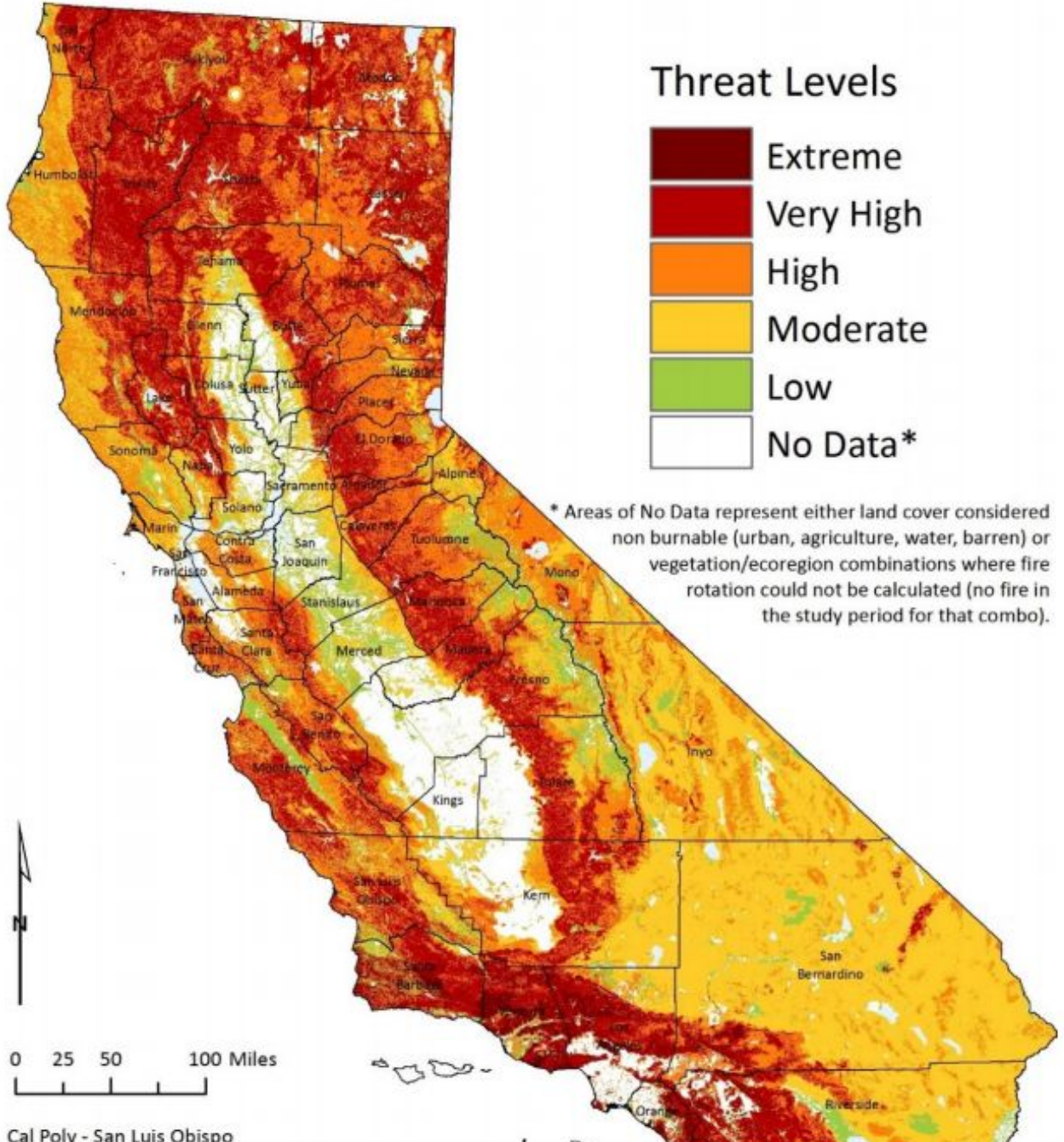
# FIRE HAZARD SEVERITY ZONES IN SRA

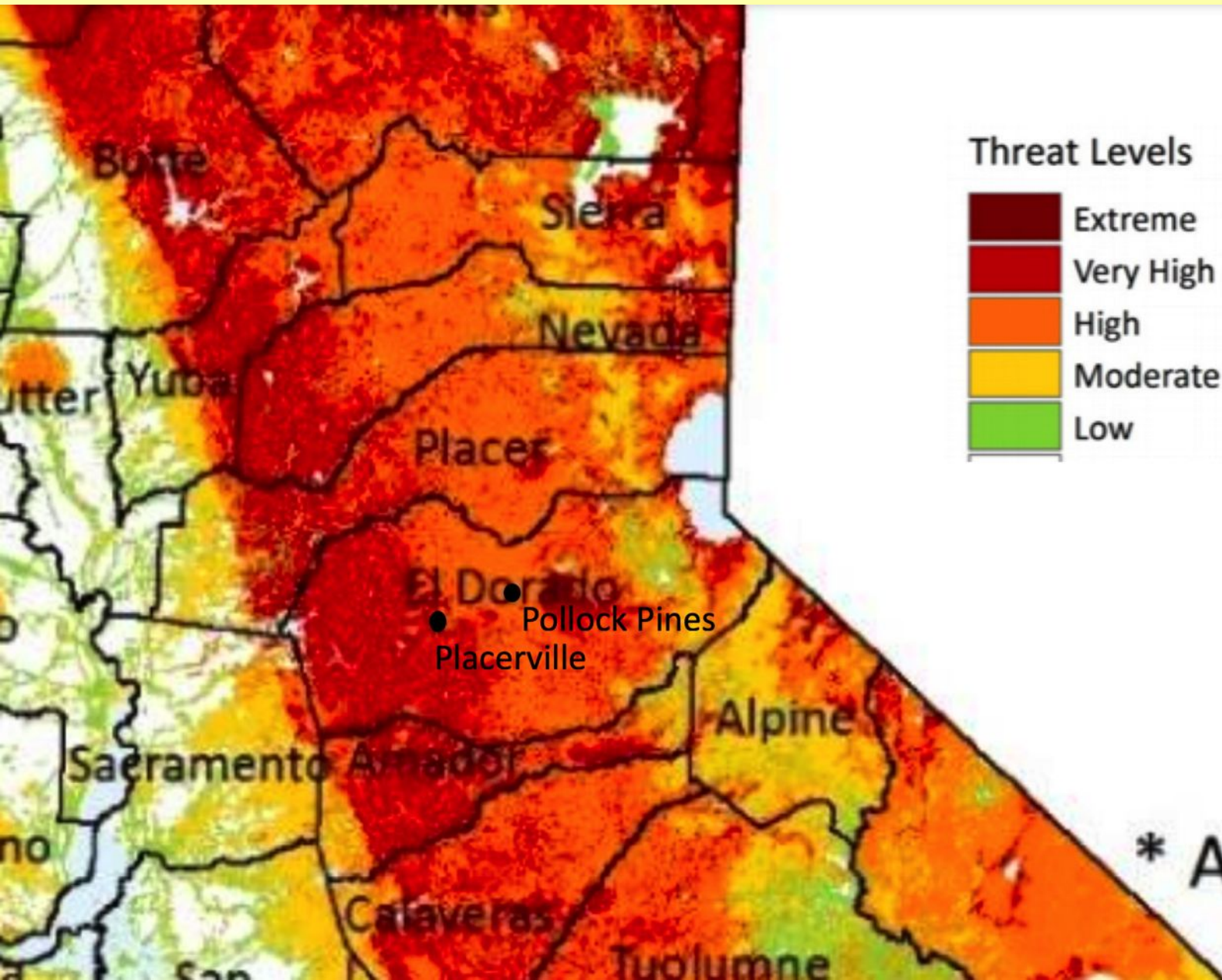
Adopted by CAL FIRE on November 7, 2007





# Wildfire Threat Areas





\* Areas of l  
non

# 9,600 wildfires in California in 2020

Most are put out, and kept to 10 acres or less

A small percentage get huge-

Small fires

Mega fires,  
like Camp  
Fire



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Mega fires,  
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Fire



# Which describes the wildlands near you: (check all that apply)

Grassland



Oak woodland



Oak Savannah



Mixed oak/conifer



Shrubland/  
chaparral



Conifer forest



# How something (like a house) catches on fire-



Heat-

Fuel-

Air- oxygen

# How something (like a house) catches on fire-



Heat- the match

Fuel- small fuel catches  
larger fuel on fire

Air- oxygen

# How something (like a house) catches on fire-



Heat-

Fuel- small fuel catches  
larger fuel on fire

Air- oxygen



How something (like a house)  
catches on fire-

**Where the heat comes from:**

Wall of flames



How something (like a house)  
catches on fire-

**Where the heat comes from:**

Radiant Heat

Wall of Flames



How something (like a house)  
catches on fire-

**Where the heat comes from:**

Radiant Heat

Wall of Flames



How something (like a house)  
catches on fire-

**Where the heat comes from:**

1. Embers

Wall of Flame



radiant Heat



# How something (like a house) catches on fire-

## catches on fire-

### 1. Embers

Wall of Flames



Radiant Heat



# Embers

Wind-blown embers are responsible for the majority of building ignitions



USDA FS, R5-TP-015

**Angora Fire – South Lake Tahoe**

# The fuel- anything that will burn

Dry or dead vegetation

Wood siding, roofing, decking,

Wood furniture, brooms, recycling bins

Trees

Shrubs- especially if woody

Perennials

Pretty much everything but rock, concrete, metal



# How best to protect ?

Small fires

Mega fires,  
like Camp  
Fire





Studies of houses that survived  
vs  
ones that didn't.



## Shout out to Some key researchers:

Jack Cohen, retired USFS, fire science researcher for 45+ yrs

Syphard and Keeley, esp 2019 study of 4 California regions

Dr. Austin Troy, University of Colo. 2020 study of Camp Fire

# Another approach: experiments



IBHS- Insurance Institute for Business and Home Safety



IBHS- Insurance Institute for Business and Home Safety

Shout out to:

Dr. Steve Quarles, buildings in wildfire studies  
for 30+ years, U.C., and IBHS

Yana Valachovic, UCANR, Forest Advisor and  
Humboldt-Del Norte County director

We don't need to be sitting ducks



# A three prong approach





1. Harden your Home itself







1. Harden your Home itself



UCANR <https://ucanr.edu/sites/fire/Prepare/Building/>

1st priority: Roofs

2<sup>nd</sup> priority: Decks

4<sup>th</sup> priority: Eaves

Vents

3<sup>rd</sup> priority: Windows

5<sup>th</sup> priority: Siding

Class A roof

Soffitted Eaves



Double pane windows

Stucco Siding





1. Harden your Home itself



UCANR <https://ucanr.edu/sites/fire/Prepare/Building/>

1st priority: Roofs

2<sup>nd</sup> priority: Decks

4<sup>th</sup> priority: Eaves

Vents

3<sup>rd</sup> priority: Windows

5<sup>th</sup> priority: Siding

**Vegetation**



1. Harden your Home itself



2. Defensible Space

Fire resistant landscaping



1. Harden your Home itself




2. Defensible Space

Fire resistant landscaping



3. Wide access



A photograph of a narrow, unpaved road or path that appears to be blocked or severely constricted by dense, overhanging trees and foliage. The road is flanked by thick green trees, with some branches and leaves hanging over the path. The ground is covered in dirt and fallen leaves. A white speech bubble is overlaid on the left side of the image, containing text.

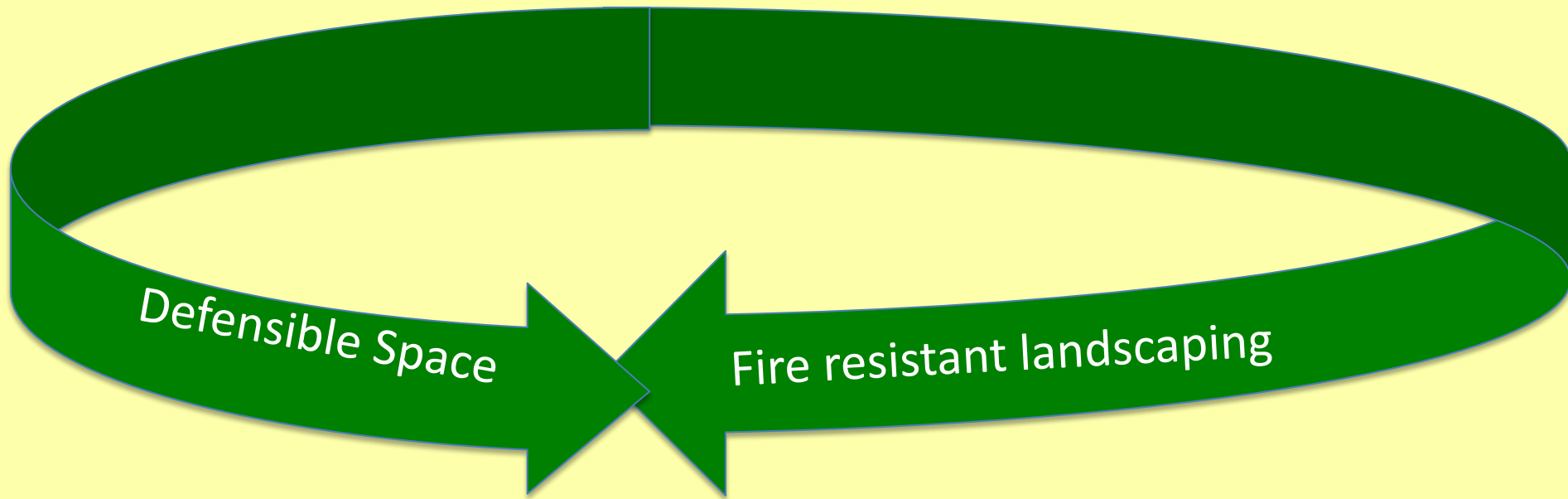
**Narrow road  
Overhanging trees  
Is there a way out?**











*Defensible Space*

Fire resistant landscaping

## GOALS:

- Prevent paths of wildfire to plants and house



*Defensible Space*

*Fire resistant landscaping*

## GOALS:

- Prevent paths of wildfire to plants and house
- Reduce chance that house will catch on fire



## GOALS:

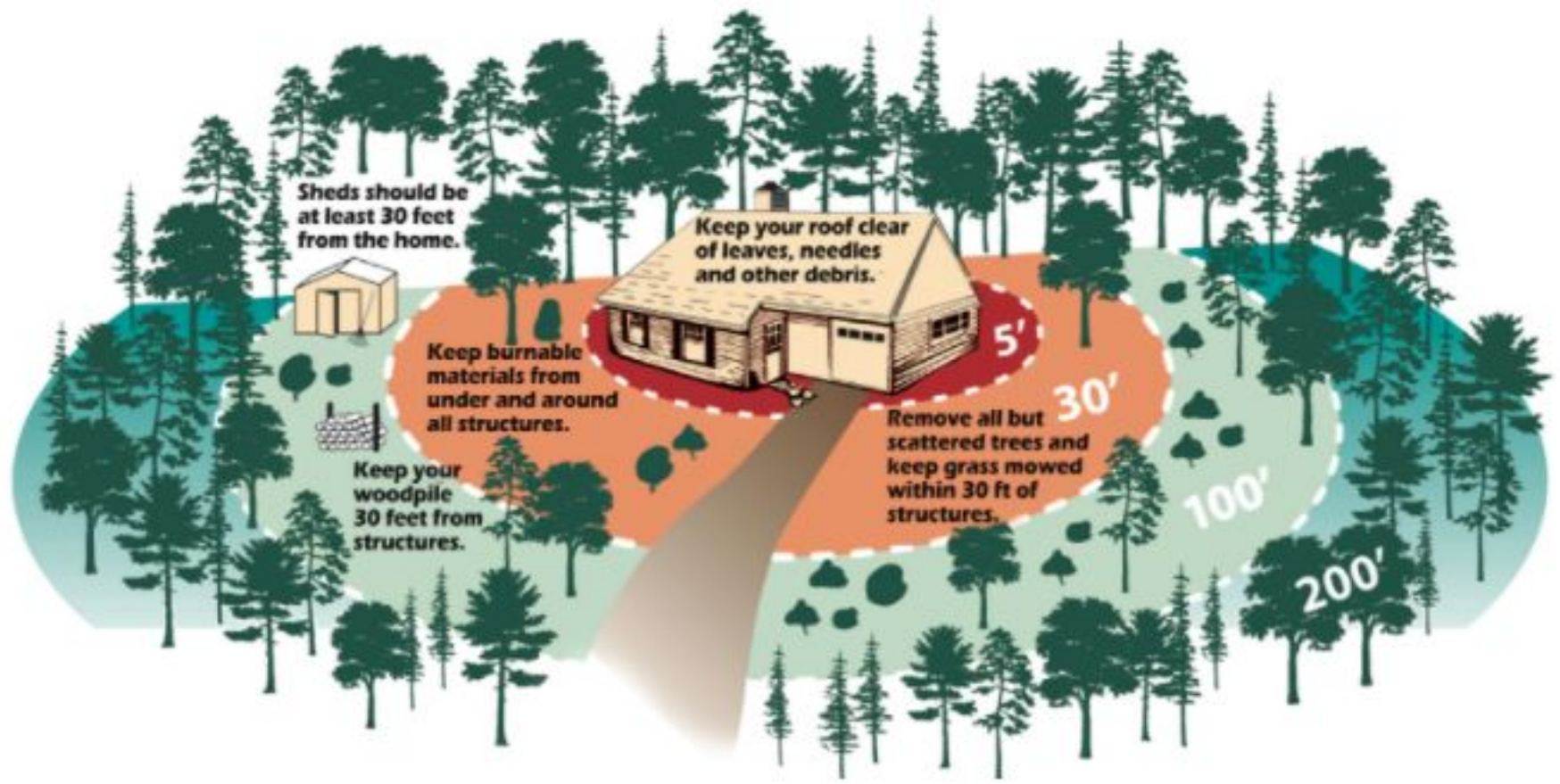
- Prevent paths of wildfire to plants and house
- Reduce chance that embers will catch house on fire
- Provide a safe place for fire personnel.

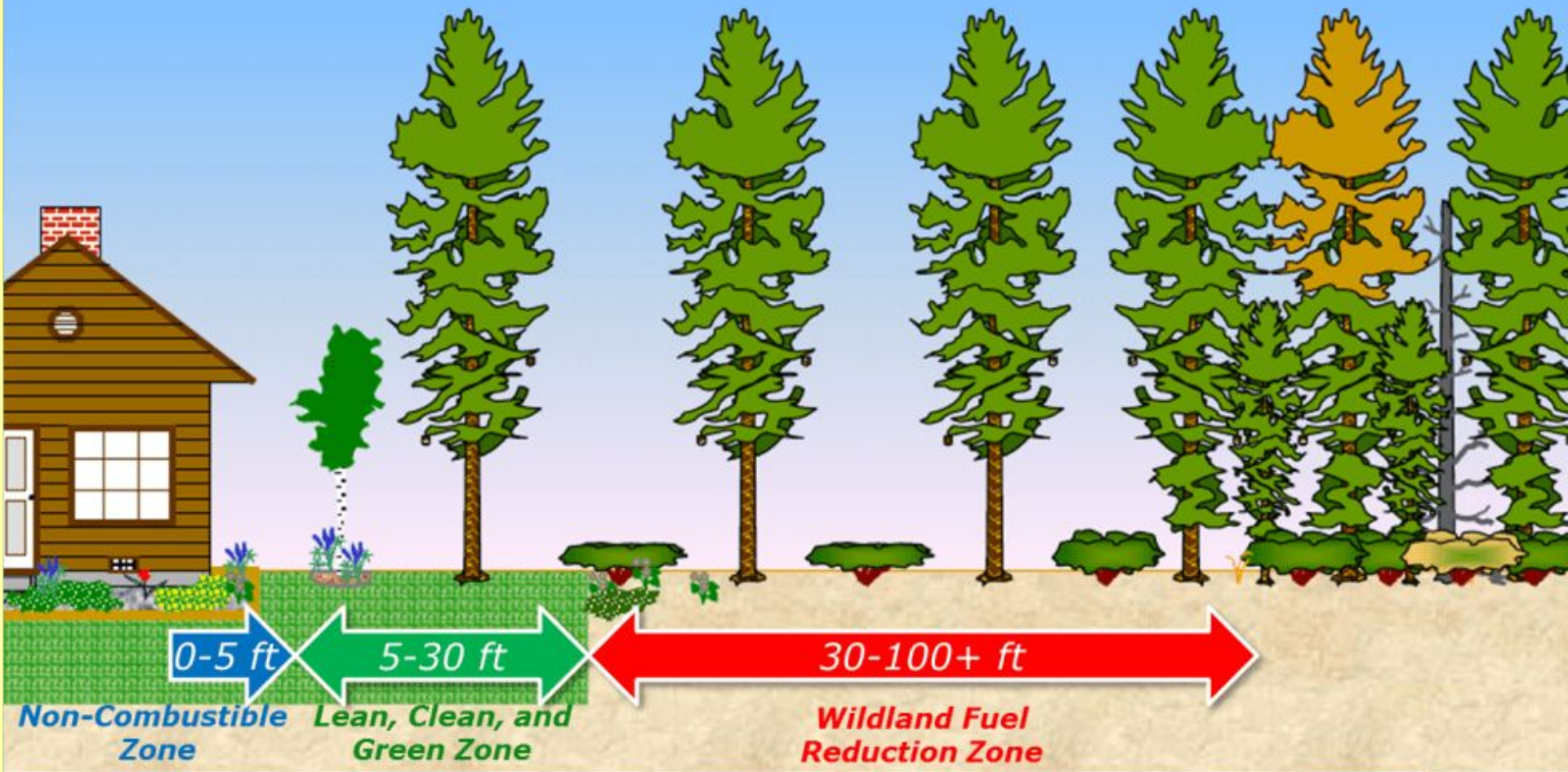


Defensible Space

Fire resistant landscaping

# Zones of Defensible Space

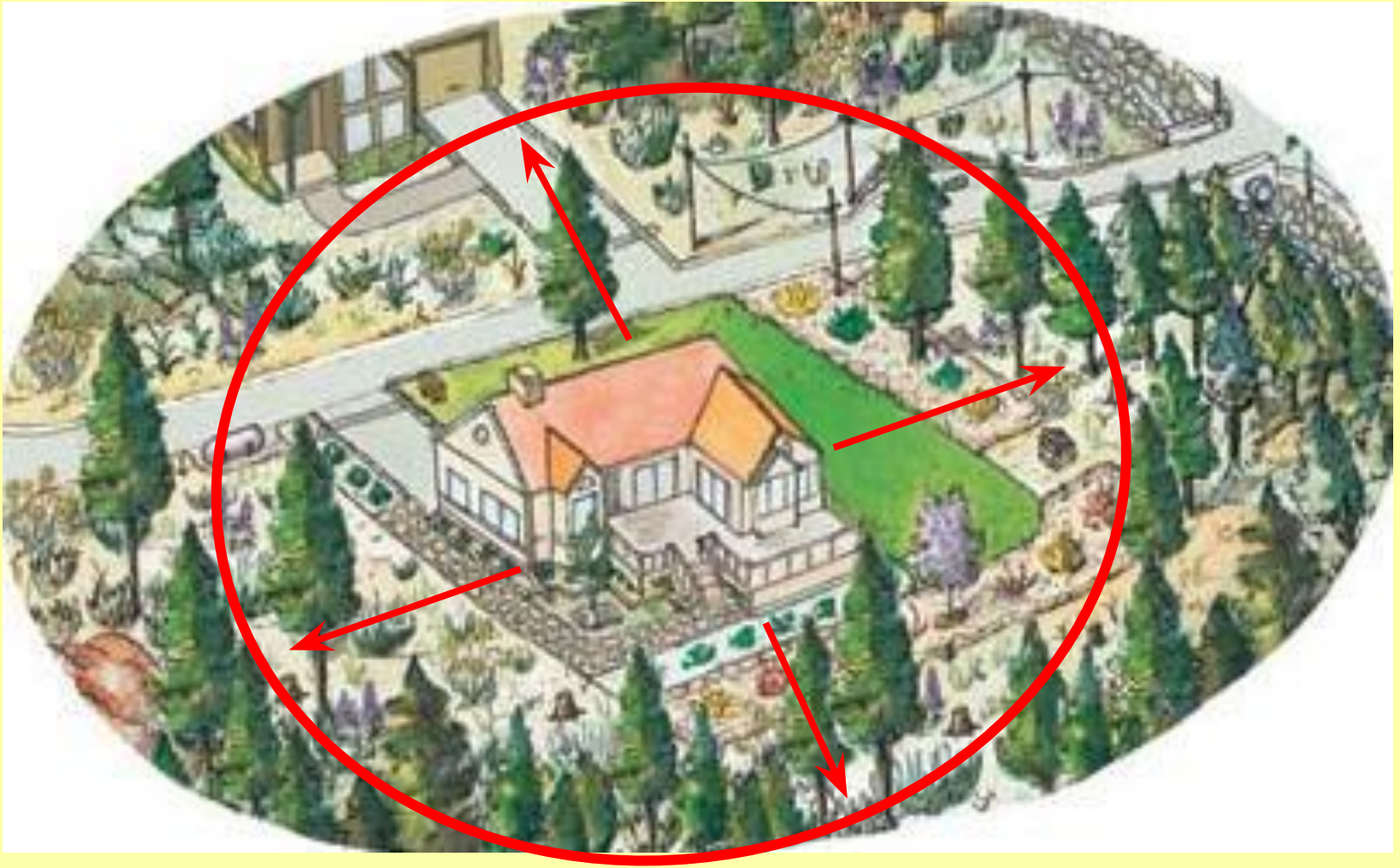




Start at **house** and work **out**



How do I measure?



Zone 0. First 5 feet-

most critical of all !

**Nothing combustible !!**







- Problems:
- Many plants within 5 ft
  - Window boxes in front of windows- especially vulnerable part of house
  - Vine up wooden post
  - Wooden chair in first five ft
  - Trees overhanging and touching



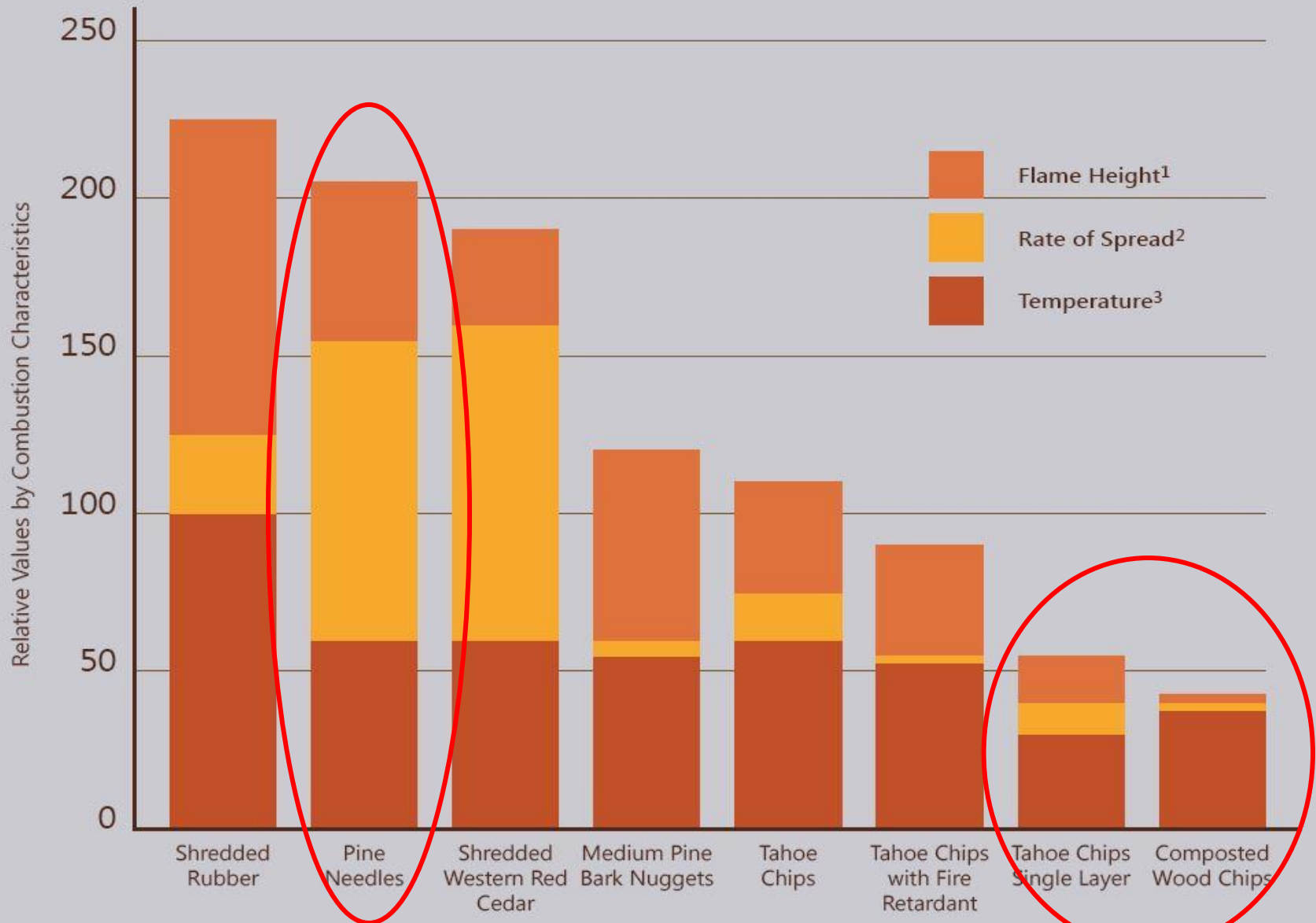




Mulch burns, and/or smolders



# Burning Characteristics



# Only mulch that didn't catch fire: decomposed granite

**Table 1.** Percentage of torch and briquette trials that experienced ignition when exposed to each ignition source from fall 2005 and spring 2006.

Fall 2005						
	Torch			Briquette		
Mulch Type	Tucson	Prescott	Flagstaff	Tucson	Prescott	Flagstaff
Straw	100	100	100	67	67	33
Pine Needles	100	100	100	100	100	67
Wood Chips	100	100	100	0	0	0
Pine Nuggets	100	100	100	0	0	0
Sod	100	100	100	0	0	0
Shredded Bark	100	100	100	0	0	0
Compost	100	100	100	0	0	0
DG	0	0	0	0	0	0



**One side of this house ignited after 10 minutes of ember exposure.**







## Zone 1. Five feet to 30 feet

### **Lean**

Well spaced vegetation, + only small amounts of flammable vegetation

### **Clean**

No accumulation of dead vegetation or other flammable debris

### **Green**

Plants that remain healthy and green



Zone 1. Five feet to 30 feet

**Lean, clean and green**

1. Remove dead and dying wood, pine needles, etc.



## Zone 1. Five feet to 30 feet

### **Lean, clean and green**

1. Remove dead and dying wood, pine needles, etc.
2. Break up continuous vegetation- create islands, or mosaic- horizontal and vertical **spacing**







**MINIMUM HORIZONTAL CLEARANCE**

**SHRUBS**

**TREES**



**FLAT TO MILD SLOPE (LESS THAN 20%)**

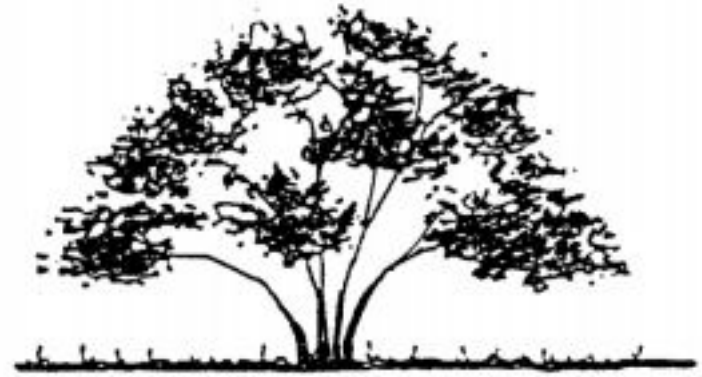




Cut out  
dead wood,  
thin shrubs



Chaparral Plant Before Pruning



Chaparral Plant After Pruning

For shrubs left after thinning, that are 4 ft or taller- create umbrellas

Prune  $\frac{1}{2}$  of lower branches out-  
shorten upper branches as needed

Nonwoody veg: keep to 12 inches







Defensible space is for ornamentals too





5-30 ft – “fuel breaks”

Hard scape: fuel break-no water needed



# Islands or mosaic













# Minimum Vertical clearances









X

X

X

X









## Zone 1. Five feet to 30 feet

### **Lean, clean and green**

1. Remove dead and dying wood, pine needles, etc.
2. Break up continuous vegetation- create islands, or mosaic- horizontal and vertical **spacing**
3. Limb up large trees- don't need to remove

**MINIMUM VERTICAL CLEARANCE**



**6 FOOT  
MINIMUM  
CLEARANCE**















# John Wilcox, El Dorado County staff Feb 2021 presentation to BOS

## 2020 Properties Inspected:

367- Pollock P. and Garden Valley

45 in compliance 1<sup>st</sup> visit

130 total in compliance now

County of El Dorado  
Vegetation Management Program  
Modified from CA 9987  
(L 100a) (10/2020)

EXHIBIT A  
Date:

### NOTICE OF DEFENSIBLE SPACE INSPECTION

An El Dorado County representative has requested your property for fire hazards.  
You are hereby notified to correct the violation(s) indicated below. Failure to correct these violations may result in a citation and fine.

OWNER/TENANT	INSPECTION ADDRESS
INSPECTOR NAME	CONTRACT NUMBER
Inspection No. 1 2 3	No Violations Observed <input type="checkbox"/>

**Zone 1 / Within 30 feet of all habitable structures (Refer to illustration below):**

- A. Remove all branches within 10 feet of any chimney or stovepipe outlet, pursuant to EDC § 8.09.070 (F)(1)(a) and 14 CCR § 1299.03(a)(2).
- B. Remove leaves, needles or other vegetation on roofs, gutters, decks, porches, stoeps, etc. pursuant to EDC § 8.09.070 (F)(3)(a) and 14 CCR § 1299.03(a)(1), § 1299.03(a)(2).
- C. Remove all dead and dying trees, branches and shrubs, or other plants adjacent to or overhanging buildings, pursuant to EDC § 8.09.070 (F)(3)(a)(3) and 14 CCR § 1299.03(a)(2).
- D. Remove all dead and dying grass, plants, shrubs, ferns, branches, leaves, weeds and needles, pursuant to EDC § 8.09.070 (F)(3)(a).
- E. Remove or separate fire flammable ground cover and shrubs, pursuant to EDC § 8.09.070 (F)(3)(a) and BOF General Guidelines Item 1.
- F. Remove flammable vegetation and items that could catch fire which are adjacent to, or below, combustible decks, balconies, and stairs, pursuant to 14 CCR § 1299.03(a)(4).
- G. Relocate exposed wood piles outside of Zone 1 unless completely covered in a fire-resistant material, pursuant to 14 CCR § 1299.03(a)(2).

**Zone 2 / Within 30-100 feet of all habitable structures (Refer to illustration below):**

- H. Cut annual grasses and forbs down to a maximum height of 4 inches, pursuant to EDC § 8.09.070 (F)(3)(a).
- I. Remove fuels in accordance with the Fuel Separation or Continuous Tree Canopy guidelines (see back), pursuant to BOF General Guidelines Item 4.
- J. All exposed rooftops must have a minimum of 10 foot clearance, down to bare mineral soil, in all directions, pursuant to 14 CCR § 1299.03(a)(2)(C).
- K. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface fuel, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of 3 inches, pursuant to 14 CCR § 1299.03(a)(2)(A).

**Defensible and Reduced Fuel Zone / Within 100 feet of all habitable structures (Refer to illustration below):**


- L. Logs or stumps embedded in the soil must be removed or isolated from other vegetation, pursuant to BOF General Guidelines Item 3.

**Other Requirements:**

- M. Outbuildings and Liquid Propane Gas (LPG) storage tanks shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior, pursuant to 14 CCR § 1299.03(a)(1).
- N. Address numbers shall be displayed in contrasting colors (4" min. size) and readable from the street or access road, pursuant to 2010 CFC § 805.1.
- O. Equip chimney or stovepipe openings with a metal screen having openings between 3/8 inch and 1/2 inch, pursuant to 2010 CFC § 2113.2.

COMMENTS:

IMPORTANT All violations marked must be addressed by the owner/tenant. A re-inspection of the property will occur on or after \_\_\_\_\_

LEARN MORE: 



# John Wilcox, El Dorado County staff

## A common problem?

County of El Dorado  
Vegetation Management Program  
Revised from the PRC's  
11/00A (10/2020)

EXHIBIT A  
Date: \_\_\_\_\_

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OWNER/TENANT: \_\_\_\_\_ INSPECTION ADDRESS: \_\_\_\_\_  
INSPECTOR NAME: \_\_\_\_\_ CONTACT NUMBER: \_\_\_\_\_ Inspection No. [ ] [ ] [ ] No Violations Observed

**Zone 1 / Within 30 feet of all habitable structures (Refer to illustration below):**

- A. Remove all lawns within 10 feet of any chimney or stovepipe outlet, pursuant to EDC § 8.09.070 (F)(7)(c) and 14 CCR § 1299.03(a)(5)
- B. Remove leaves, needles or other vegetation or roots, gutters, shrubs, porches, overhangs, etc. pursuant to EDC § 8.09.070 (F)(7)(g) and 14 CCR § 1299.03(a)(1) § 1299.03(a)(2)
- C. Remove all dead and dying trees, branches and shrubs, or other plants adjacent to or overhanging buildings, pursuant to EDC § 8.09.070 (F)(7)(a)(5) and 14 CCR § 1299.03(a)(2)
- D. Remove all dead and dying grass, plants, shrubs, trees, branches, leaves, weeds and needles, pursuant to EDC § 8.09.070 (F)(7)(a)
- E. Remove or separate fire flammable ground cover and shrubs, pursuant to EDC § 8.09.070 (F)(7)(a) and BOF General Guidelines Item 1.
- F. Remove flammable vegetation and items that could catch fire which are adjacent to, or below, combustible decks, balconies, and stairs, pursuant to 14 CCR § 1299.03(a)(4)
- G. Reduce exposed wood pile outside of Zone 1 unless completely covered in a fire-resistant material, pursuant to 14 CCR § 1299.03(a)(5)

**Zone 2 / Within 30-100 feet of all habitable structures (Refer to illustration below):**

- H. Cut annual grasses and forbs down to a maximum height of 4 inches, pursuant to EDC § 8.09.070 (F)(7)(a).
- I. Remove fuels in accordance with the Fuel Separation or Continuous Tree Canopy guidelines (see back), pursuant to BOF General Guidelines Item 4.
- J. All exposed woodpiles must have a minimum of 10 feet clearance, down to bare mineral soil, in all directions, pursuant to 14 CCR § 1299.03(a)(2)(C)
- K. Dead and dying woody surface fuels and small fuels shall be removed. Lower surface fuels, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of 3 inches, pursuant to 14 CCR § 1299.03(a)(2)(A).

**Defensible and Reduced Fuel Zone / Within 100 feet of all habitable structures (Refer to illustration below):**

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**Other Requirements:**

- M. Outbuildings and Liquid Propane Gas (LPG) storage tanks shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior, pursuant to 14 CCR § 1299.03(a)(7).
- N. Address numbers shall be displayed in contrasting colors (4" min. size) and available from the street or access road, pursuant to 2019 CPC § 995.1.
- O. Eave overhang or overhang openings with a metal screen having openings between 3/8 inch and 1/2 inch, pursuant to 2019 CBC § 2113.9.2.

Comments: \_\_\_\_\_

**IMPORTANT** All violations marked must be addressed by the owner/tenant. A re-inspection of the property will occur on or after \_\_\_\_\_

**KNOW THE LAW  
BE FIRE SMART**  
WWW.READYTODOWN.DFWS.ORG  
100 feet of Defensible Space is required under the Public Resources Code (PRC) 4291 and El Dorado County Ordinance 5101, Chapter 8.09.





A common problem?

Trees not limbed up



# What to do with the slash?



# What to do with the slash?

- Burn- need permit, only on burn days-

Best is a dry day right before rain  
IF a burn day

# Alternatives to Burning

- Chipping programs
- Chipping yourself
- Green waste disposal
- Distanced piles
- Composting
- Community clean up days

## EDD: Green Waste-free



If you have bins, 2 big ones/2 weeks

+

2-5 paper bags(32 gal) /2 weeks (must arrange)

2 unlimited green waste days (must arrange)

Voucher for all- curbside: unlimited once, + 18 bags  
once more

Voucher for all-at Throwita Way- 1-2 pickup loads

# Distanced piles





## Zone 1. Five feet to 30 feet

### **Lean, clean and green**

1. Remove dead and dying wood, pine needles, etc.
2. Break up continuous vegetation- create islands, or mosaic- horizontal and vertical **spacing**
3. Limb up large trees- don't need to remove
4. Can have some mulch- composted wood chip is safest- keep < 3 inches



**Rational Action**





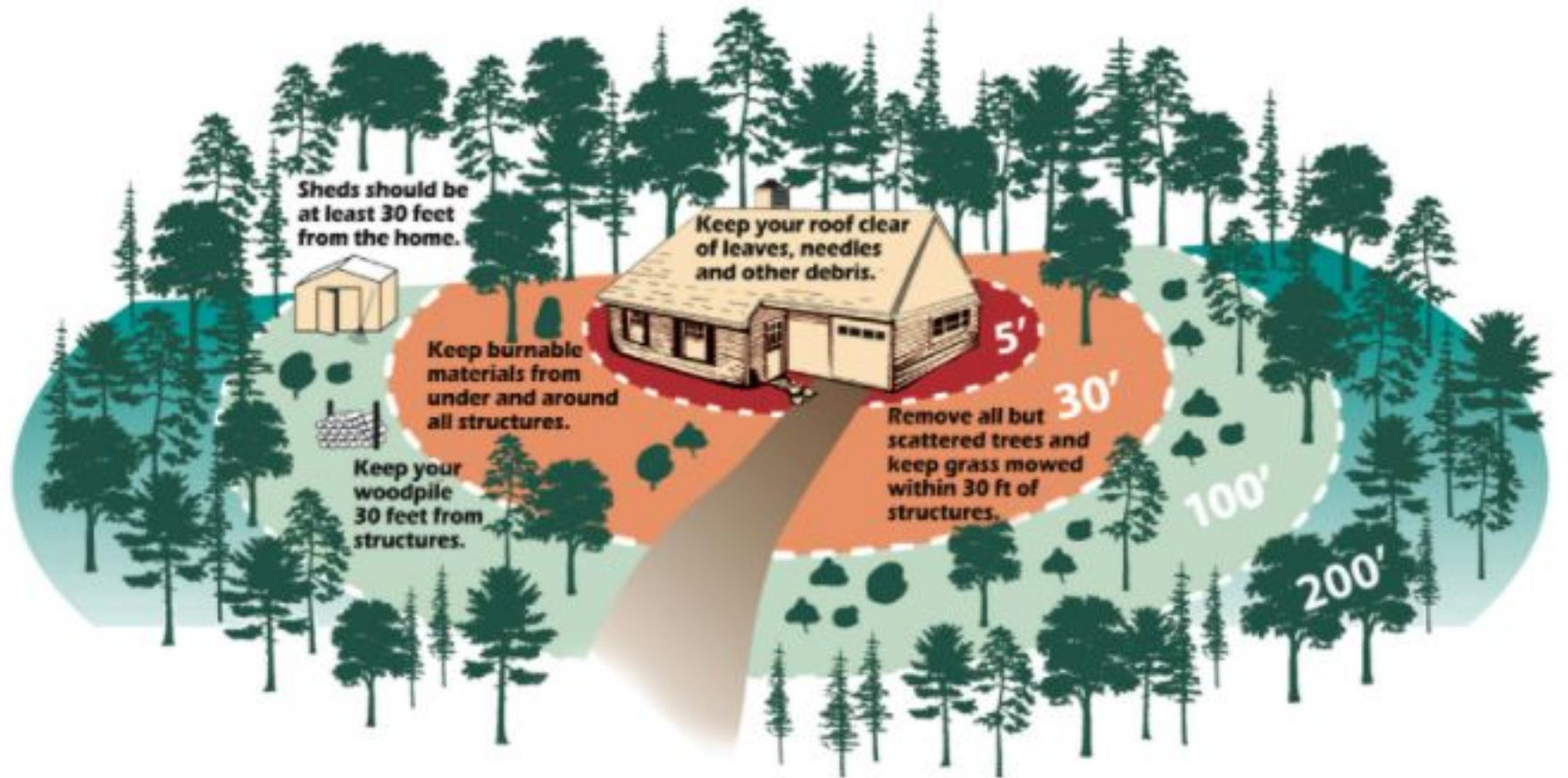
**Overreaction**



## Zone 1. Five feet to 30 feet

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2. Break up continuous vegetation- create islands, or mosaic- horizontal and vertical **spacing**
3. Limb up large trees- don't need to remove
4. Can have some mulch- composted wood chip is safest
5. Don't remove all plants!





## Zone 2. 30 ft to 100 ft

### **A little more relaxed**

1. Remove dead and dying wood, thick litter etc.  
Can keep some leaf, pine needles, < 3 inches deep
2. Break up continuous vegetation- create islands, or mosaic- horizontal and vertical **spacing-**  
can be a bit closer, still avoid ladder fuels
3. Still keep dead and dry summer grasses down to 3- 4 inch high maximum



## Zone 2. 30 ft to 100 ft

### **A little more relaxed**

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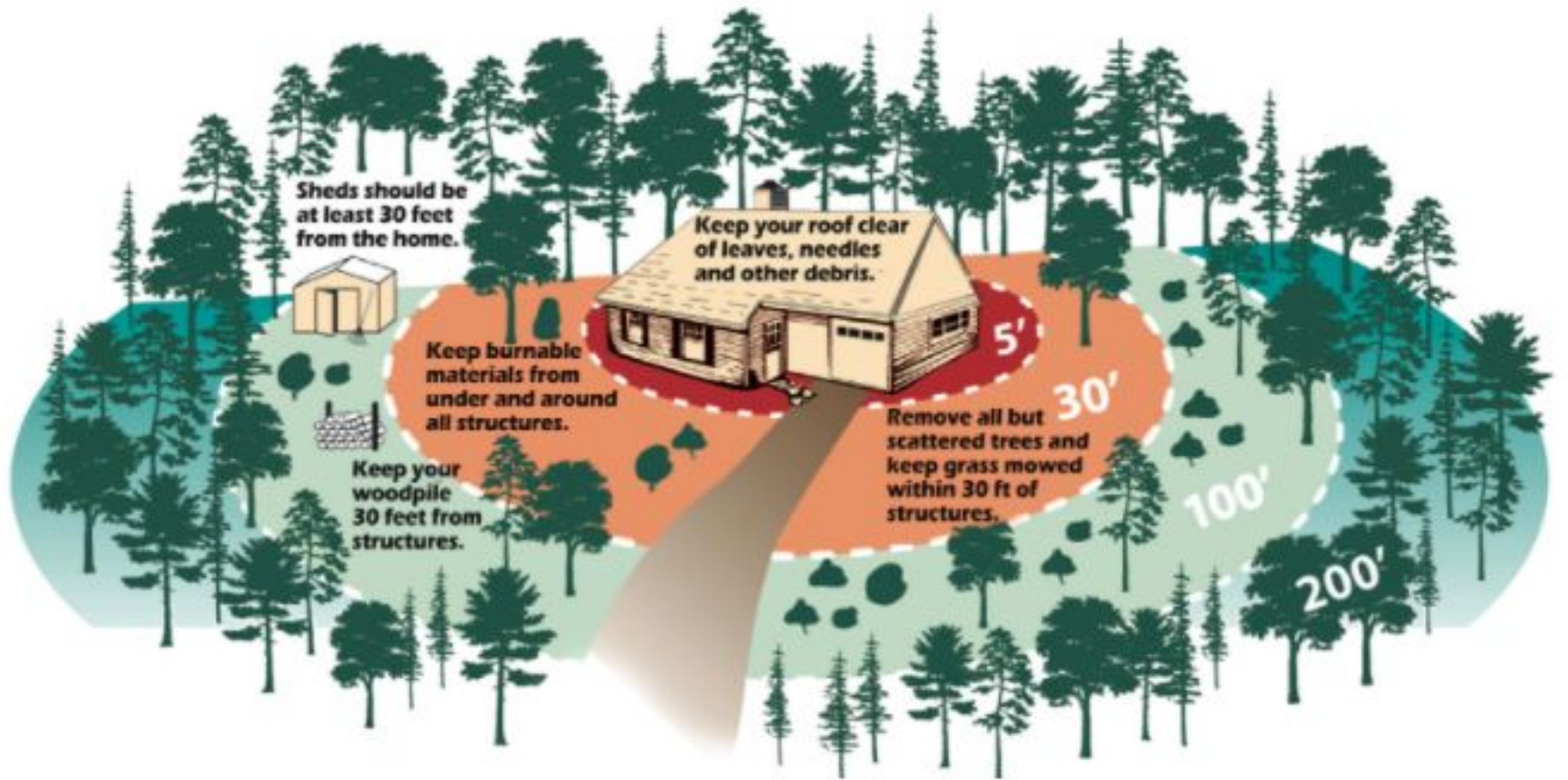


## Special Considerations

1. Wood piles/Outbuildings/propane tanks-
  - at least 30 ft out, with  
10 ft mineral soil in all directions
2. Decks- no vegetation below, or touching
3. Protect riparian areas



# Outermost zone- past 100 ft – resilience, habitat health





# Outermost zone- past 100 ft – resilience, habitat health



















# Beyond 100 ft+

Healthy California wildlands have been managed with periodic wild and cultural fires for millennia



# Prescribed Burns



# Prescribed Burns



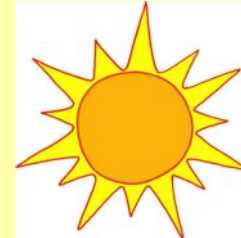
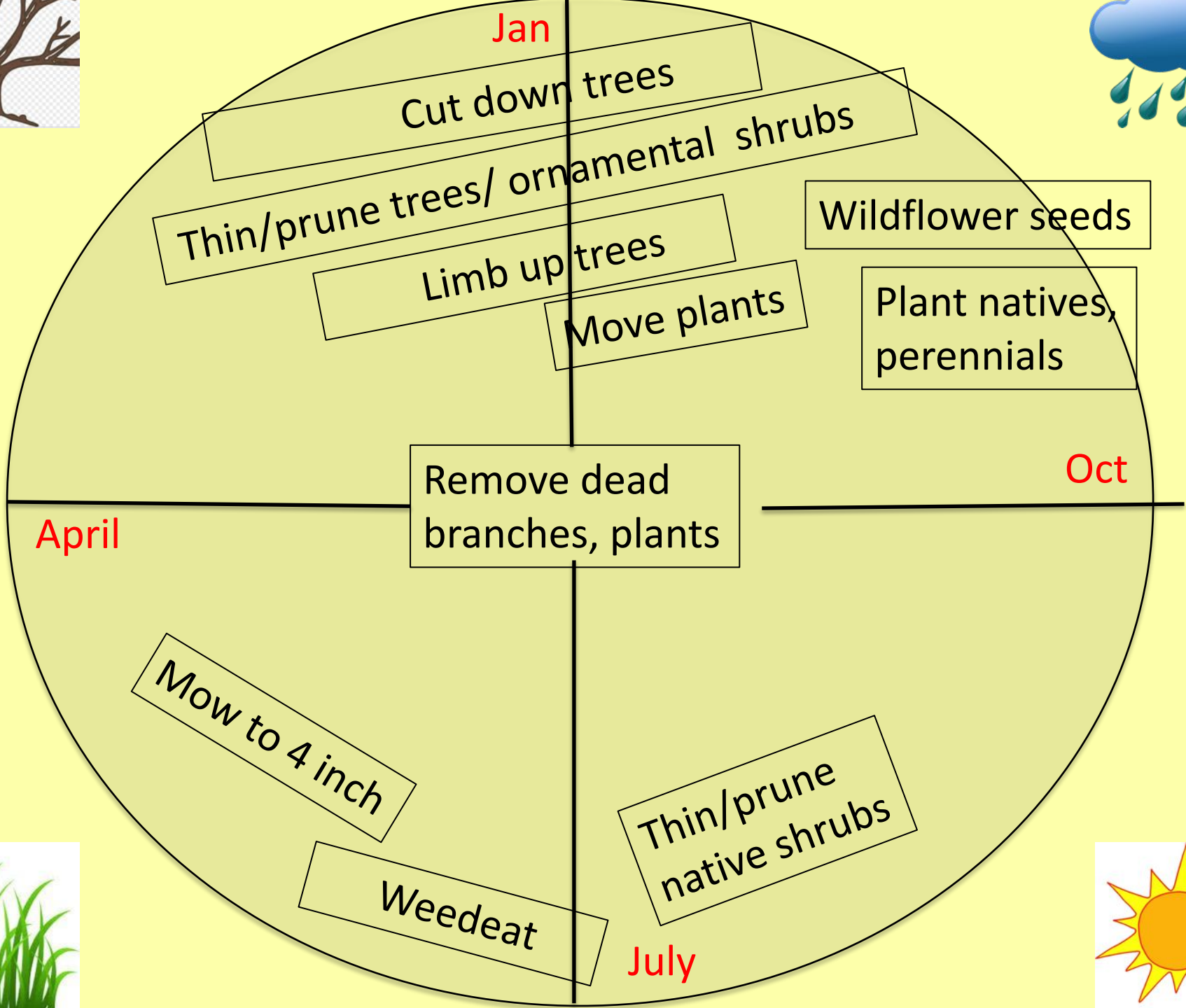
# Prescribed Burns

- Know what you're doing-
- Attend training- 5 session free webinar offered by UCANR thru Mariposa County UCCE online - includes neighborhood prescribed burn associations, EQUIP funds thru NRCS



# **Nuts and Bolts**

- Seasonality
- Pruning basics



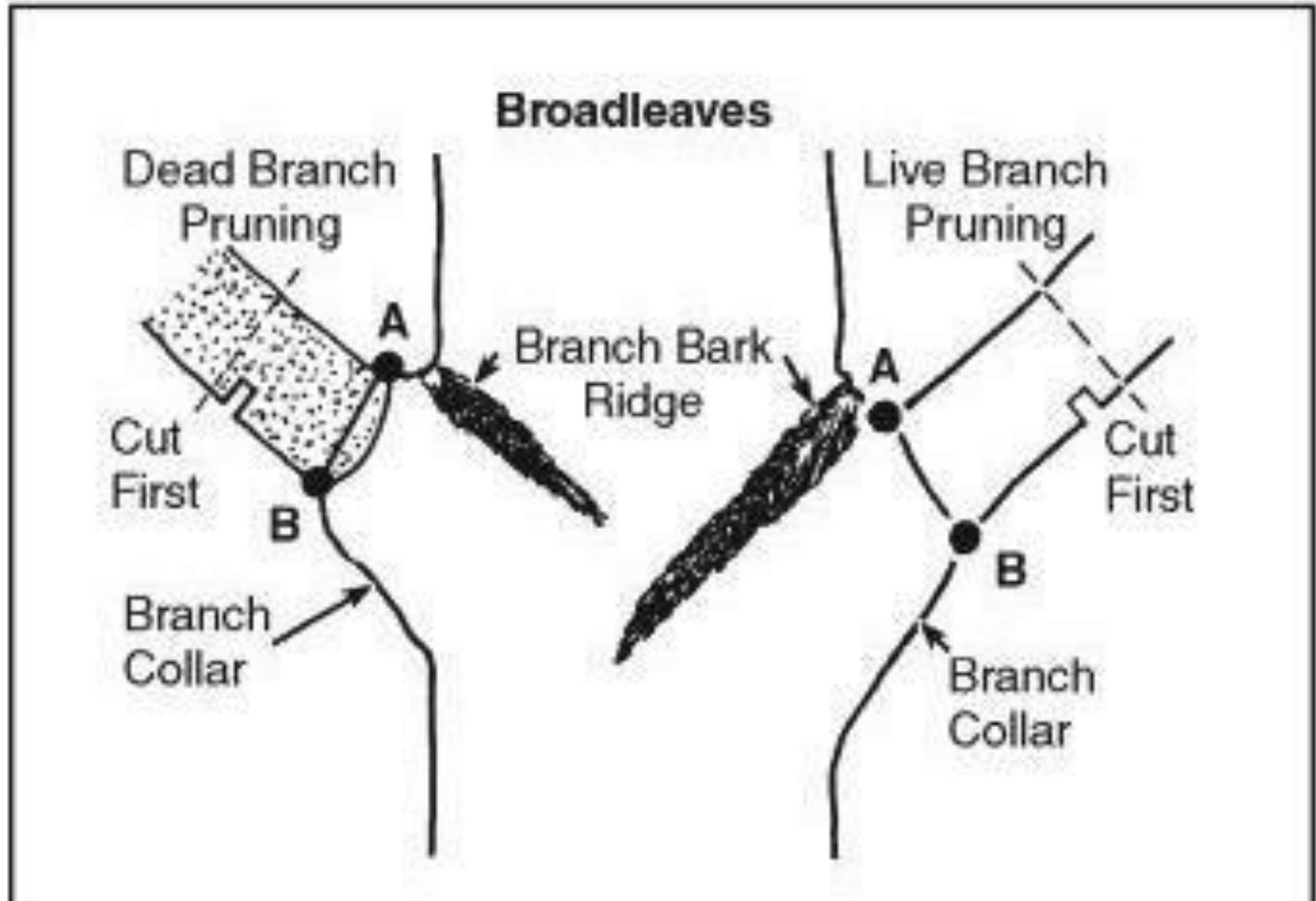




Prune to just  
above collar



# Big branches: undercut



**We've been focusing on**

**Removal (negative gardening!)**



# But plants can also be moved



Difficult but possible!

Shovel prune roots in late Fall

Move before Spring bud break

Wrap root ball in burlap while moving, getting as much of root as you can

Orient same direction to sun.

Keep hole same depth

# Don't forget defensive space when planting new plants!

Be fire smart



Chose location:

> 5 ft from house,  
away from other  
plants, not near  
a window



How tall will it be?



Is it fire prone?





# Little Green Gas Can



# Plant Choices-

← Which to remove when thinning?

→ Which to plant?



Some plants really are  
more fire prone  
than others

Choose wisely!













Flammable: Minimize in landscape

Lots of brittle and dead undergrowth

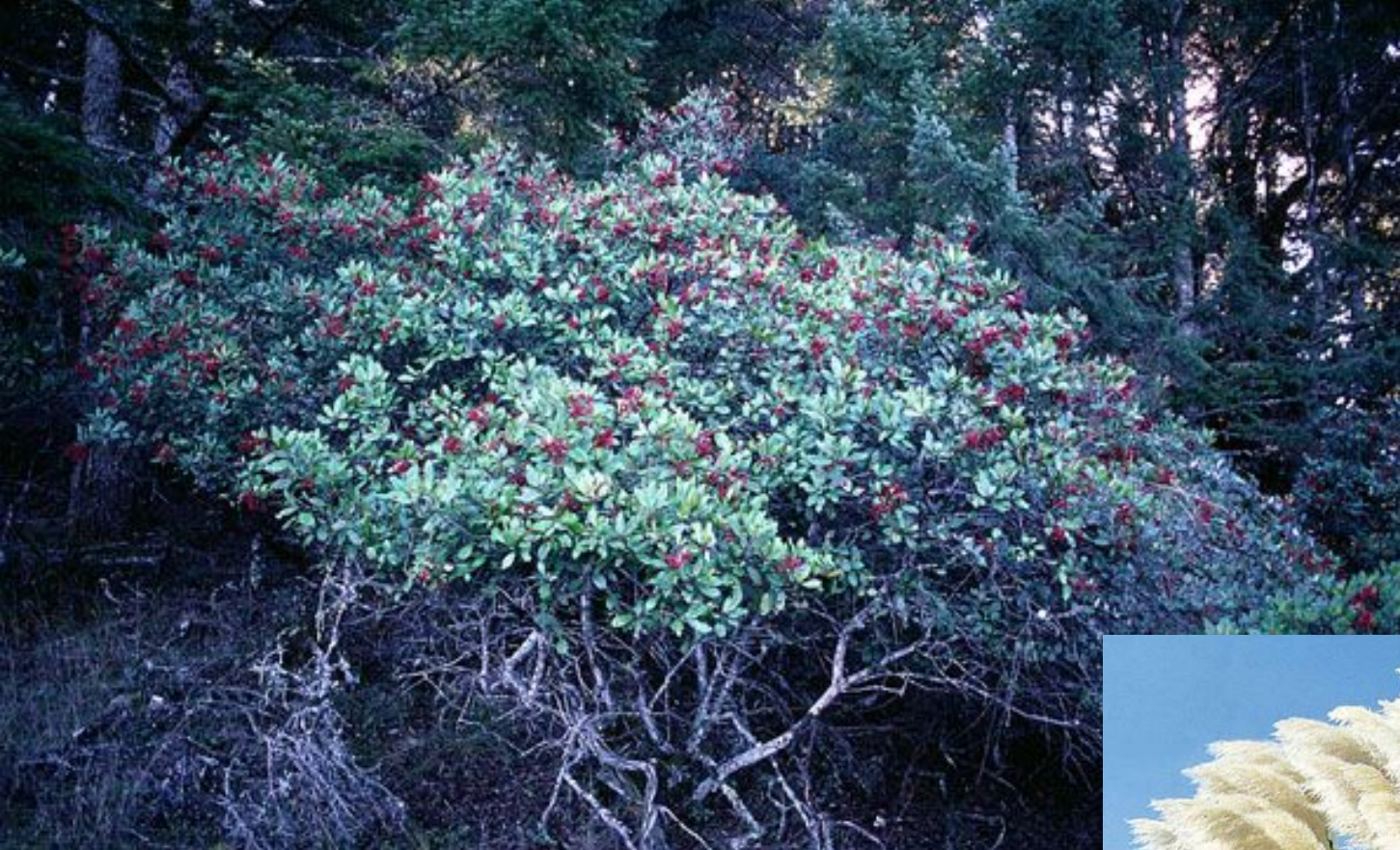
Resinous leaves

Aromatic





Pennisetum-  
Fountain grass



Toyon



Rosemary



Pampas grass

# Lists please?

Many lists, with contradictions

Remember: fire resistant, not fire proof!

Irrigation and maintenance are key factors.

Know your elevation, zone and microclimates.



Its all about the **condition not the species!**

## Manzanita



Fire hazard, right?

Its all about the **condition:**

## Manzanita



Fire hazard, right?



Or not

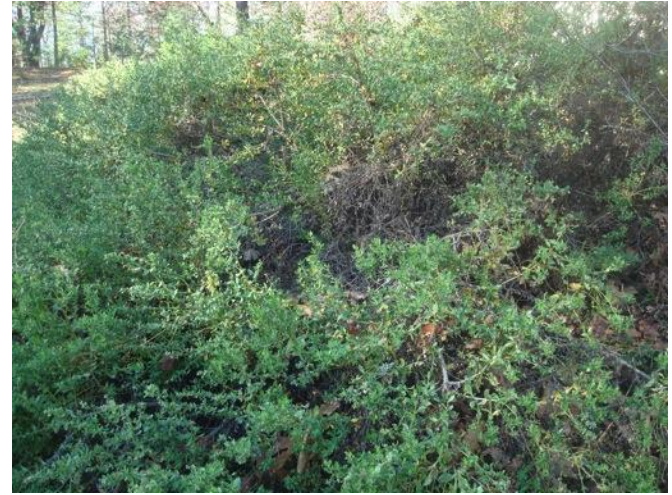
# Manzanita



# Coyote Bush- Baccharis



Native form



Dwarf form



Dwarf form-  
maintained

# Plants that are fire resistant

Old school- use lawns for defensible space



# Plants that are fire resistant

Deciduous, often

Open growth  
structure

Hold moisture

Low growing



Western redbud

**An Achievable Goal:**

**Fire wise landscape**

**+**

**sustainable landscape**













Western  
redbud



# Edibles in the garden







yarrow



Sticky monkeyflower



Lupine



Linum- western blue  
flax



Douglas  
iris



Mimulus  
cardinalis

© 2003 Heperstance Garden



Wild ginger





Wild ginger



Woodland strawberry



Spice bush

Western Columbine





🏠 To see descriptions of the plants native to your location, enter a California address or click on the map.

Plants Native To :



All Plants  
( 2216 )



Trees  
( 161 )



Shrubs  
( 561 )



Perennials  
( 1081 )



Annuals  
( 256 )



Grasses  
( 210 )



Succulents  
( 84 )



Vines  
( 29 )



Sun  
( 1582 )



Shade  
( 287 )



Part Shade  
( 1038 )



Bird And Butterfly  
Plants  
( 583 )



Groundcovers  
( 151 )



Hedges  
( 125 )



Chaparral  
( 702 )



Riparian  
( 569 )

Click the map to select a Location



Plants Native To : 

Number of plants : 1081

Sort By :

Popularity



1

**Blue Eyed Grass***Sisyrinchium bellum*[Add to My Plants](#)

2

**Hummingbird Sage***Salvia spathacea*[Add to My Plants](#)

3

**California Fuchsia***Epilobium canum*[Add to My Plants](#)

4

**Chalk Dudleya***Dudleya pulverulenta*[Add to My Plants](#)

5

**Showy Penstemon***Penstemon spectabilis*[Add to My Plants](#)

6

**Douglas' Iris***Iris douglasiana*[Add to My Plants](#)


Plants Native To : 


Number of plants : 199


Sort By :


Popularity





- 


**Blue Eyed Grass**  
*Sisyrinchium bellum*  
[Add to My Plants](#)
- 

**California Fuchsia**  
*Epilobium canum*  
[Add to My Plants](#)
- 

**Western Columbine**  
*Aquilegia formosa*  
[Add to My Plants](#)
- 

**Foothill Penstemon**  
*Penstemon heterophyllus*  
[Add to My Plants](#)
- 

**Scarlet Monkeyflower**  
*Mimulus cardinalis*  
[Add to My Plants](#)
- 

**California Goldenrod**  
*Solidago velutina ssp. californica*  
[Add to My Plants](#)
- 

**Checker Bloom**  
*Sidalcea malviflora*

## Blue Eyed Grass

Sisyrinchium bellum

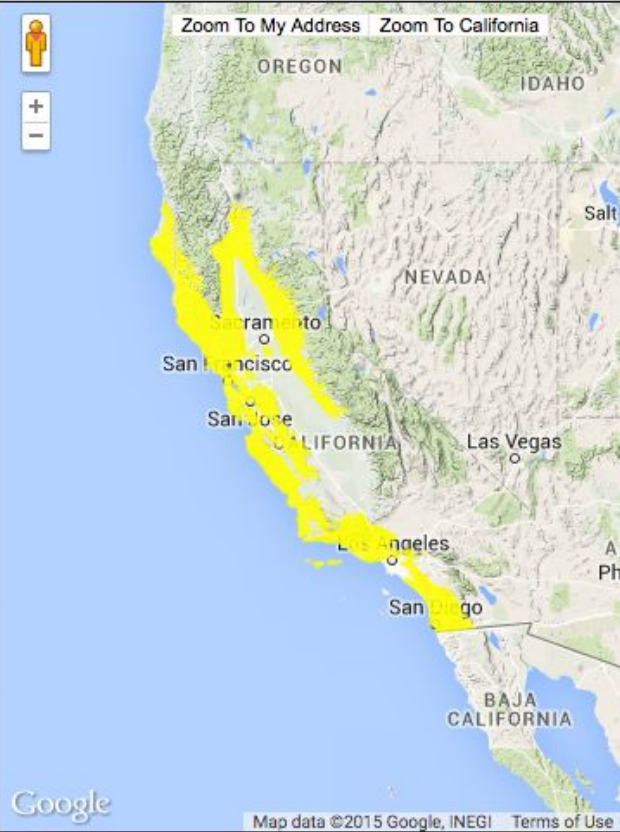
Add to My Plants



© 2013 Calscape



### Estimated Natural Range



Sources Include: Data provided by the participants of the Consortium of California Herbaria

### Summary Description

Plant Type	Perennial herb
Maximum Height	1 feet
Site Type	Meadows, seasonally moist grasslands
Sun	Sun, Part Shade



# Great Resources

Ray Griffith Plant List- El Dorado County

Former horticultural professor, FLC



# [https://www.eldoradocnps.org/images/gardening/Ray\\_Griffith\\_EDC\\_Native\\_Plant\\_List.pdf](https://www.eldoradocnps.org/images/gardening/Ray_Griffith_EDC_Native_Plant_List.pdf)

## El Dorado County Native Plant List for Gardening

Created by Ray Griffiths, former Horticulture Professor, FLC

### Native Plant Vegetation Key

Zone

vz = valley zone below 1500'

fz = foothill zone below 3000'

mz = mountain zone above 3000'

Note: If characteristics are unknown, may be arbitrarily assigned a "5".

Fire: 1 = fire resistant 10 = very flammable

Drought: 1 = drought tolerant 10 = needs moisture

Deer: 1 = deer resistant 10 = browsed hard

Shade: 1 = shade tolerant 10 = full sun

Wildlife: 1 = high value 10 = low value

### NATIVE TREES

Scientific Name	Common Name	Zone	Fire	Drought	Deer	Shade	Wildlife	Comments
<i>Abies concolor</i>	White Fir	mz	10	3	3	2	3	Shade tolerant suppression.
<i>Acer macrophyllum</i>	Big-leaf Maple	mz, fz	1	7	8	3	2	Needs moist kills, roots re
<i>Aesculus californica</i>	Calif. Buckeye	fz	4	3	4	7	4	Toxic but deer slopes, fire k
<i>Alnus rhombifolia</i>	White Alder	vz, fz	1	10	7	9	4	Imp to birds, fixing, deep
<i>Arbutus menziesii</i>	Pacific Madrone	mz, fz	2	3	6	3	2	Fruit for bird leaves and ba
<i>Calocedrus decurrens</i>	Incense Cedar	fz, mz	1, 10	3	2	2	3	Shade tolerant insects & hol
<i>Cornus nutallii</i>	Mountain Dogwood	mz	2	8	4	2	3	Shade tolerant often riparia
<i>Pinus lambertiana</i>	Sierra Pine	mz	8	3	3	4	4	Huge, beauti hard wood of

**Remember: NO plant is fireproof**



**BE STRATEGIC-**

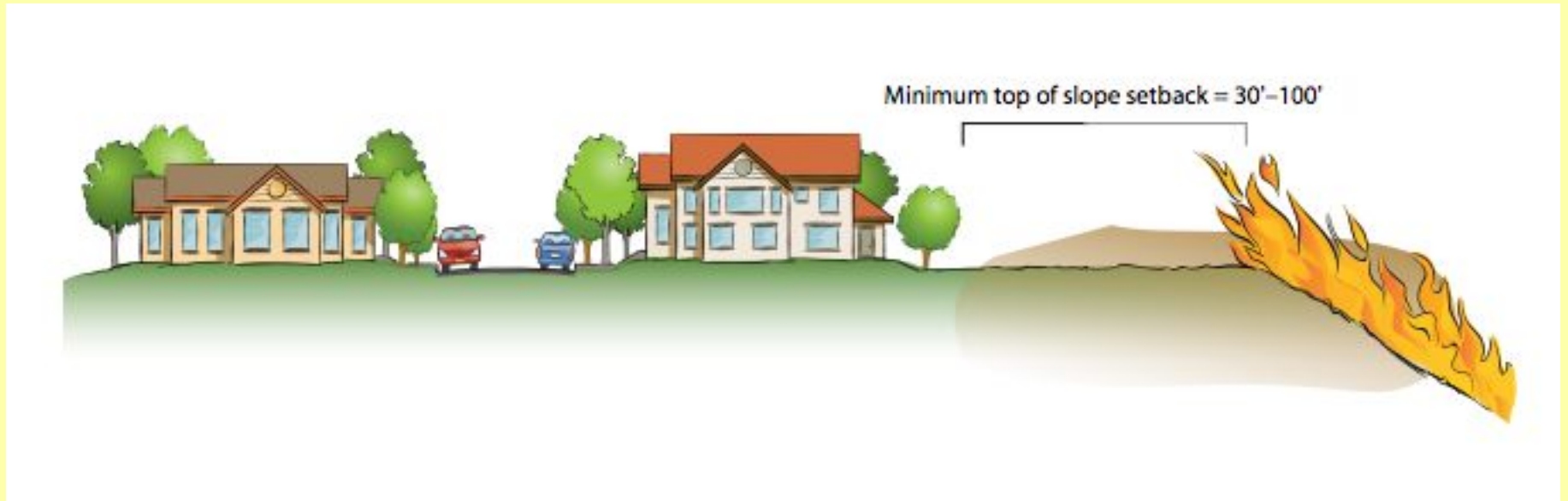
Evaluate *your* house



1. Direction of biggest dangers-

terrain, wind/weather, vegetation

# Terrain



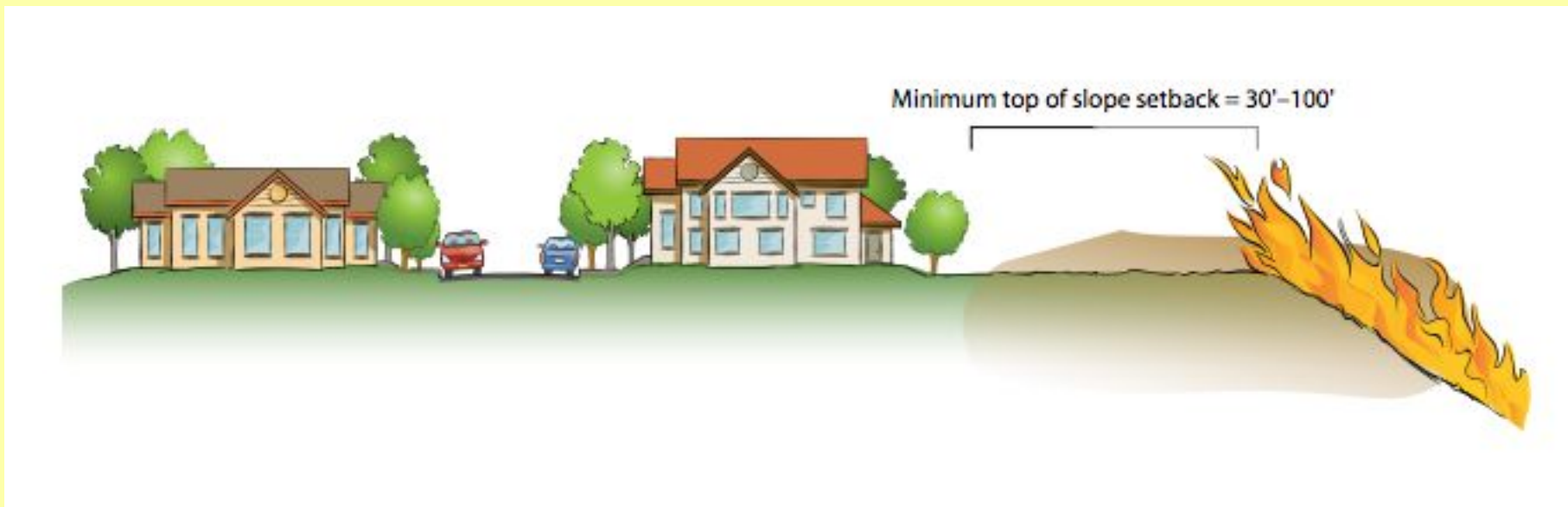
Are you closer than 30-100 ft from a steep slope?

# More areas of higher risk

Above a canyon, incl. box canyon?

Above a chimney or gulch?

On a saddle?



# Wind/Weather



Which is south or west side-  
(probably the driest)?

# Wind/Weather



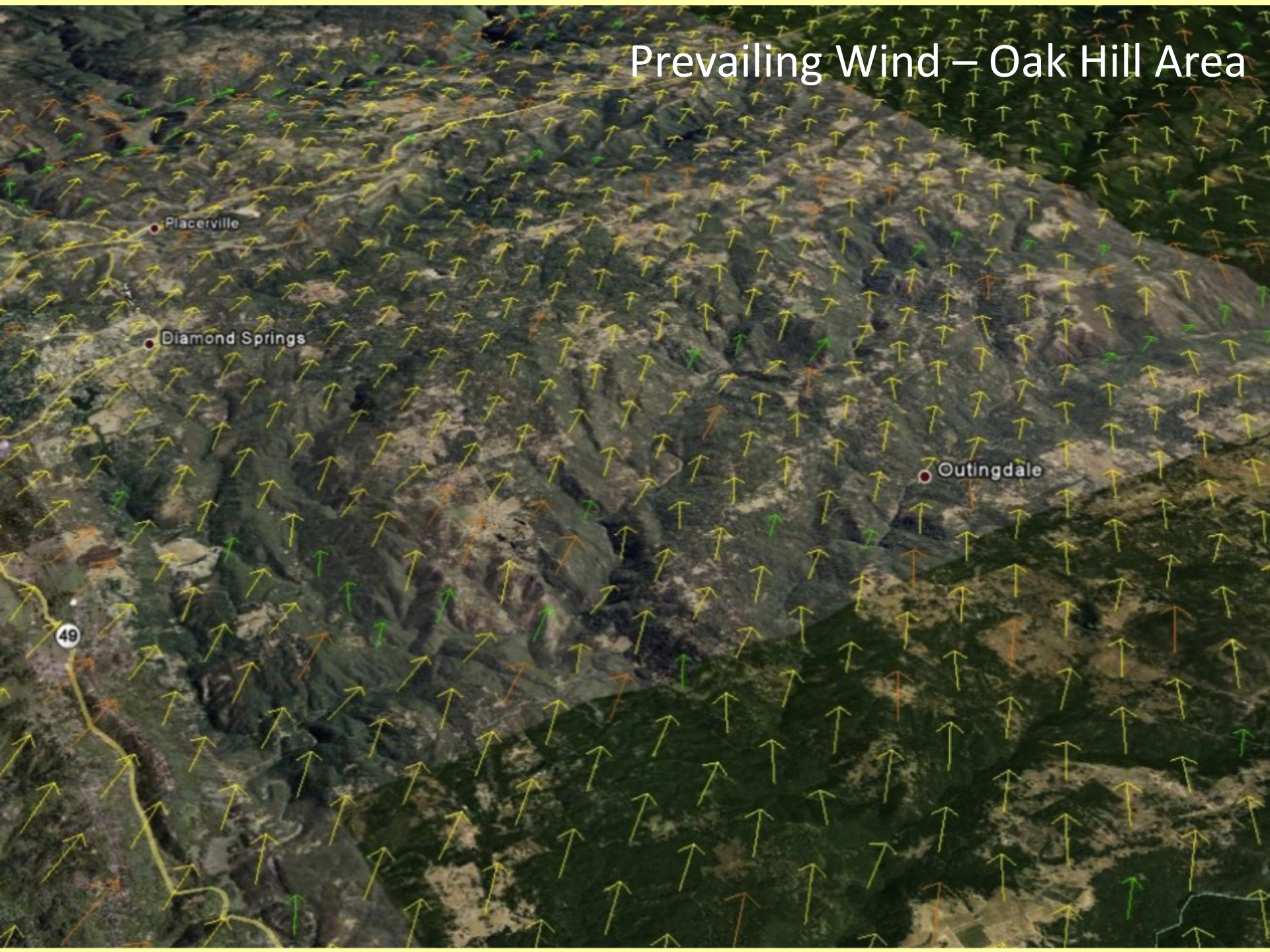
Which is south or west side-  
probably the driest?

What direction is prevailing wind?





# Prevailing Wind – Oak Hill Area



# Fuel

- You've created def. space, but:

2. How close are other houses?



# Fuel

- You've created def. space, but:

2. Are other houses < 25-30 ft away?



# Fuel

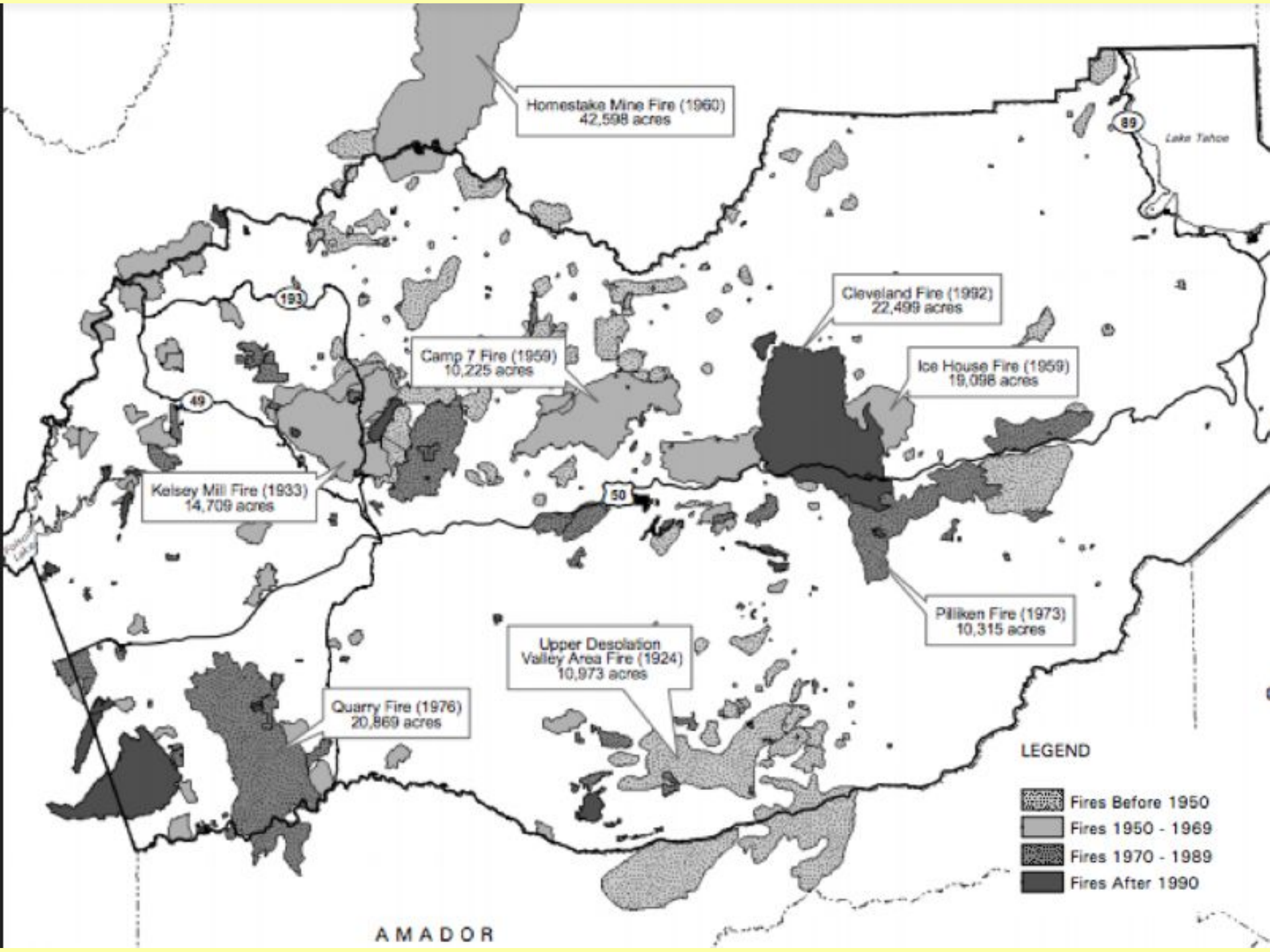
- You've created def. space, but:

2. Are other houses within 25- 30 ft?

3. How about your own (or neighbors') outbuildings?



Time to use paper and pencil !



# Now think like an ember!

- Walk around your house
  - **Where can an ember hit something combustible?**
- Take photos in fall after wind storm
  - Prioritize



# Harden Home retrofit









# But I don't want to remove plants or trees!!

- Provide shade in summer, wind breaks in winter
- Habitat for wildlife we share this ground with
- Aesthetically pleasing, provides privacy
- Calming- plants/nature is good for people psychologically
- Good for home value
- Prevents erosion
- Protects water quality
- Can prevent invasives
- Sequesters carbon



Becky Matsubara



























Does this stuff work?

Camp  
Fire  
Survivor,  
  
Paradise



Recently upgraded roof and vents

No plants next to house



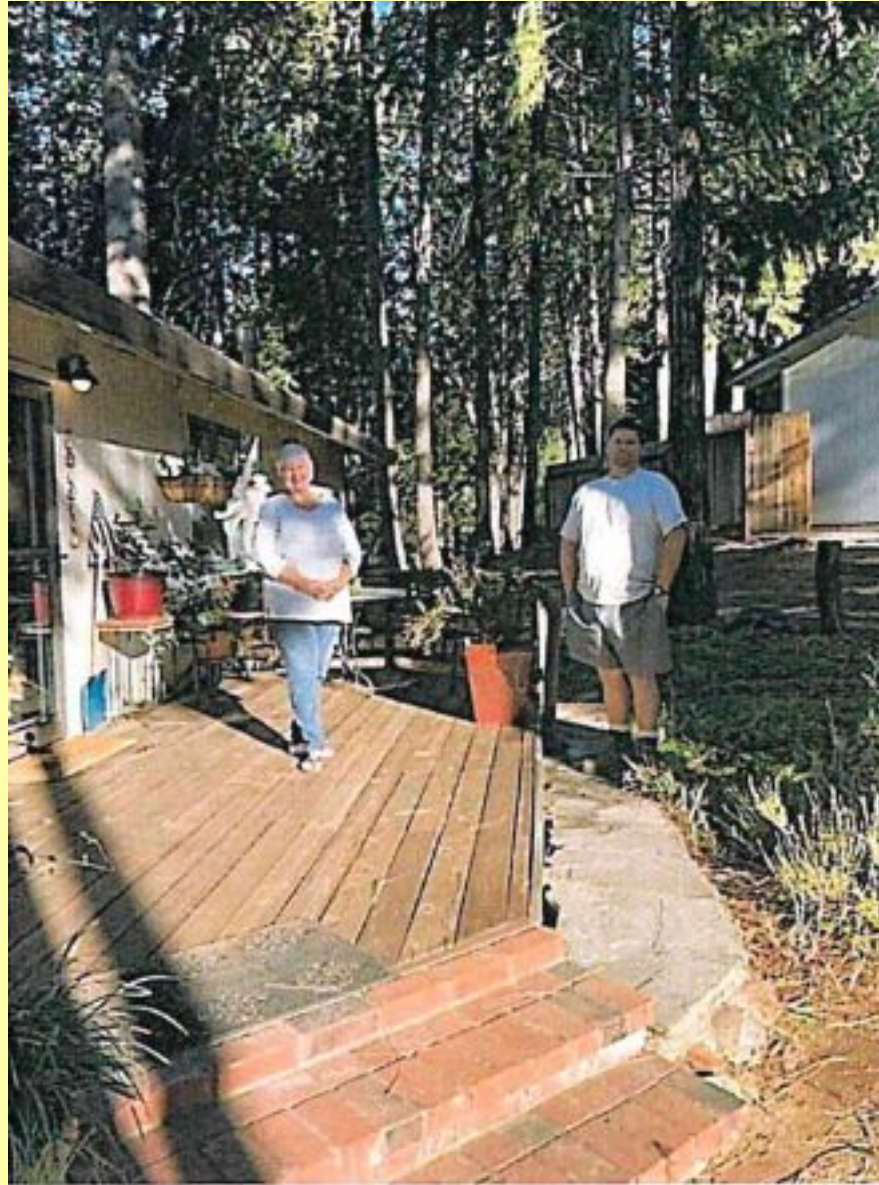


# Work together-



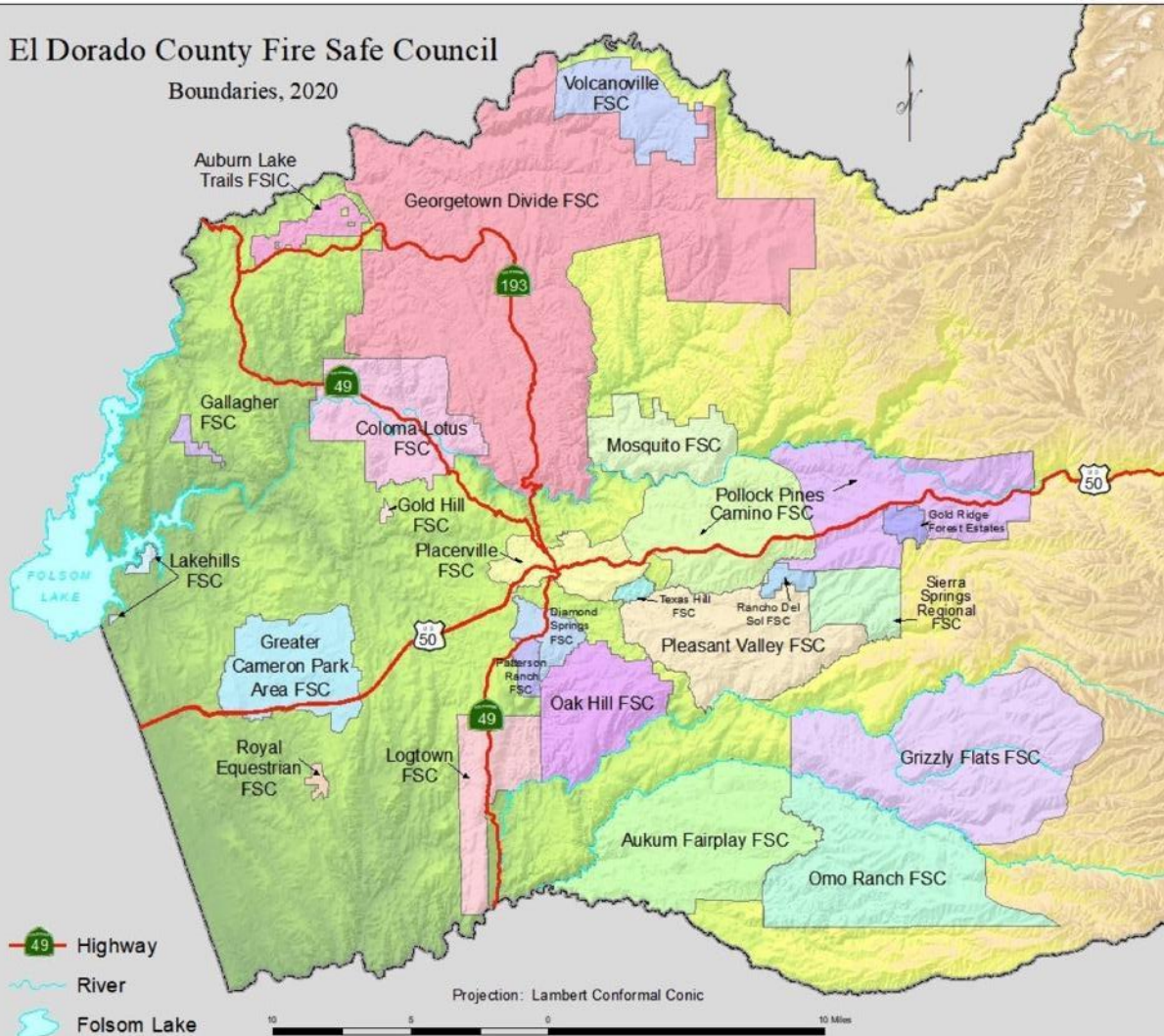
whether prescribed burns, shaded fuelbreaks, second roads, road clearance, education,

Meet your  
neighbors



# El Dorado County Fire Safe Council

Boundaries, 2020



- Auburn Lake Trails FSIC
- Aukum Fairplay FSC
- Coloma-Lotus FSC
- Diamond Springs FSC
- Gallagher FSC
- Georgetown Divide FSC
- Gold Hill FSC
- Gold Ridge Forest FSC
- Greater Cameron Park Area FSC
- Grizzly Flats FSC
- Lakehills FSC
- Logtown FSC
- Mosquito FSC
- Oak Hill FSC
- Omo Ranch FSC
- Patterson Ranch FSC
- Placerville FSC
- Pleasant Valley FSC
- Pollock Pines-Camino FSC (Camino)
- Pollock Pines-Camino FSC (Pollock Pines)
- Rancho Del Sol FSC
- Royal Equestrian FSC
- Sierra Springs Regional FSC
- Texas Hill FSC
- Volcanoville FSC

Highway  
 River  
 Folsom Lake

The El Dorado County Fire Safe Council assumes no responsibility arising from use of this data. The map and associated data are provided on an "AS IS" basis, without warranty of any kind, either expressed or implied, including but not limited to fitness for a particular purpose. El Dorado County Fire Safe Council assumes no liability for damages arising from errors or omissions.

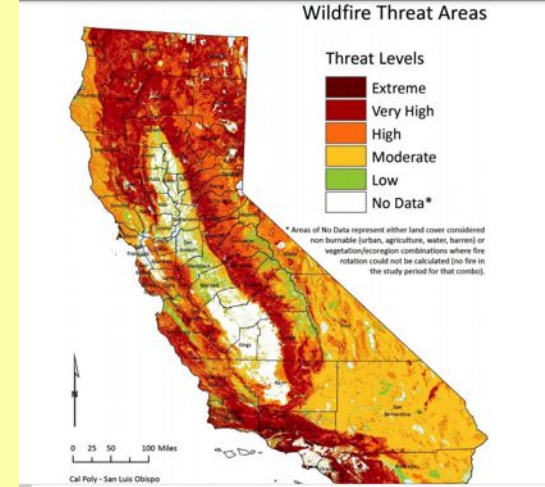
Data Source: El Dorado County Fire Safe Council



# Which Fire Safe Council do you live in?

The Future- We started out  
with risk-

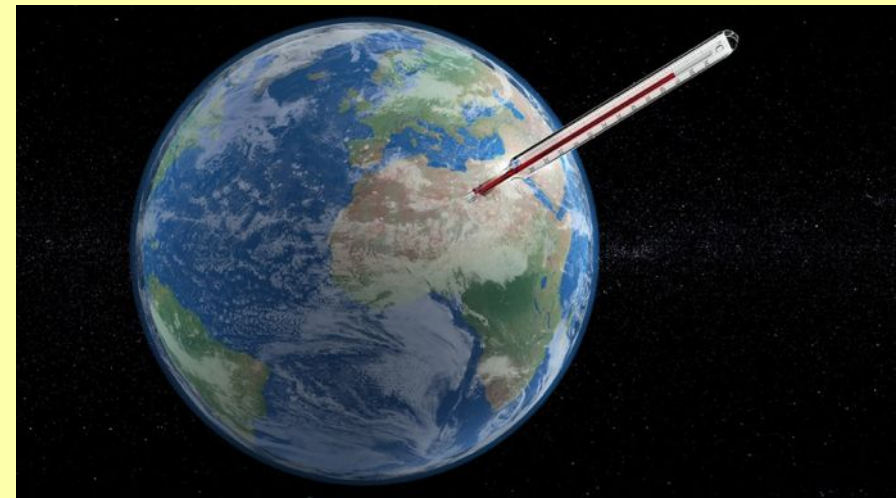
Risk is only getting worse-



Built up fuel

More people

Climate change



Climate change-  
models suggest:

Wildfire season will be longer



Climate change-  
models suggest:

Wildfire season will be longer  
Vegetation will be drier



Climate change-  
models suggest:

Wildfire season will be longer

Vegetation will be drier

More wildfires will be intense





Climate change-  
models suggest:

Wildfire season will be longer

Vegetation will be drier

More wildfires will be intense  
more damaging



We can work to mitigate and  
adapt to all of those-

Built up fuel

More people

Climate change

We can work to mitigate and  
adapt to all of those-

Reducing fuels thru landscape  
work and prescribed burns

More people

Climate change

We can work to mitigate and adapt  
to all of those-

Reducing fuels thru landscape work  
and prescribed burns

Improving electric infrastructure,  
wildfire education

Climate change

We can work to mitigate and adapt  
to all of those-

Reducing fuels thru landscape work  
and prescribed burns

Improving electric infrastructure,  
wildfire education

Reducing green house gas emissions

We don't fight earthquakes,  
tornadoes, or hurricanes-

**We adapt and build smarter-**

Researchers Syphard and Keeley

**- Let's do that  
for fires too -**



# Living in the Wildland Urban Interface- WUI

Comes with Responsibility

# Living in the Wildland Urban Interface-WUI

## Comes with Responsibility

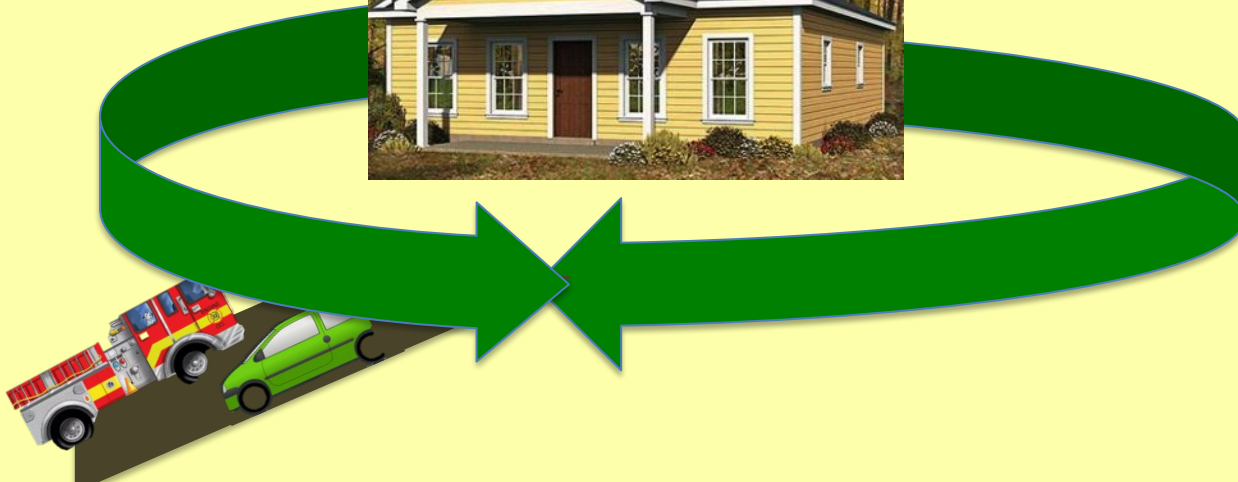
To protect our homes  
and communities-  
  
both natural and built





Its no one thing that reduces risk  
completely-

it's a system of things together





Creating defensible space can be hard work Zane A Selvans



So can this



Whoever said  
the small  
things don't  
matter

has never seen  
a match start a  
wildfire.

*Beau Taplin*



or a  
well-prepared house  
survive a  
wildfire

Rain brings life



So does fire





**Don't be afraid - be ready**

Evaluate your yard and house-  
make a plan

- Do the most important things first
- Keep going
- Maintain in the future!





And-  
Don't forget to enjoy these  
amazing foothills we call home



