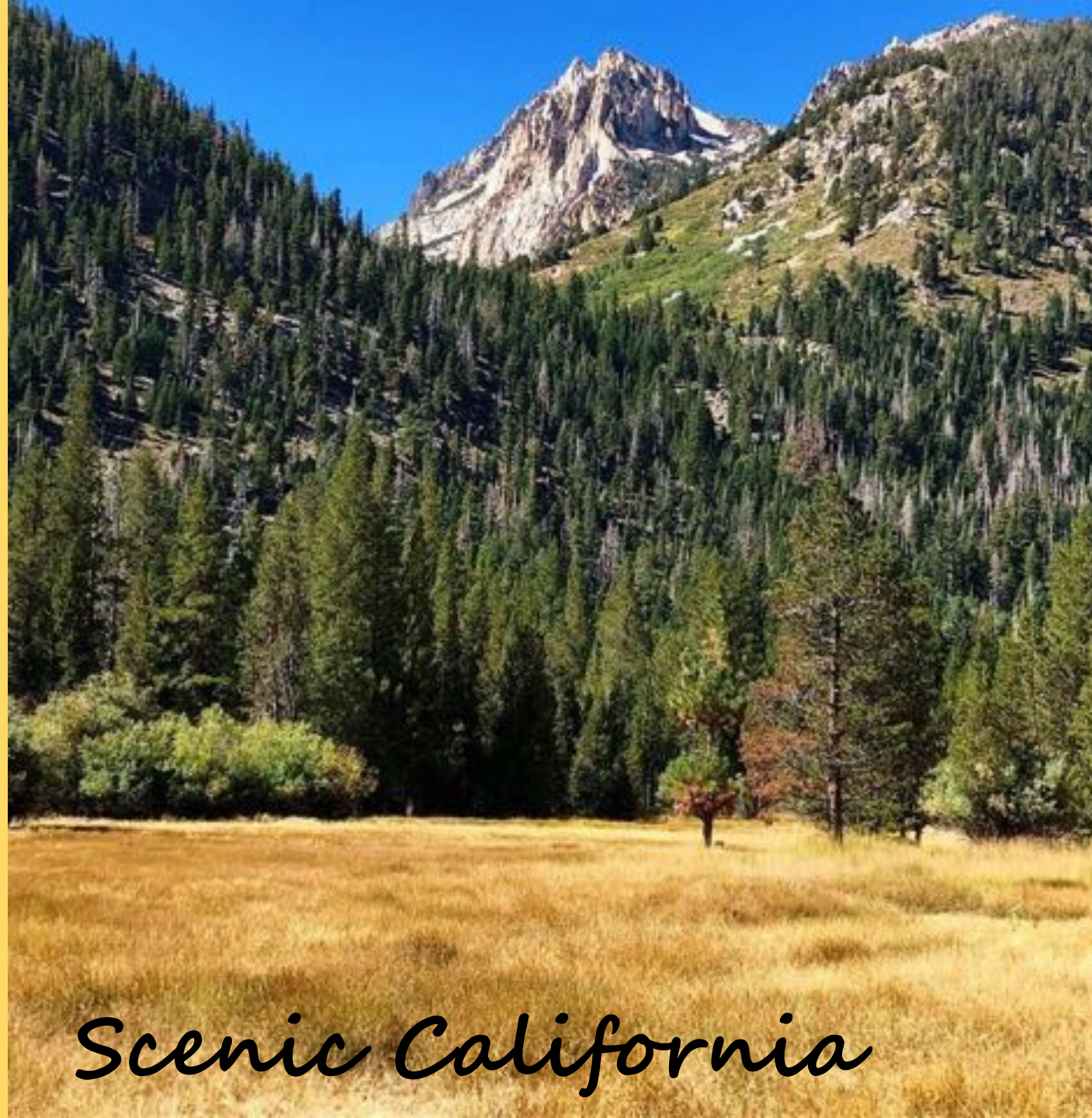


# *Ask a UC Master Gardener*



## **Landscaping Tips to Help Defend Your Home from Wildfire**



*Scenic California*



# **Climate: Mediterranean**

## Nevada County



# Mediterranean Climate



- 5 Major world Mediterranean-climate regions
- 32° - 41° Latitude N or S
- Many special distinctions among world's landscapes
- Most fire prone areas of world

# Fire is Natural in Sierra Nevada

## Common Wildfire Cycles

BIOME	FIRE CYCLE
Upper Conifer Forest	16 - 26 years
Lower Conifer Forest	5 -16 years
Foothill Woodlands	2-8 years
Oak Grasslands	2-8 years



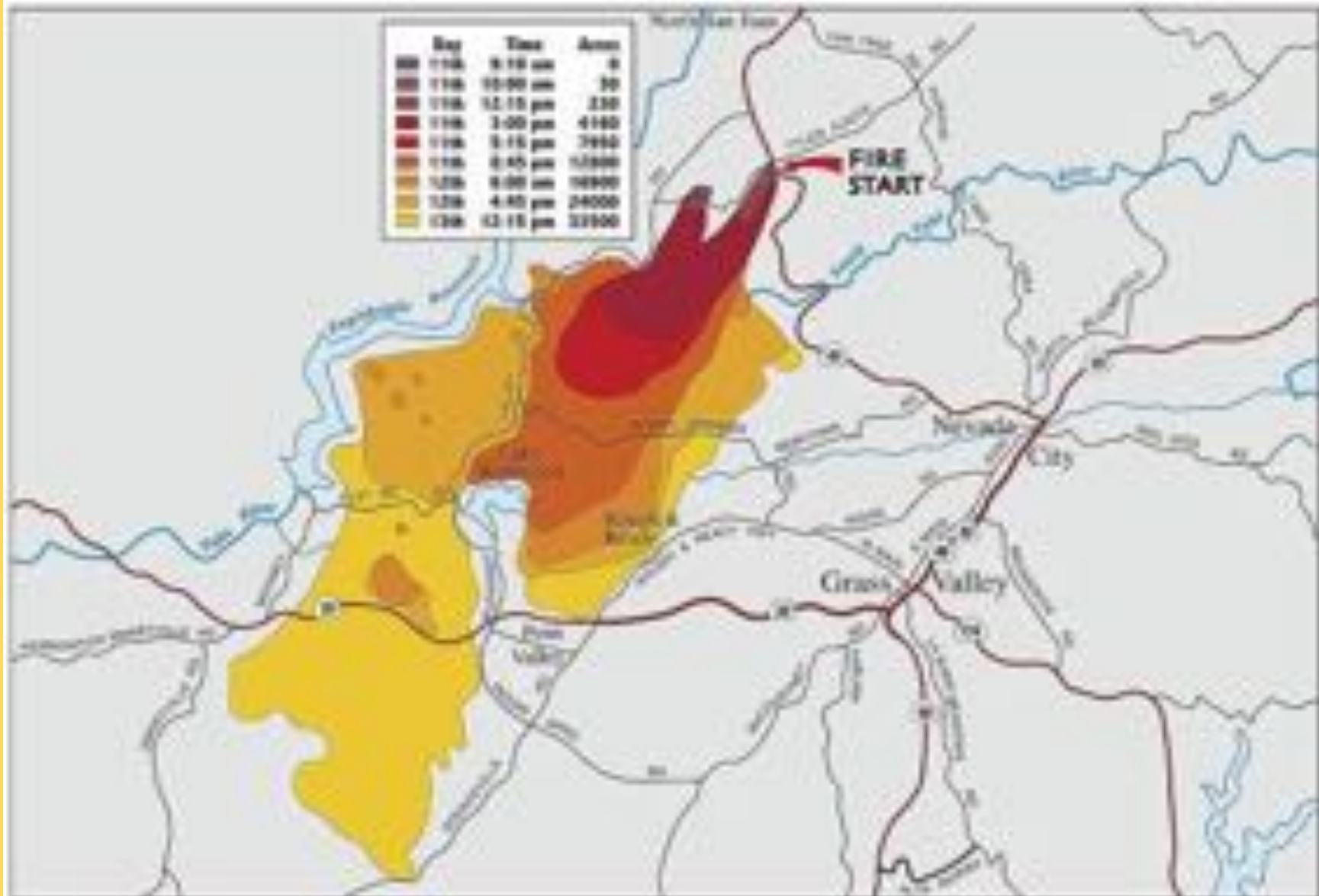
# 49er Fire in 1988

- North San Juan
- Homeless guy burning TP
- 33,700 acres
- 312 structures in 3 days
- More homes now than 1988: Project more than 1000 homes would burn now





# 49er Fire in 1988



# FireWise Landscaping



*“Vegetation within 100’ of a house will either lead a fire to that structure - or stop it. Homeowners who take proactive steps will have a far greater chance of withstanding a wildfire.”*



# FireWise Landscaping

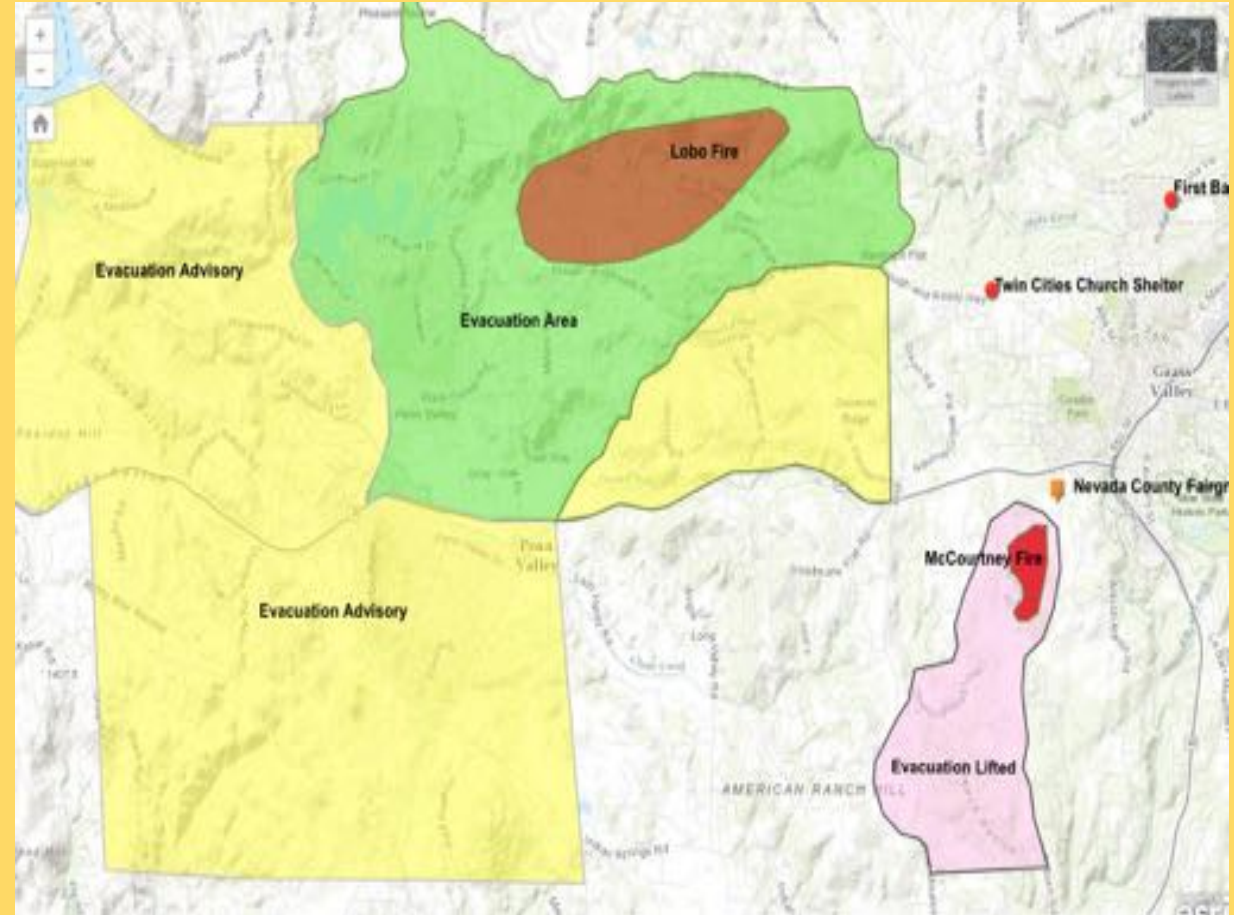


## Homeowner pre-fire activities

- Green well-maintained landscape
- Fire resistant roof
- Reduction of wildland vegetation around property perimeter
- Good access road with turnaround area.

# Lobo Fire Oct 8, 2017 – 11:35 pm

- Lone Lobo Trail, Rough and Ready
- 821 acres
- 22 structures destroyed





# 1991 Oakland Fire

2,449 homes destroyed  
25 lives lost



**State Board of Forestry & Fire Protection**  
**More responsibility on homeowners**  
**It's the Law!**



# 4 Steps to Firewise Landscaping

1. Observe
2. Design
3. Select
4. Maintain



# FireWise Landscaping

- “Strategic placement of plants around perimeter of your home
- Creating and maintaining a fire break that includes fire-resistant plants that can reduce and block intense heat.”

*Cal Fire*

***In the event of a wildfire,  
effectively managing the way you landscape,  
can protect your home***



# Fire Wise Landscaping

## Primary goal: Fuel Reduction

- Limiting, managing amount of flammable vegetation or materials near your home
- Proper plant selection, arrangement & spacing

***Firewise landscaping integrates traditional landscape functions into a design that reduces the wildfire threat by incorporating defensible space guidelines***





# Most Conifers

- Woody evergreens that bear cones and year round needlelike or scale like leaves



- Softwood
- Supply resins and turpentine
- Examples: juniper, cedars, pine
- Campfire starts with softwood



# **Avoid Woody Conifers Close to Structures**





# Ladder Fuel with Conifer Needle Drape

Eliminate  
Ladders  
to Avoid  
Crown  
Fires



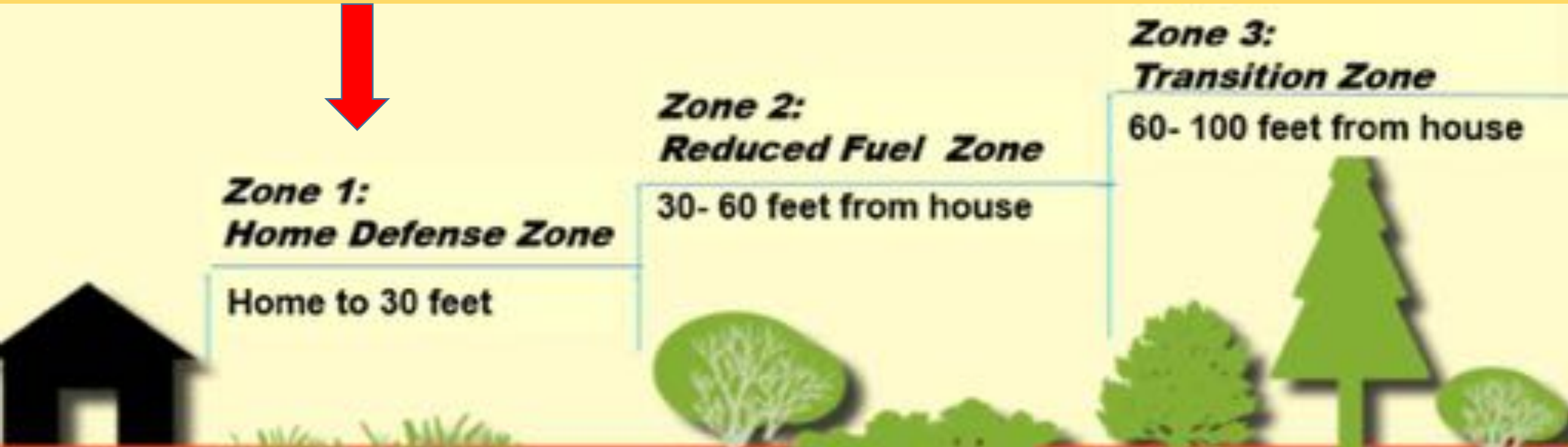


# 4 Steps to Firewise Landscaping

1. Observe
- 2. Design**
3. Select
4. Maintain



# Design Defensible Space Around House



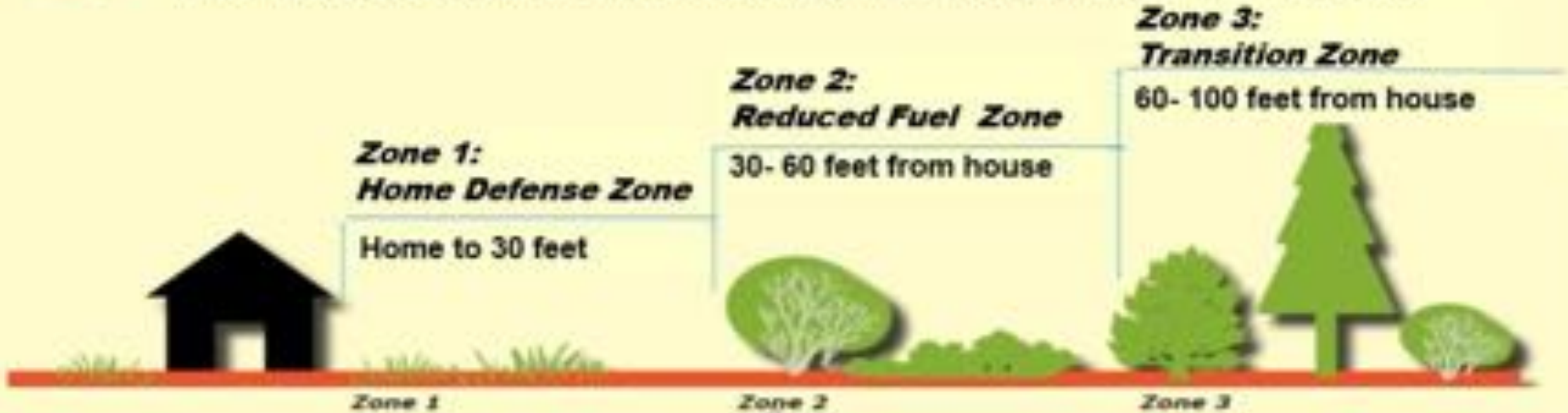






# Design your Landscape to Defend Your Home

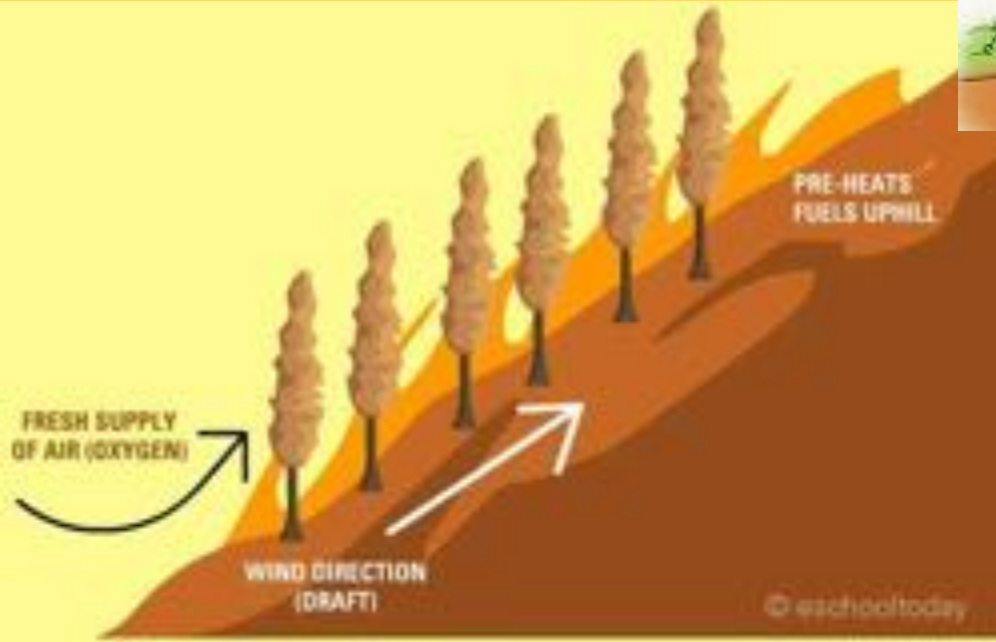
Your landscape can be attractive, low maintenance and fire resistant



STRATEGY	Fire Resistant Plants Only	Reduce Plant Density	Thin & Prune Existing Plants
<b>Plant Choices</b>	Oasis, low growing, fire resistant plants. Lawn. Avoid conifers or oily plants.	Low growing fire resistant plants and shrubs. Minimize use of conifers or oil rich plants	Keep most existing plants. Conifers okay. No oily plants under conifers.
<b>Spacing</b>	No foundation plantings. Stone patio, gravel mulch, pavers to 5'. Occasional, well spaced plants to minimize fuel.	Space trees and shrubs 2x their height	Space 10 feet apart to reduce fuel ladders that create crown fires.
<b>Maintenance</b>	Well pruned. Remove dead plants. Mow or weed-eat grasses. Well irrigated	Reduce volume of surface vegetation by cutting down tall grasses & pruning trees and shrubs	Prune overhanging branches and tree limbs 6-10 feet high.

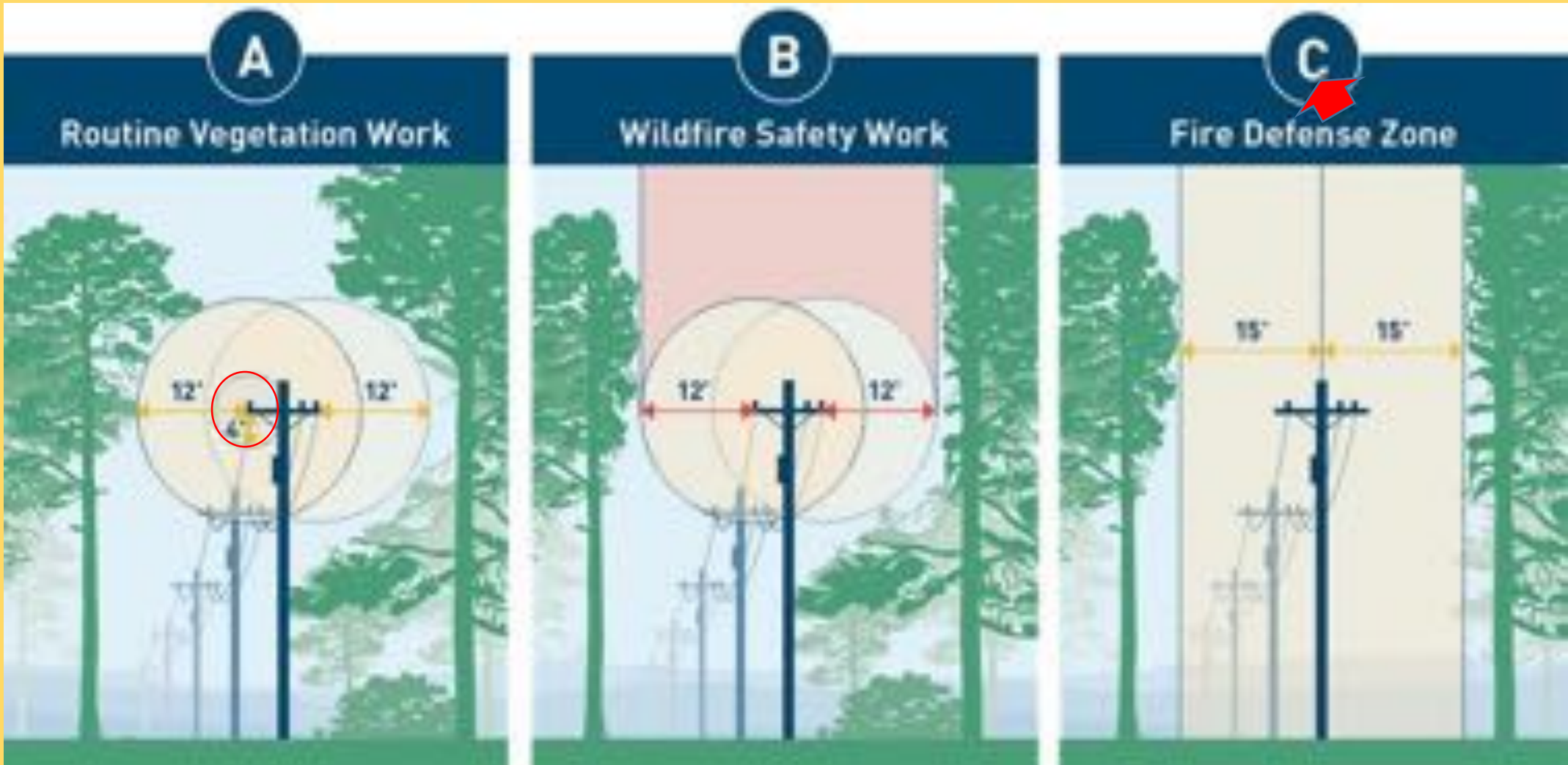
# Consider Slope

Fire travels faster uphill so increase distances



Trees or Tree Clumps		Shrubs or Shrub Patches	
Hill slope	Space between trees	Hill slope	Space between shrubs
0% to 20% slope	10 feet	0% to 20% slope	2 times shrub height
20% to 40% slope	20 feet	20% to 40% slope	4 times shrub height
40% or greater slope	30 feet	40% or greater slope	6 times shrub height

# PG&E Pruning 7100 Miles



Don't plant trees under wires.



# Create Defensible Space

## “Lean, Clean & Green”

Lean by pruning/trimming shrubs & cutting back tree branches to avoid fire-spread

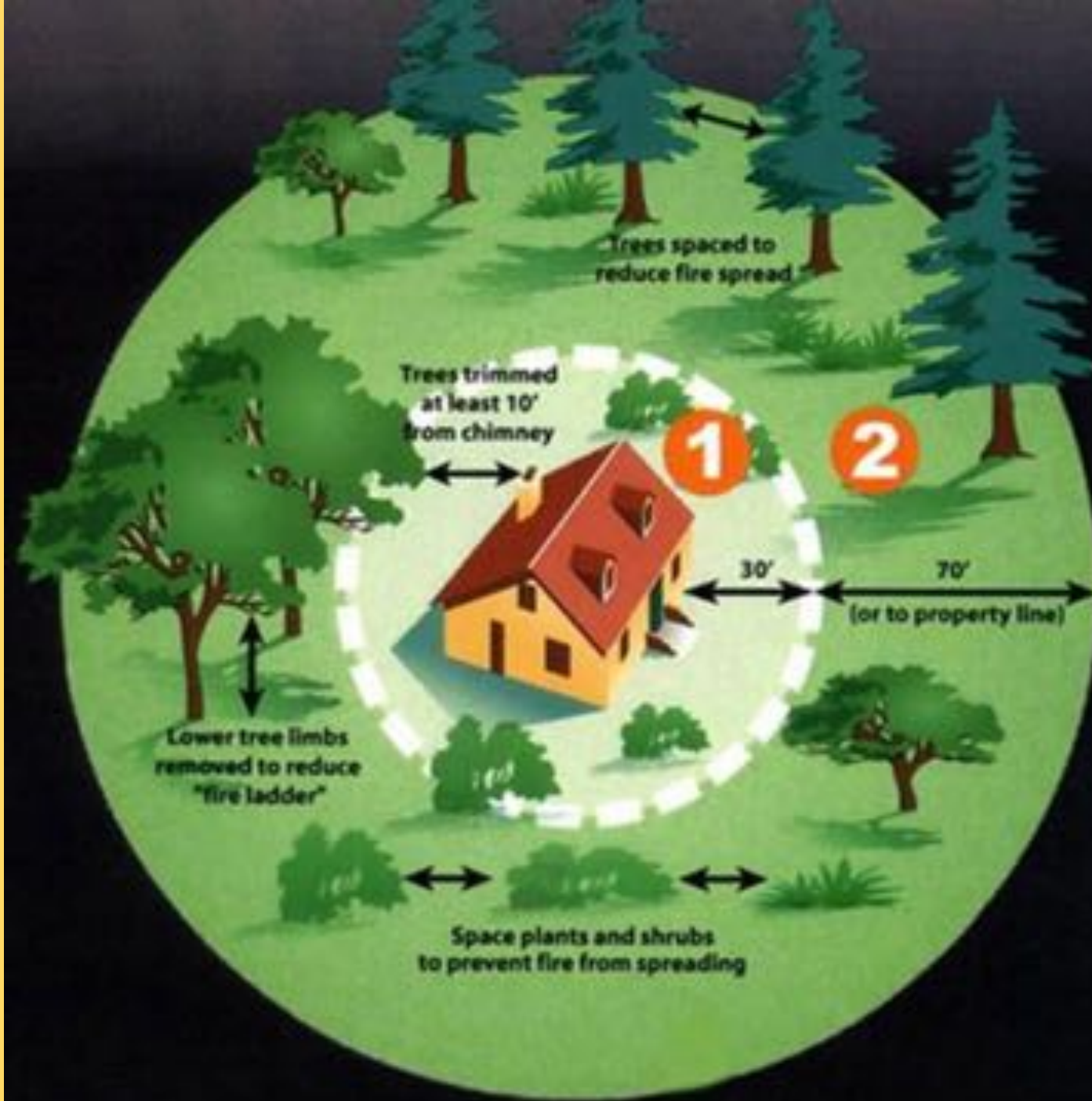
Clean by removing combustible materials, needles, leaves, dead twigs, dry grasses

Green by planting, maintaining healthy fire-resistant vegetation within 30 feet of the home... especially during fire season

***Most intensive vegetation management to resist ignition lies within Home Defense Zone***



# Defensible Space





# Plant Placement & Spacing

***Where and How*** more important than ***What***

1. Replace flammable vegetation with fire-resistant varieties
2. Place smaller plants nearest house
3. Shrubs, taller trees furthest from house
4. Create small plant groupings, islands, patches, clusters
5. Stagger plants - Avoid 'rows' of plants
6. Maintain & horizontal vertical clearances



***Keep it Simple!***



# **Inner Home Defense 0-5' Hardscaped Firebreaks**

Walkways -Rocks – Gravel – Brick

Patios - Stone walls

***Walkways that surround  
planting areas  
provide an effective barrier  
to fire spread***



# Hardscape: Rocks, Water and Oasis Effect

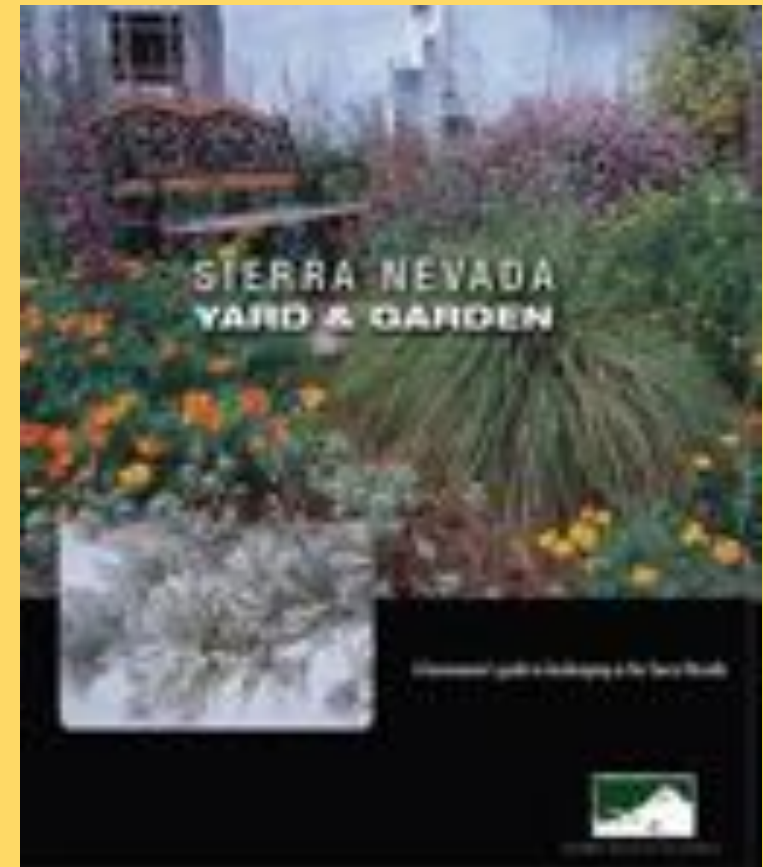






# Oasis Resources

Sierra Nevada Yard and Garden  
Sierra Nevada Alliance







## Sierra Nevada Yard & Garden Guide

As wildfires rage across California, the Sierra Nevada Alliance offers a first of its kind guide to homeowners for creating a beautiful Sierra friendly yard and garden that:

- Guards against wildfire
- Is easy to care for and meets a family's goals
- Exists in harmony with wildlife
- Uses low maintenance, native plants
- Protects and conserves community drinking water.

Sierra Nevada Yard & Garden is one stop shopping – defend your home from wildfire, protect water quality, create a low maintenance yard and more. The guide shows homeowners how to get beautiful gardens and yards that don't require fuss for folks in the Sierra foothills, Eastern Sierra, and high country. The full color 157 page guide uses an innovative zone and island approach to fire safe designs and takes homeowners through a step-wise process: observe, design, select, and implement, making Sierra friendly yards simple and easy to create. The guide also includes chapters and appendices focused on plant selection, how-to, and yard and garden resources by sub-regions of the Sierra. The guide is filled with real-life features of Sierra homeowners gardening from 900 feet to 6 200 feet in elevation.

# Mulch

## Important in Western Landscapes

- Reduce water requirements of plants
- Cool soil temperatures
- Reduce weeds
- Control soil erosion and dust
- Prevent soil compaction
- Visually enhance landscape
- Healthy soil microbes = healthy plants



# Mulch

## The Combustibility of Landscape Mulches

### Mulches Used in Residential Landscapes



Shredded Western Red Cedar



Composted Wood Chips



Shredded Rubber



Pine Needles



Medium Pine Bark Nuggets

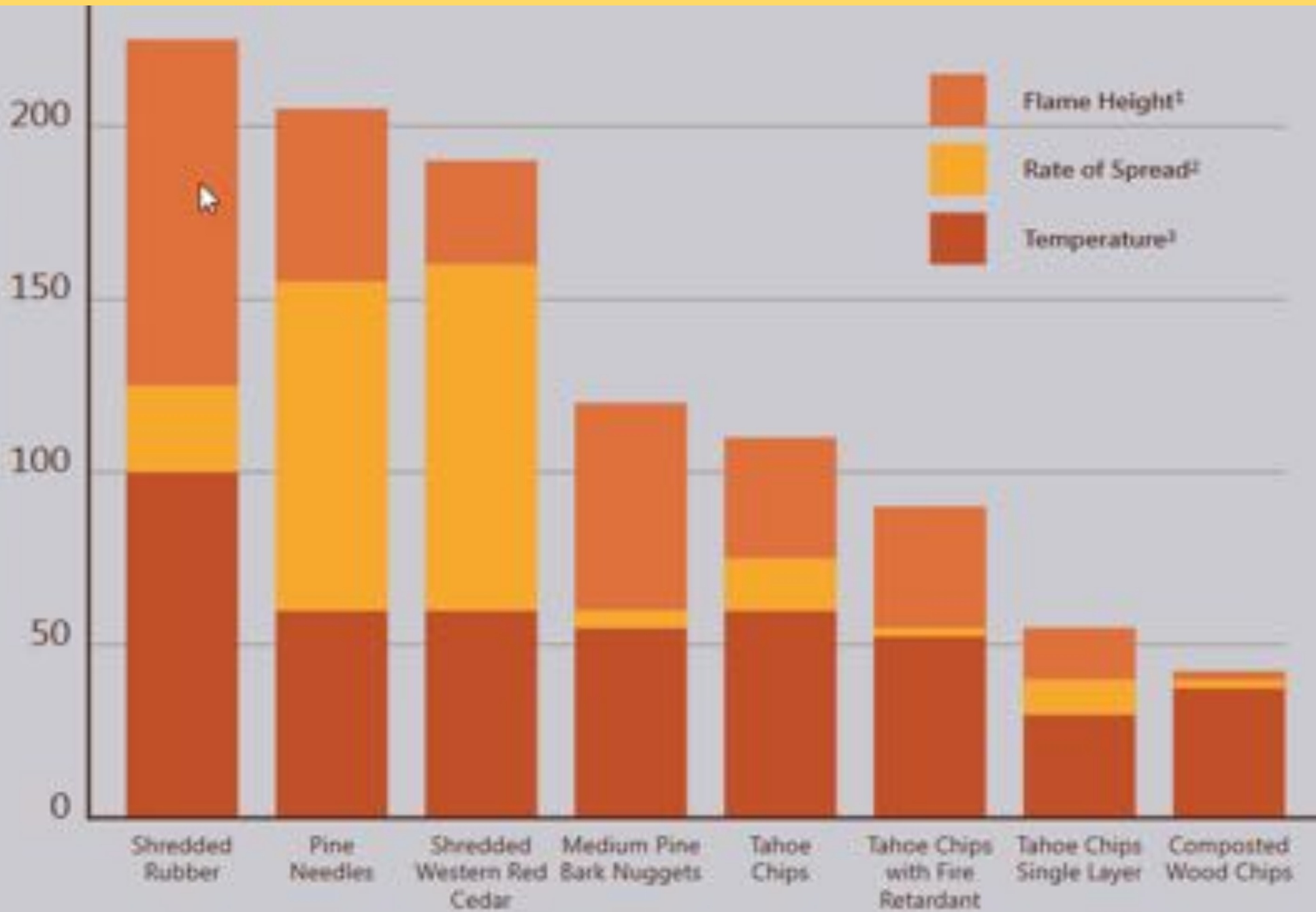


Tahoe Chips

2008 testing: UCE, UCNCE, Nevada-Tahoe Conservation District, Carson City FD



Relative Values by Combustion Characteristics



# Mulch

**The  
Combustibility  
of Landscape  
Mulches**



**Most Hazardous Fire Behavior**

**Shredded Western Red Cedar**

**Greatest Flame Height & Temperature**

**Rubber Mulch\***

**Most Easily Ignited/Fastest Spread Rate**

**Shredded W. Red Cedar/Pine Needles**

**Incidental Flaming only  
with some smoldering**

**Composted Wood Chips**

**Least Hazardous Fire Behavior**

**Composted Wood Chips, single layer**



# Mulch

- Embers from oncoming wildfire ignited pine bark nugget mulch in flowerbed.
- Burning mulch ignited landscape timbers, scorched adjacent lawn.
- Fortunately, house was separated from mulch by lawn and concrete sidewalk.



# Rock Mulches





# Use Stone instead of Mulch near Foundation





# Succulents: sedums, hens and chicks

Can be used in landscape to interrupt fire pathways.





# Nevada County Firewise Brush Chipping



**DEFENSIBLE SPACE** *chipping program* page 2 of 2

**STEP 1** Chipping is completed on a lot to clear which retention throughout all the different neighborhoods. To see your implementation for the first two days of your appointment.

Brush Today: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
Date Appointment: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
Work Site Area: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
Neighborhood: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

**Include a Retaining Member?**  
to receive priority chipping!  
 No  Yes

**STEP 2**  
Name: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Neighborhood: \_\_\_\_\_  
Assistant's Phone Number: \_\_\_\_\_  
Are you a property owner?  No  Yes  
Truck: \_\_\_\_\_  
Strong Structure: Please provide details on lot or map

**STEP 3**  
Chipping Information  
Total number of jobs: \_\_\_\_\_  
Number of lots to be chipped in blocks of adjacent lots:  
Average Per Day: 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000  
Length: \_\_\_\_\_  
Height: \_\_\_\_\_  
Where to be chipped?  Front  Side  Back  
Are there any special considerations to take for the project?  
 No  Yes (Please specify in the notes section)

**STEP 4** **File Chips/Blockout Chips?**  
Blockout Chips:  Yes  No  
File Chips:  Yes  No  
Click here: \_\_\_\_\_

**STEP 5**  
By signing below, I agree to the following terms and conditions:  
1. I understand the firewise chipping program is a voluntary program.  
2. I understand that the firewise chipping program is a voluntary program.  
3. I understand that the firewise chipping program is a voluntary program.  
4. I understand that the firewise chipping program is a voluntary program.  
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10. I understand that the firewise chipping program is a voluntary program.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

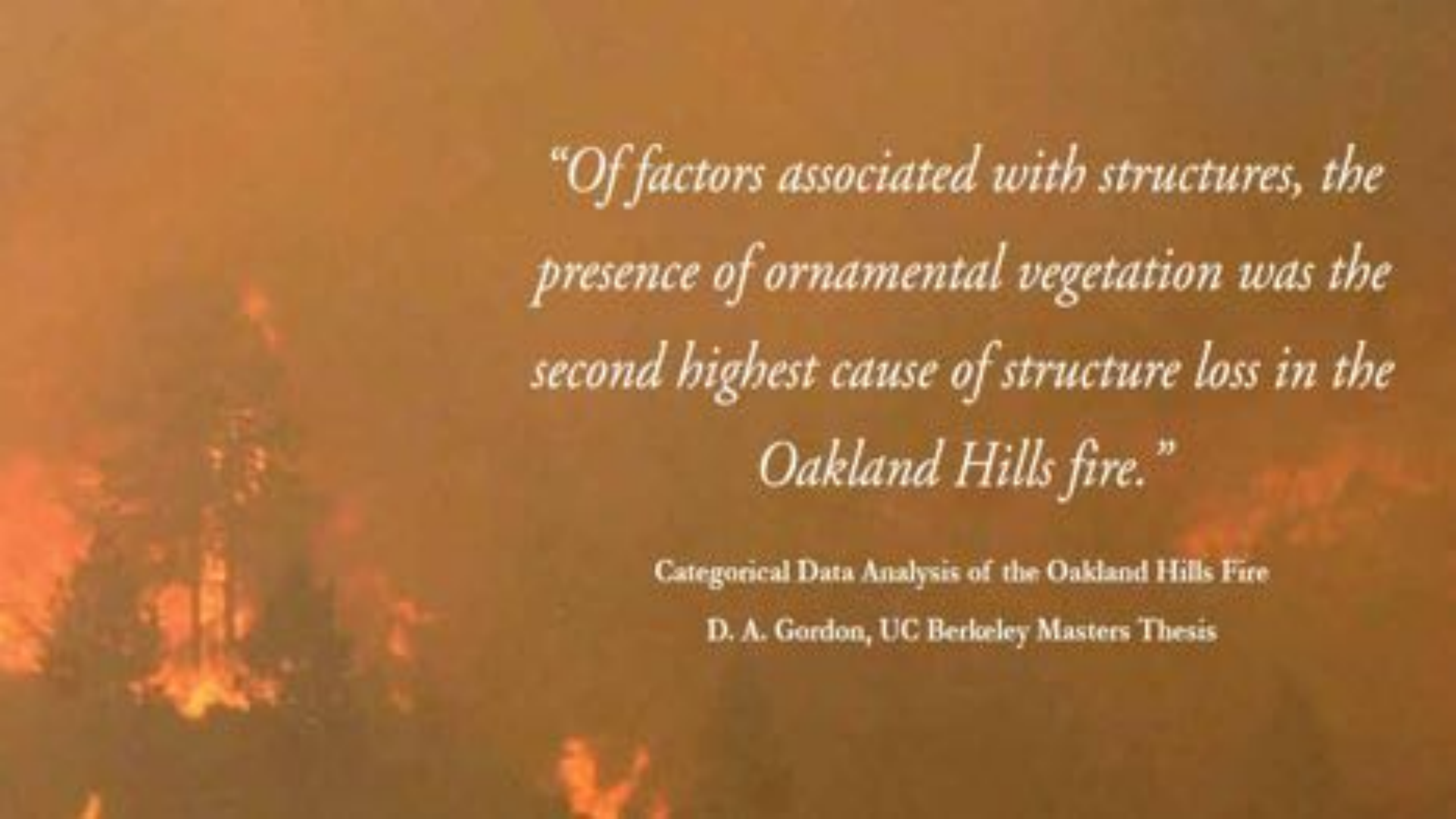
Fire Safe Council of Nevada County | P.O. Box 1152, Grass Valley, CA 95942  
Phone: 530-272-1100 | Fax: 530-272-5320 Email: [firewise@nccdc.com](mailto:firewise@nccdc.com) | [www.firewise.org](http://www.firewise.org)

# 4 Steps to Firewise Landscaping

1. Observe
2. Design
3. **Select**
4. Maintain







*“Of factors associated with structures, the presence of ornamental vegetation was the second highest cause of structure loss in the Oakland Hills fire.”*

Categorical Data Analysis of the Oakland Hills Fire

D. A. Gordon, UC Berkeley Masters Thesis

# **FireWise Plant Choices**



# Terms Matter

Don't use terms Firesafe or Fireproof

All plants will burn under extreme intense conditions



# Terms Matter: Firewise



- Less likely to burn
- May burn less hot or for less time
- May imply low maintenance, slow growth



# Fire-Resistant plants...*not fire-proof!*

## Factors that determine flammability:

1. How quickly it's parts burn: *how much moisture content*
2. Overall plant form: *influences how hot plant burns*



\*Native plants



\*Evergreen Currant  
*Ribes viburnifolium*

# Fire-Resistant plants...*not fire-proof!*

## Naturally-occurring plant differences:

1. High moisture content =  
*slower to ignite, absorbs heat*
2. Natural drought resistance =  
*plants retain moisture, take longer to ignite*



**\*California Wood Fern**  
*Dryopteris arguta*

# Fire-Resistant plants...*not fire-proof!*

## More naturally-occurring plant differences:

3. Open, loosely branched plants  
*can trap burning embers,*  
*absorb more heat w/o burning*  
*slower flame spread*

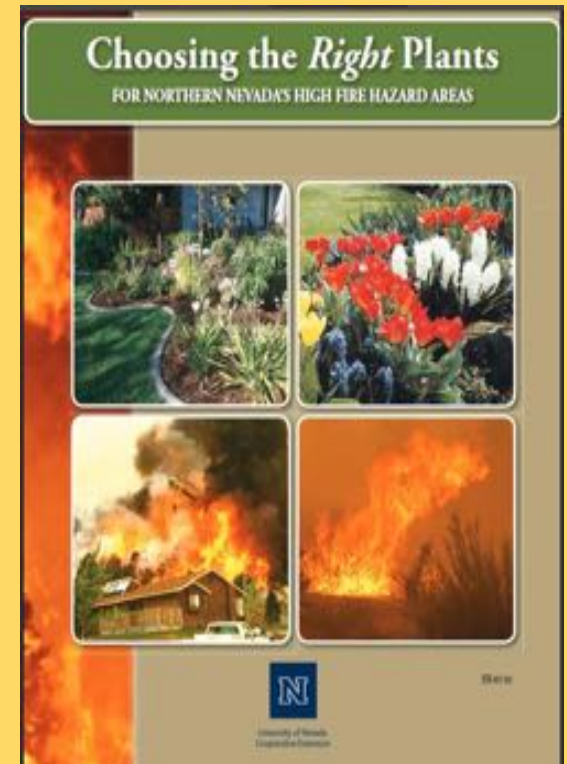
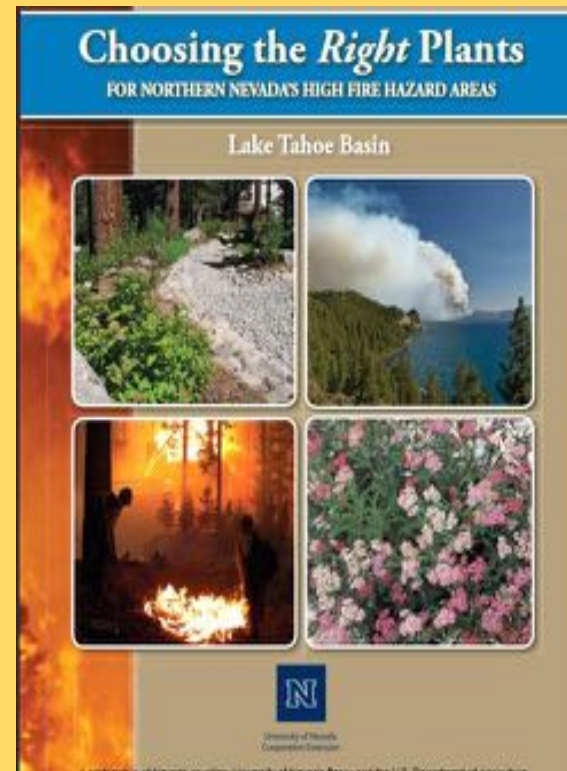
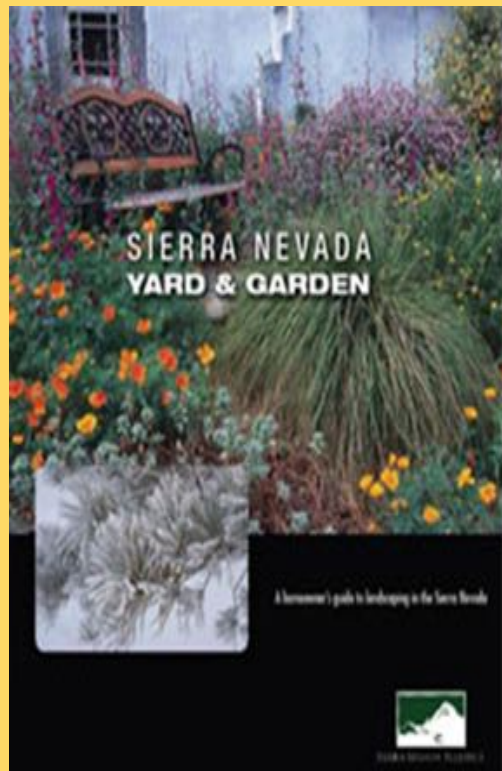
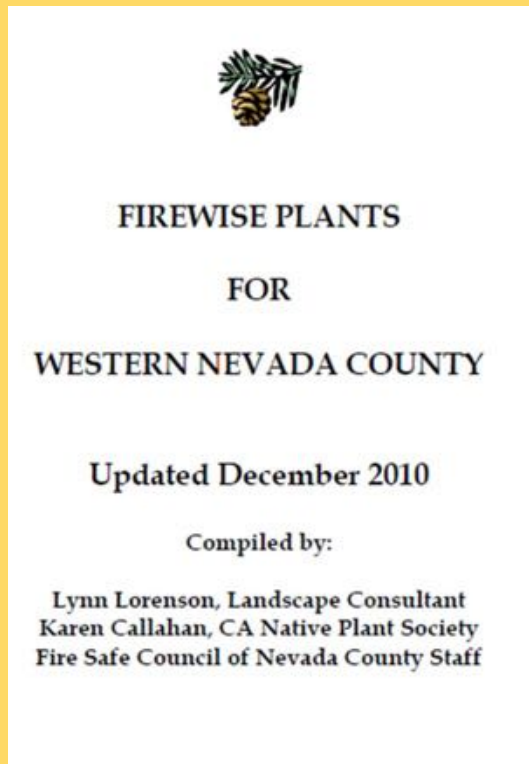
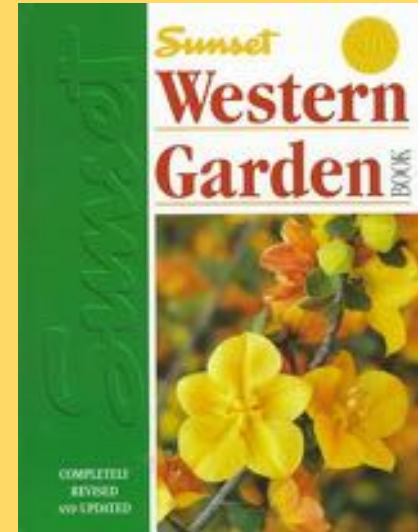


**\*Madrone**  
*Arbutus menziesii*



# Do Your Research

- Selecting the right plant requires some research
- Use reliable Firewise Plant List
- Check plant guides for plant characteristics



# 9 Firewise Plant Characteristics

Look for one or more traits:

1. Thick, moist, supple leaves in summer
2. Low fuel volume, low litter
3. Little or no sap, oil or resin content, no odor
4. Slow growth rate
5. Low-growing/compact, grows up to 18” in height



**Firethorn** *pyracantha*  
*Pyracantha coccinea*



**\*Oregon Grape**  
*Mahonia aquifolium*

# 9 FIREWISE Plant Characteristics

6. Smooth bark: *rough bark burns faster*

7. Deciduous: *leaves have higher moisture content*

8. Drought tolerant

9. Natives: *adapted to drought, take longer to ignite*



**\*Dwarf Mahonia**

*Berberis aquifolium* var. *repens*



**\*Oregon Ash**

*Fraxinus latifolia*



# Groundcovers



\*Ajuga  
Reptans



Lamium  
*maculatum*



Euphorbias



\*CA Creeping Sage  
*Salvia sonomensis*



\*Manzanita  
*Arctostaphylos uva ursi*



Candytuft  
*Iberis sempervirens*



Mountain Yarrow  
*Achillea millefolium lanulosa*



Hardy Sedums



*Stachys byzantina*  
'Helen von Stein'



UC Verde' Buffalo Grass  
*Buchloe dactyloides*



# Trees and Shrubs



**Strawberry Tree**  
*Arbutus unedo*



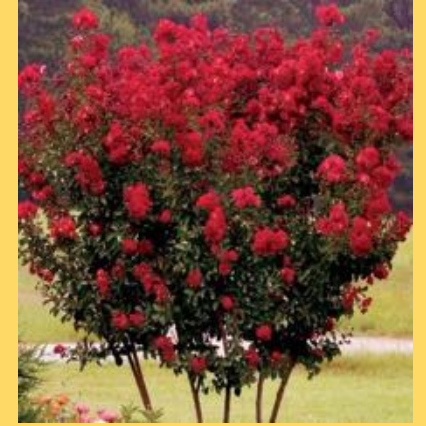
**\*Western Redbud**  
*Cercis occidentalis*



**\*Western Dogwood**  
*Cornus Nuttallii*



**Flowering Pear**  
*Pyrus calleryana*



**Crape Myrtle**  
*Lagerstroemia indica*



**\*California Lilac**  
*Ceanothus griseus horizontalis*



**\*Tree Anemone**  
*Carpenteria californica*



**\* California Fuchsia**  
*Epilobium canum*



**Pineapple guava**  
*Feijoa sellowiana*



**\*Mtn Cream Bush**  
*Holodiscus discolor*



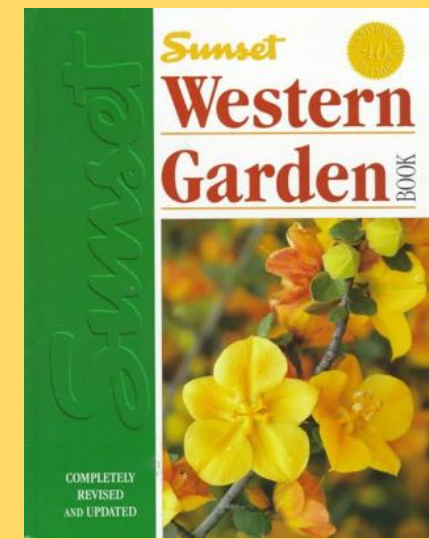


Right plant  
*Right place*

- Healthy plants will always be more fire-resistant than struggling plants!
- Ignoring this guideline leads to
  - increased maintenance
  - failure of plants to thrive
  - Death
- Natives must be in right place



# “Right Plant in Right Place”

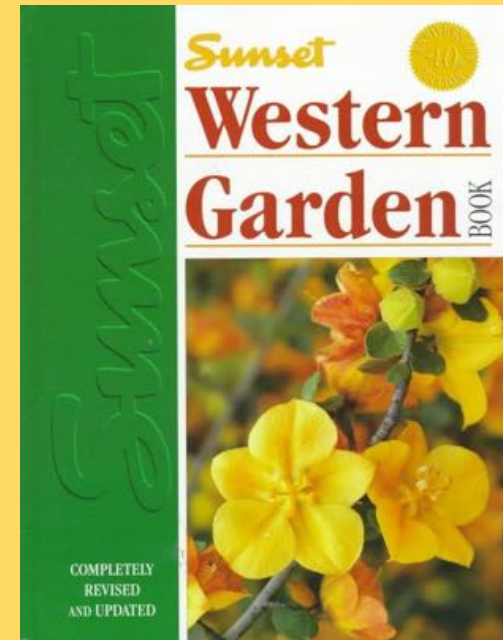


- Mature height and width of plants
- In addition to their ornamental value, select plants to match eco-niche growing conditions
  1. Hardiness
  2. Sun needs
  3. Moisture needs

# Hardiness

## Adaptation to Climate – Mediterranean

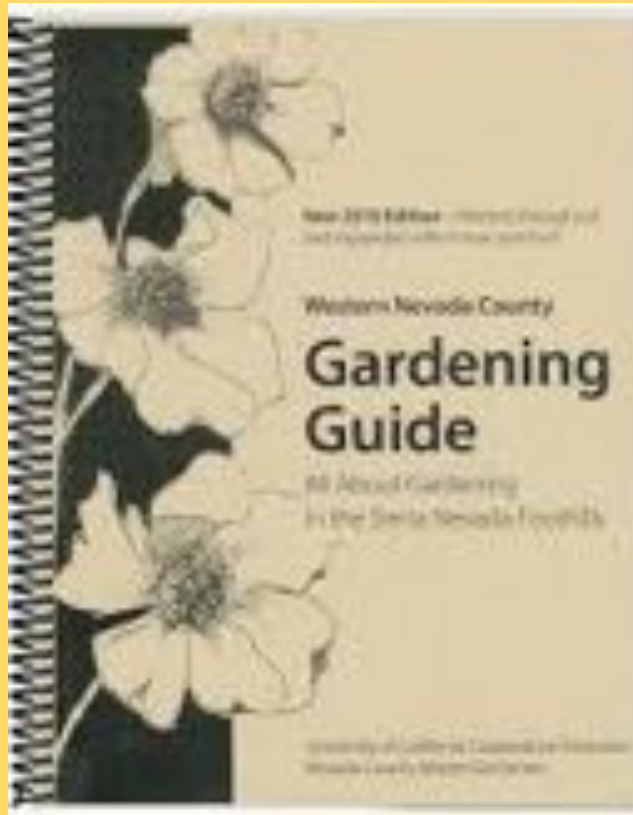
1. USDA Hardiness Zone Map by zip code  
NV CO: Zone 1 coldest; zone 9 warmest.
2. Sunset Gardening Zone Map –  
Generalized warm and cold climate





# Firewise Plants

“Reliable Plant List”



Nevada County Master Gardener's  
Western Nevada County Gardening Guide



## FIREWISE PLANTS FOR WESTERN NEVADA COUNTY

Updated December 2010

Compiled by:

Lynn Lorensen, Landscape Consultant  
Karen Callahan, CA Native Plant Society  
Fire Safe Council of Nevada County Staff

# Firewise Plants p. 3

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## Sun and Water Needs

Plants for  
Sun/ Dry Conditions  
Sun/ Water Conditions  
Shade/ Dry Conditions  
Shade/ Water Conditions



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# Firewise Plants



FIREWISE PLANTS

FOR

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# Firewise Plants p.4



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# Not So Firewise Plants p. 22-24



FIREWISE PLANTS  
FOR  
WESTERN NEVADA COUNTY

Updated December 2010

Compiled by:

Lynn Lorenson, Landscape Consultant  
Karen Callahan, CA Native Plant Society  
Fire Safe Council of Nevada County Staff

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## EXTREMELY COMBUSTIBLE PLANT MATERIAL

Characteristics of plants not recommended for high fire areas (most of Nevada County is designated a High Severity Fire Zone)

High surface area to volume ratio

Low moisture content

High percentage of dead matter or debris

Plants designated  as extremely combustible. These plants should be avoided or used with great caution as to the proximity to structures or surrounding plants. Others on this list should only be used with proper maintenance & clearing.





# Not So Firewise Plants p. 22/23/24




 **Extremely Combustible**

## CALIFORNIA NATIVE & NON-NATIVE SHRUBS

 avoid use or use only with proper clearing & maintenance!

- |   |                                |
|---|--------------------------------|
|  Chaparral Greasewood | <i>Adenostoma fasciculatum</i> |
|  Red Shads            | <i>Adenostoma speciosum</i>    |
| California Sagebrush  | <i>Artemisia californica</i>   |
| Hopsed Bush   | <i>Dudonaea stans</i>          |
| Buckwheat   | <i>Eragrostis</i> spp.         |
|  Juniper              | <i>Juniperus</i> spp.          |
|  Chaparral Pea        |                                |

## CALIFORNIA NATIVE & NON-NATIVE GRASSES, PERENNIALS & VINES

 avoid using these extremely combustible plants!

- |   |                     |                            |
|---|---------------------|----------------------------|
|  Bamboo              | <i>Bambusa</i> spp. |                            |
|  Pampas Grass        |                     | <i>Cortaderia selloana</i> |
|  Japanese Honeyuckle |                     | <i>Lonicera japonica</i>   |
| Eulalia Grass   |                     | <i>Miconia</i>             |
| Deer Grass  |                     | <i>Muhlenbergia</i> spp.   |
|  Fountain Grass      |                     | <i>Pennisetum setaceum</i> |
|  Black Sage          |                     | <i>Salvia mellifera</i>    |

## CALIFORNIA NATIVE & NON-NATIVE GROUNDCOVERS

 avoid using near structures or other shrubs & trees!

- |   |   |
|---|---|
|  Coyote Bush  | <i>Baccharis</i> spp.                               |
|  Algerian Ivy | <i>Hedera Canariensis</i> , <i>Hedera (various)</i> |
|  Juniper      | <i>Juniper</i> spp.                                 |

# Firefighters Call These Gasoline Plants



<i>Artemisia</i> species	Sage or Wormwood
<i>Calamagrostis acutiflora</i>	Feather Reed Grass
<i>Calocedrus decurrens</i>	Incense Cedar
<i>Cedrus atlantica 'Glauca'</i>	Blue Atlas Cedar
<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush
<i>Cupressus glabra</i>	Arizona Cypress
<i>Cytisus</i> species	Broom
<i>Genista</i> species	Dwarf Broom
<i>Juniperus</i> species	Juniper
<i>Picea glauca 'Conical'</i>	Dwarf Alberta Spruce
<i>Picea pungens</i>	Spruce
<i>Pinus</i> species	Pine
<i>Sequoia gigantea</i>	Giant Redwood
<i>Thuja occidentalis</i>	Arborvitae



# Gasoline Plants

***Keep these bad boys out of Zones 1 & 2 !***

## *9 Common characteristics:*

1. Leaves typically resinous, oily, waxy; wood usually contains volatile oils or terpenes, *e.g. rosemary, eucalyptus*
2. Leaves typically stiff, leathery, small or fine, lacy
3. Sap is gummy, resinous and/or has a strong odor
4. Loose or papery bark, *e.g., Birch trees*
5. Dense plant structure; can trap fine, dry or dead materials
6. Can be blade-leaf or needle-leaf woody evergreens
7. Any shrub with excessive dead wood
8. Dying or dead brush
9. Plants that flame when preheated/ignited by match



Scotch Broom



Juniper



Bamboo



Pampas Grass



Mountain Misery



Rosemary



# Gasoline Plants

- 1. Most conifers:** Fir, Cedar, Cypress, Larch, Spruce, Pine
- 2. Shrubs:** Chamise/Greasewood, Calif Sagebrush, Hopseed Bush, Red Shanks, Buckwheat, Juniper, Chaparral Pea
- 3. Groundcovers:** Juniper, Coyote Bush
- 4. Any shrub or tree with excessive dead wood**



Spruce



Juniper



Coyote Bush

# DO NOT PLANT Brooms p.24

Invasive and  
Fire Hazard

## Integrating Away the Confusion about

### BROOMS

Two plant groups (genera) are commonly called brooms: Cytisus and Genista. Each genus contains individual species that are considered fire hazards and most that are not, so have no general rating for fire hazard.

Most brooms are considered a fire hazard. Plants may be named either Cytisus or Genista. Check the second scientific name species to be sure.

**DO NOT PLANT:** These species are invasive and a fire hazard!

- |                       |                               |
|-----------------------|-------------------------------|
| • Canary Island broom | Cytisus <del>spachianus</del> |
| • Scotch broom        | C. <del>scoticus</del>        |
| • Caste               | Genista <del>spina</del>      |
| • French broom        | G. <del>monspeliensis</del>   |
| • Spanish broom       | Spartium <del>genista</del>   |

There are hundreds of broom species. Not commonly found, but a fire hazard! Genista spina, spartocarpa and stamptalis.

**NO FIRE HAZARD FOR THE FOLLOWING PLANTS:** Sweet brooms are generally not considered invasive. However, the growth habits and size make them prone to fire:

- |             |                               |
|-------------|-------------------------------|
| Sweet broom | Cytisus <del>spachianus</del> |
| Sweet broom | Cytisus <del>scoticus</del>   |

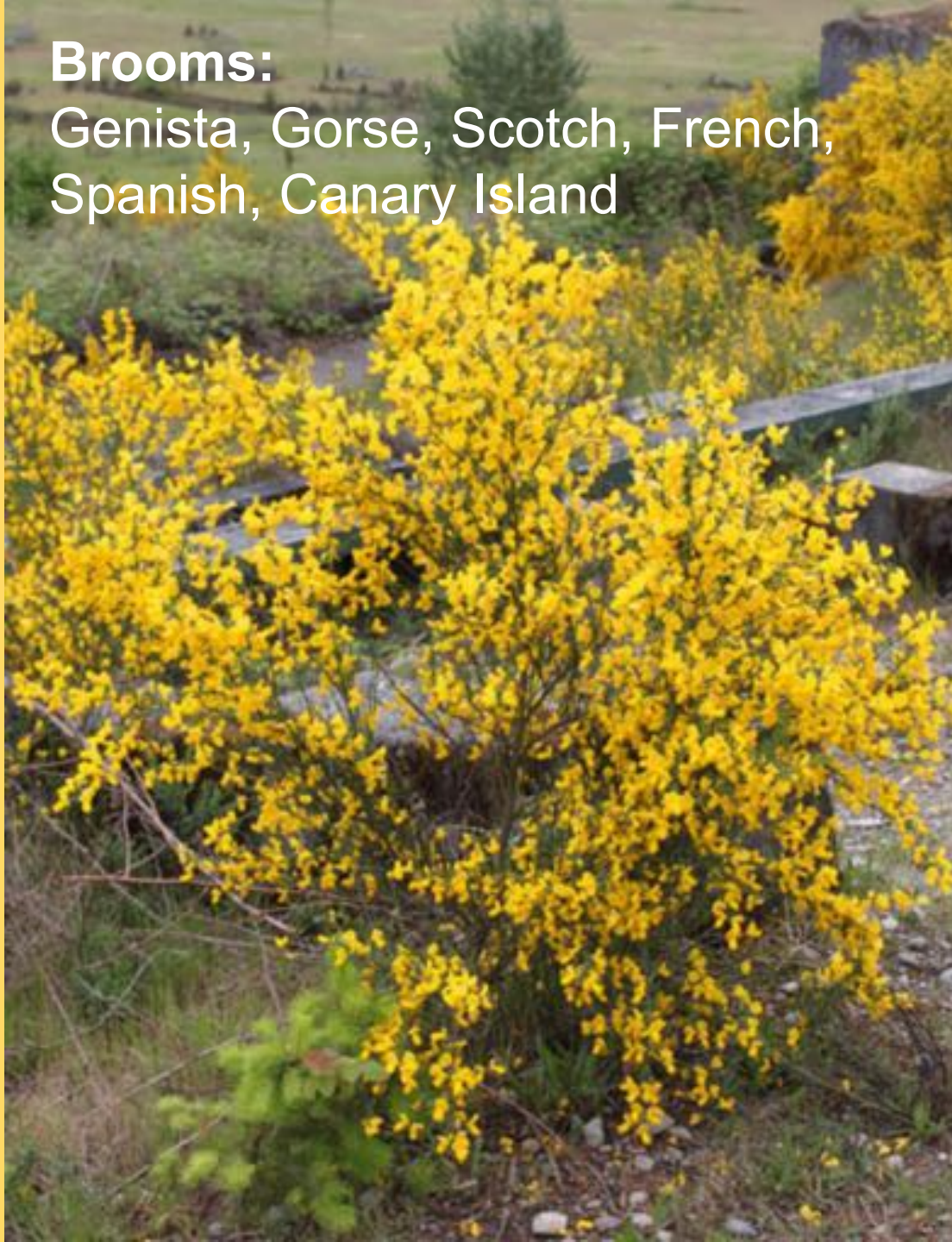
**NO FIRE HAZARD FOR THE FOLLOWING PLANTS:** These are growing ground cover plants are not considered invasive. Use with caution within the 30-foot perimeter of a structure.

- |                    |                          |
|--------------------|--------------------------|
| Ground cover broom | Genista <del>spina</del> |
| Ground cover broom | G. <del>stamptalis</del> |



**Brooms:**

Genista, Gorse, Scotch, French,  
Spanish, Canary Island





# SCOTCH BROOM FACTS - By Dan Lubin, Redbud- CNPS, Grass Valley, CA

SCOTCH BROOM is a Non-native plant and is not part of the natural ecosystem in California.

- It has no known natural predators or diseases in the U.S.
- Crowds out native vegetation
- Is highly FLAMMABLE even when green
- Pollen is common allergen in springtime

SCOTCH BROOM was brought into the United States with many uses:

- SCOTCH BROOM is native to southern Europe and northern Africa. It was introduced into California in the 1850's as an ornamental plant.
- It may also have been "packaging" in crates of goods, namely Whiskey! Scotch Broom may have been the "bubble-wrap" of the 19<sup>th</sup> century.
- Later it was used to prevent soil erosion and to stabilize coastal dunes by the Soil Conservation Service of the USDA.

SPANISH BROOM, FRENCH BROOM, and GORSE are related plants also in California and in Nevada County.

- All species are invasive plants and are highly flammable.
- Seeds of all species are extremely "hard" and last up to 80 years or more.
- Prone to reseed itself after fires and/or soil disturbances.
- Contains no wildlife value – nothing eats it besides deer browsing on seedlings. Birds do not eat the seeds.





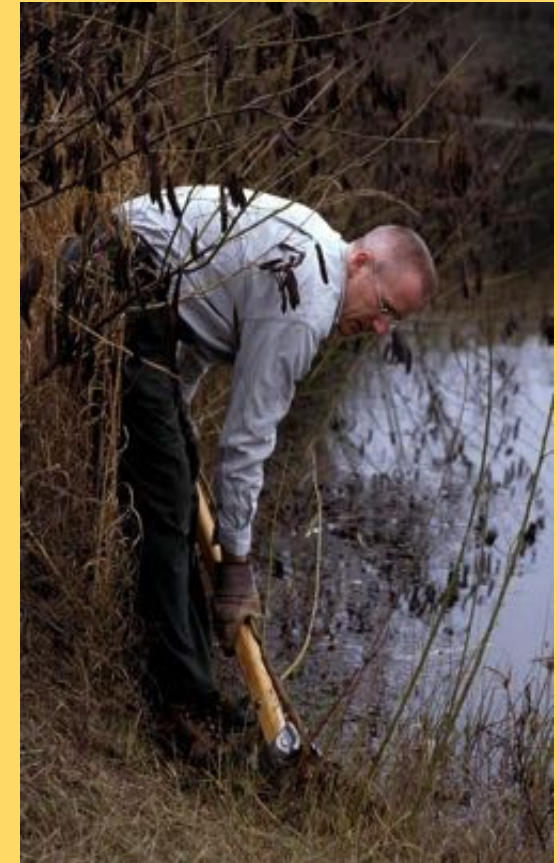
# 2 Ways to Get Rid of Scotch Broom

Pulling or "Wrenching" SCOTCH BROOM is preferred method during the rainy season (November – May) when soil is wet and roots easily come out of soil.

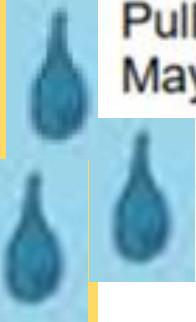
- A "Weed Wrench" or "Root Jack" is preferred tool to pull out Broom easily. These tools have a "claw" that surrounds the stem of the plant, and uses natural leverage to pull the plants directly out of the ground.



**Weed Wrench Loans from  
Fire Safe Council of Nevada County**




# 2 Ways to Get Rid of Scotch Broom



Pulling or "Wrenching" SCOTCH BROOM is preferred method during the rainy season (November – May) when soil is wet and roots easily come out of soil.

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Cutting all BROOMS during the DRY SEASON ONLY also works effectively, but only during the extreme dry months of July-October.

- 
- Cut the plants as close to the ground level as possible when soil moisture is at its lowest will cause the roots to immediately die off. Very effective in Sierra Nevada Foothills.
  - Cutting also has the advantage of NOT DISTURBING the soil, thereby not encouraging new weeds.

Either pile BROOMS to burn, or CUT the plants into small pieces to use as MULCH directly on the soil. Some experts say the BROOM "Mulch" will prevent new Broom seedlings.

- One advantage to cutting and mulching Broom onsite is not transporting seeds to new areas.



# PowerGear ByPass Loper



# 4 Steps to Firewise Landscaping

1. Observe
2. Design
3. Select
4. **Maintain**





# Fire Resistant Plants

Can be fire hazards if neglected:

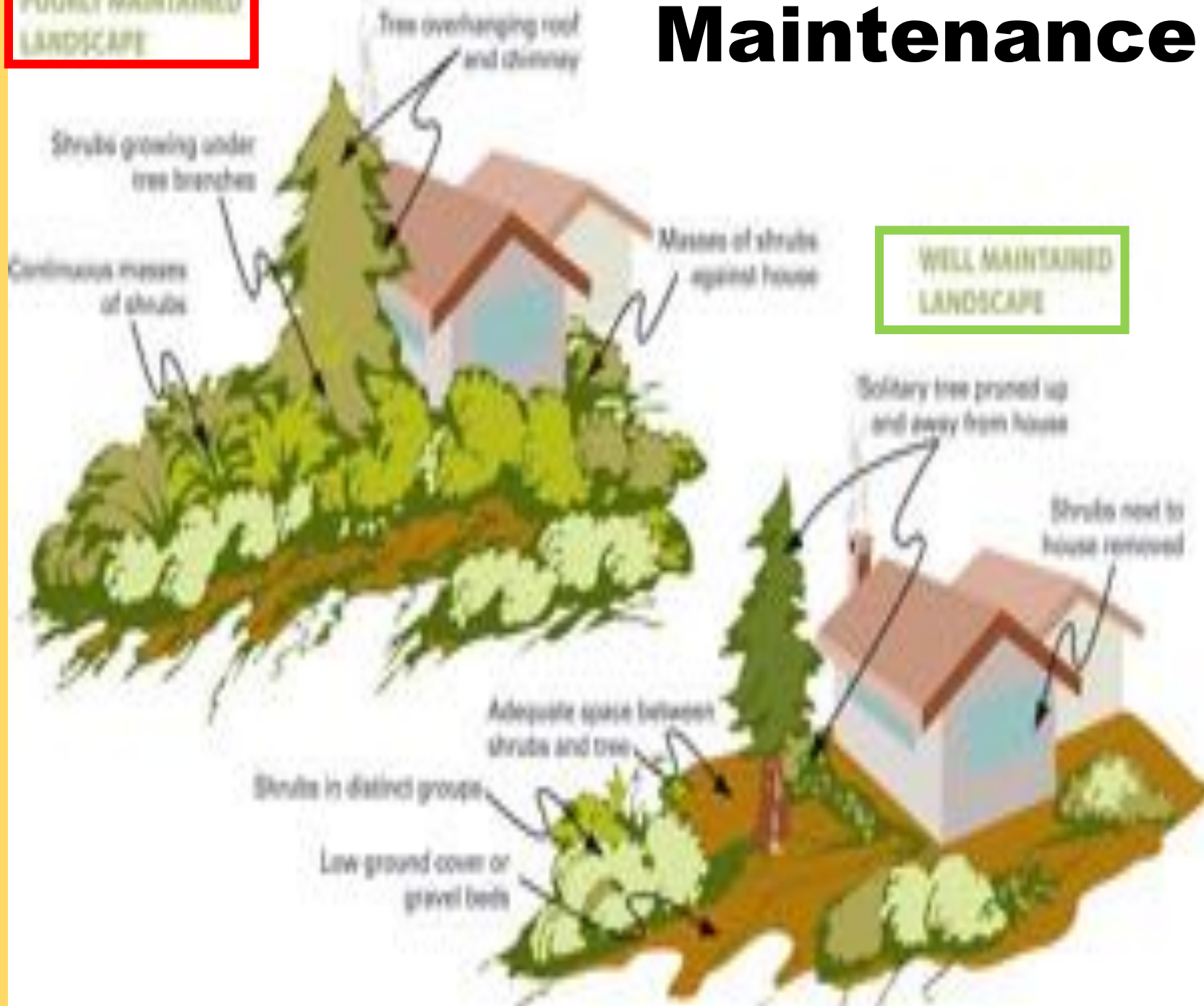
- Irrigation: even drought-tolerant plants may need some summer watering to retain fire resistance
- Do not let debris accumulate
- Essential:
  - Raking
  - Regular thinning
  - Pruning
  - Weed eating or mowing
- ***Landscape design & maintenance more important than plant species for fire-resistant defensible space***



\*Flannel bush  
*Fremontodendron*

**POORLY MAINTAINED  
LANDSCAPE**

# Maintenance





# Fire Safe Council Firewise Living Tour

*Nevada County examples  
of firewise home tours*



# **SoCal Fires of 2003**

## **3,340 homes destroyed**

## **23 lives lost**



*"Ornamental vegetation created an unpredictable and significant fuel source that blew into attic vents and eaves and spread through neighborhoods by torching, crowning, or throwing embers. Structures became involved from ember attack from the inside out rather than flame impingement."*





“Some communities don’t believe a fire will ever happen where they’re at... And unfortunately time is showing us that it does happen. Fire has no boundaries and no preference for where it burns.”



# You Can't Wait Until Fire Approaches



# Defensible Space Implemented





# Nevada County

- More people living in forests and brush lands than any other in CA
- Wildfire –number one natural disaster threat we face living here
- People make excuses for not clearing their property of hazardous brush and ladder fuels.



# Excuse #1

## I CAN'T AFFORD TO DO IT!



- You can't afford not to.
- Can you afford to lose your home or put your family in danger?
- Can you afford to lose your homeowner's insurance if your carrier deems you too high a fire risk?
- This is happening throughout Nevada County.
- If you are cited for not being compliant with the law, you'll have to do it within a limited period time.



# **Excuse #1**

## **I CAN'T AFFORD TO DO IT!**



- Some will take action, but a greater number will do nothing unless forced to do so.
- Take a new perspective - brush clearing may actually improve the value of your property.
- Phase your project to spread the work or cost over time.
- Start at the structure and work your way out to 100 feet or more depending on your home siting and surrounding vegetation.

# Excuse #2

## WHAT'S THE USE? WILDFIRE WILL BURN EVERYTHING ANYWAY!



- Creating defensible space has proven to be the most effective measure you can take to save your home from a wildfire.
- It's a fact – just ask your local firefighter.
- Defensible space keeps high intensity wildfire away from your structure
- It also provides an area firefighters use to actively suppress the fire.



# Excuse #3 I WANT TO LEAVE MY PROPERTY NATURAL



Dense and overgrown brush is not a natural condition.

Naturally occurring, low-intensity, frequent fires were a benefit to the pre-settlement ecosystem and kept brush from getting too thick.

To expect fires to come through and restore the natural order is no longer a viable solution.

# Excuse #3 I WANT TO LEAVE MY PROPERTY NATURAL



Current fuel load would create an inferno of proportions that would create temperatures far in excess of naturally cleansing fires prior to settlement.

Homes in the wildland expose extreme fire danger to a growing population living in or near the forest.

Thinning brush will not only reduce the devastating effects of wildfires, but restore the environment to a more natural state.



# Excuse #4

## I WANT PRIVACY.

- Plants, both native and ornamental, can be placed or left, in a staggered formation so as to create a visual, but non-contiguous screen.
- Screens made up of fire safe plants create a great alternative to dense, flammable brush.
- This takes long range planning and forethought, and helps solve the problem while meeting the needs of the individual for privacy.



Photinia

# Excuse #5

## WHY SHOULD I DO IT?



- Fire safety is your responsibility as a resident under the law.
- A defensible perimeter around your property line may help prevent a fire from spreading to your home.
- A patchwork of firebreaks throughout a neighborhood could protect adjoining neighborhoods, the forest and our watersheds.



# Just DO It!

- Nevada County is a beautiful place to live
- Many have come here for the lush natural beauty of our surroundings.
- Become part of the solution.
- Our actions or lack thereof have consequences.



**JUST DO IT.**



COMMUNITIES

*Compatible With*

NATURE



# Need Help?

Take action now, put together *your* plan

## Gardening Questions:

Nevada County Master Gardeners

Hotline: (530) 273-0919

Office: 255 So. Auburn St.

Grass Valley, CA 95945

Office hours:

Tues & Thurs 9 am to 12 noon

[www.ncmg.ucanr.org](http://www.ncmg.ucanr.org)



## Defensible Space Questions:

Fire Safe Council of Nevada County

Phone: (530) 272-1122

Office: 139 E. Main St.

Grass Valley, CA 95945

[www.areyoufiresafe.com](http://www.areyoufiresafe.com)



# Master Gardener Slideshow



- This slideshow was put together by Master Gardener Cathe' Fish based on a slideshow developed by Master Gardener Stephanie Wagner. Thanks, Cathe' and Stephanie
- Visit Nevada County Master Gardener's website [ncmg.ucanr.org/](http://ncmg.ucanr.org/)
- Facebook [UCCE Master Gardeners of Nevada County](#)
- MASTER GARDENER HOTLINE OFFICE: 530-273-0919
- Office: 255 South Auburn Street, Grass Valley - in Veterans Memorial Building
- Demonstration Garden: 1036 W. Main Street, Grass Valley, (on the NID grounds) offers a wonderful variety of plant venues, including an orchard and oak habitat

# Defensible Space Questions?

## Fire Safe Council of Nevada County



- Visit our website [www.areyoufiresafe.com](http://www.areyoufiresafe.com)

**Fire Safe Council of Nevada County**

**Phone: (530) 272-1122**

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**Grass Valley, CA 95945**