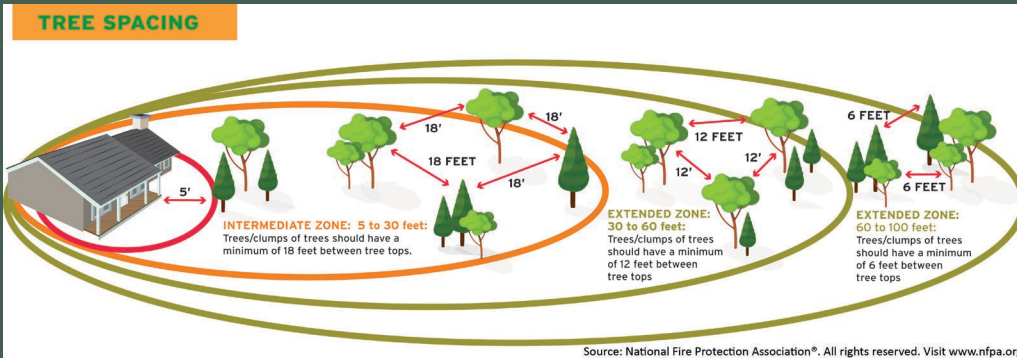
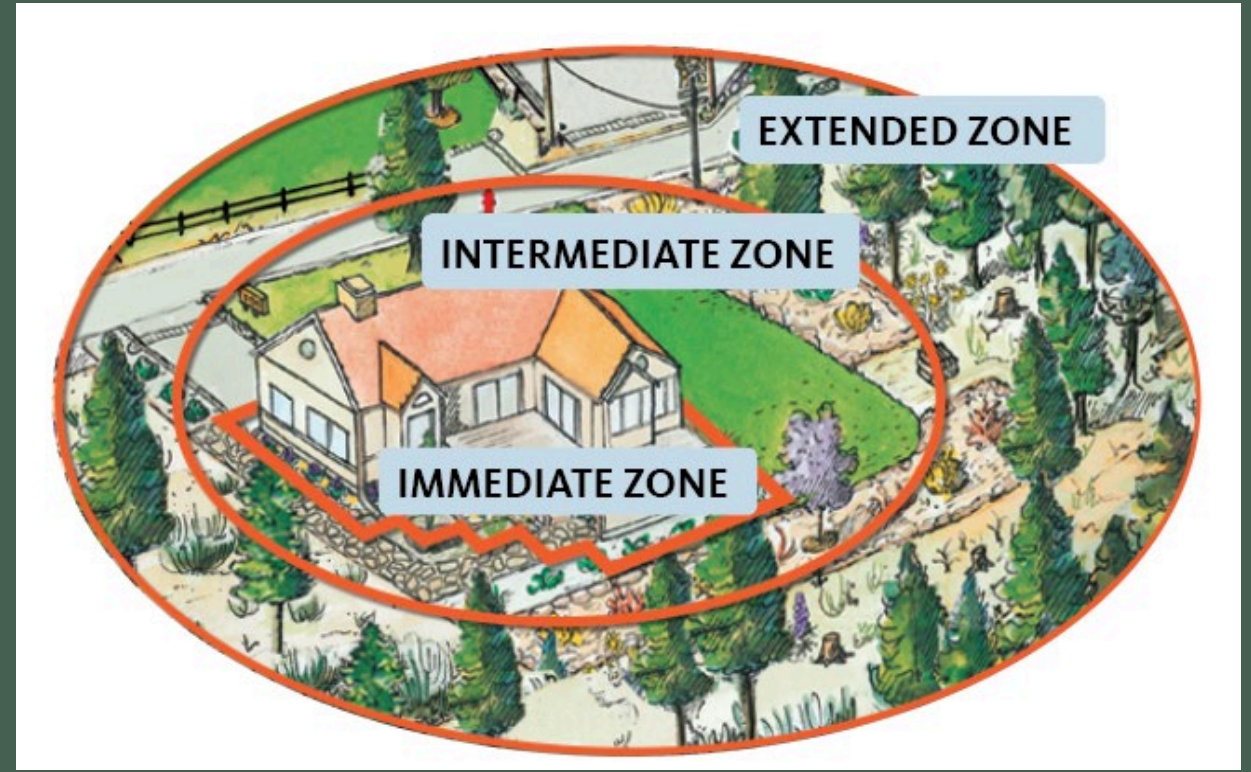
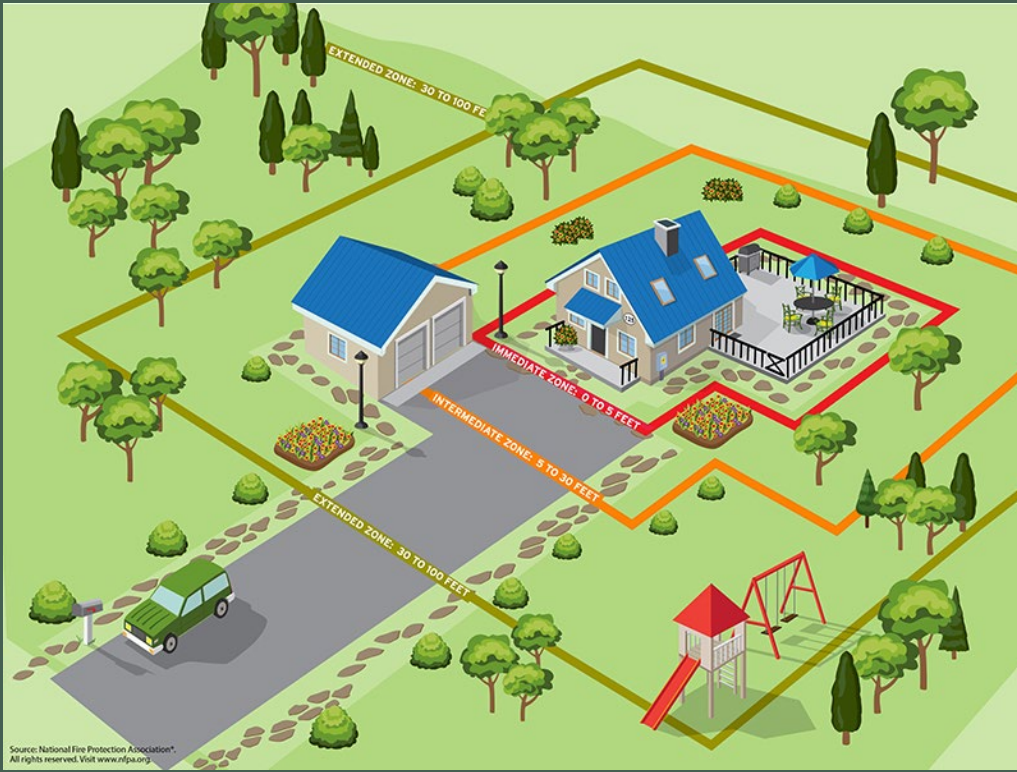




# FIREWISE LANDSCAPE & DESIGN PRINCIPLES

Idaho Firewise, Inc.



## Home Ignition Zone (HIZ) – “Defensible Space”

The Home Ignition Zone is defined as the home and everything around it out to 100 feet (more on steeper slopes)

# Immediate Zone

Fire Rated Housing Material, Class A

➤ Zone 1, Immediate Zone: 0-5'



- Metal, sheet & shingles
- Slate shingles
- Clay tile
- Asphalt shingles
- Fiber-cement shingles
- Stone
- Brick
- Stucco
- Concrete
- Wrought Iron



*If it's touching the house, it's part of the house (fence)*

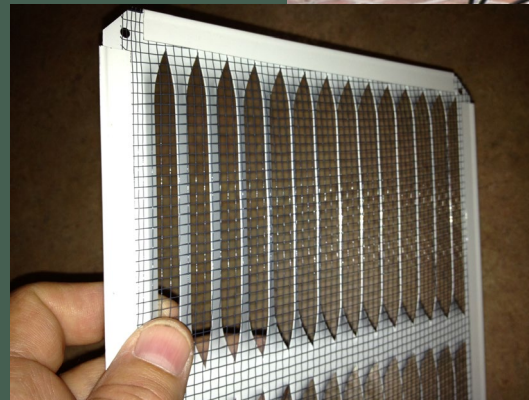
# Hardening the Home

- Screen all vents (1/8")
- Clean roofs & gutters
- Clean debris from attic vents, decks/porches



## *Potential Fuels for Fire -*

- Decking
- Firewood
- Planters
- Door Mats
- Patio Furniture
- Propane Barbeque
- Other Structures



➤ *Zone 1, Immediate Zone: 0-5'*



# Firewise Landscape Design Principles

- Remove fuels in Zone 1, 0-5'
- Use hardscapes to break up continuous fuels
- A watered, maintained lawn is a firewise lawn
- Group fire resistant plant materials in islands
- Choose mulch wisely
- Provide adequate spacing between trees and shrubs
- Remove ladder fuels

# Attributes of Firewise Plants



High Moisture Content



Soap, Latex, or Pectin Content



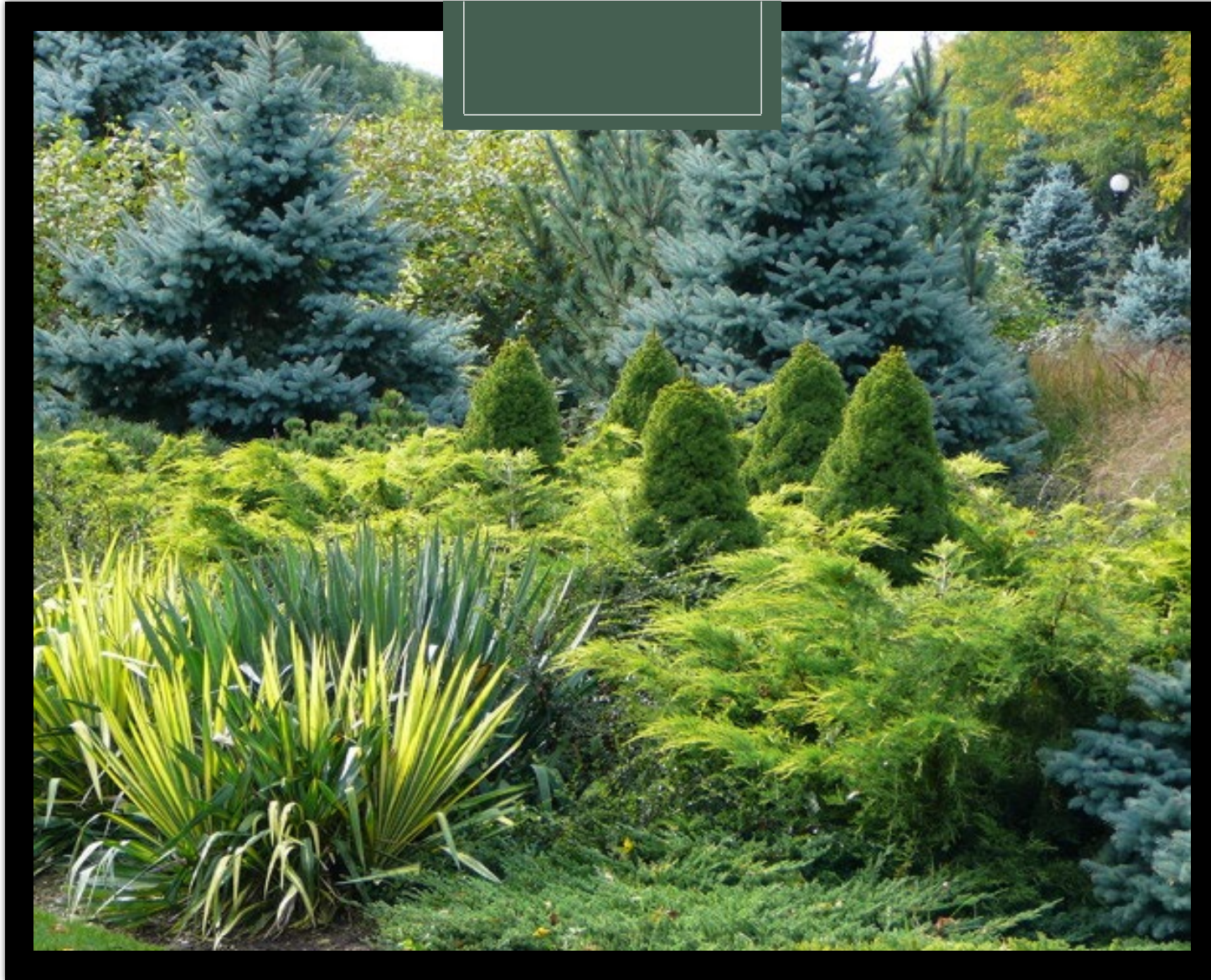
Drought Tolerant, Resilient



Low or Compact Growing



Low Oil or Resin Content



IS THIS  
FIREWISE?



# FIREWISE LANDSCAPE



## Resilient Design: Firescape

- High moisture plants
- Drought tolerant
- Saponin content
- Rock boulders
- Rock mulch
- Low or compact growth
- Spacing in between plant groupings

*Photo: Firescape Demonstration Garden,  
Santa Barbara, California*



Remove fuels in Zone 1, Immediate Zone, 0-5'  
Non-Combustible Zone  
*Rethinking the foundation planting*



Remove fuels in Zone 1, 0-5'  
Non-Combustible Zone  
*Rethinking the foundation planting*



# Use hardscapes to break up continuous fuels

Driveway

Pathways

Patios

Rock  
Mulch

Boulders

Bed  
Outlines

Sitting  
Wall

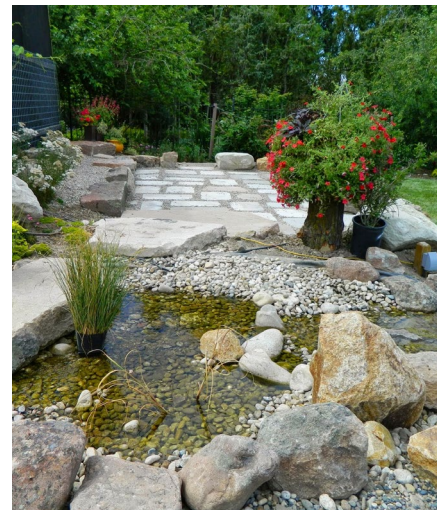
Retaining  
Wall

Water  
Features

Stepping  
Stones

Dry River  
Bed

Crevice  
Garden



# A watered, maintained lawn is a firewise lawn

1. Kentucky Bluegrass/Ryegrass 4EVR BLUE®
2. Perennial Ryegrass
3. Dwarf Tall Fescue Mix ENDURATURF®
4. Fine Fescue SHADOWMASTER™
5. XERILAWN®
6. Sheep Fescue
7. (Under construction) Previously Sandberg Bluegrass
8. High Desert Grass Mix
9. Blue Grama
10. Buffalograss
11. Zenith® Zoysia
12. Dog Tuff™ Grass



Group fire-resistant plant materials in islands...

Or create drifts of plantings utilizing negative space in between

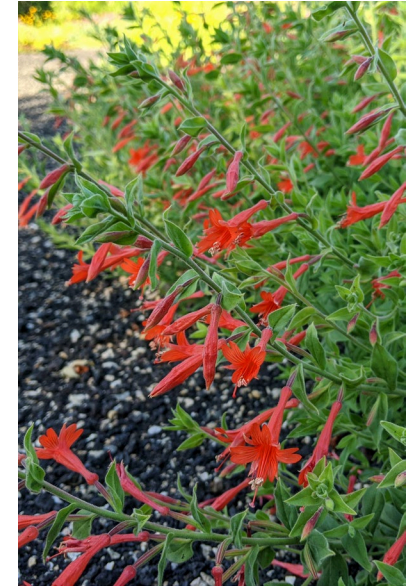


# Choose mulch wisely

1. Native rock
2. Decomposed granite (manufactured sand, crushed rock – not a “standardized commodity”)
3. Lava rock
4. Pea gravel
5. Round rock
6. Cobblestone
7. Boise River pea gravel, Snake River pea gravel
8. River pebble, river rock
9. Brown/gray decorative rock “perma-bark” (not gardener friendly)
10. Organic mulch (avoid use in Zone 1)
11. Nature’s mulch (sand, gravel, mosses, lichens)

## *All mulches provide:*

- Reduced growth of non-desirable annual plants
- Protection of the soil from wind and water erosion
- Increased water infiltration





# Firewise Landscape Design Principles

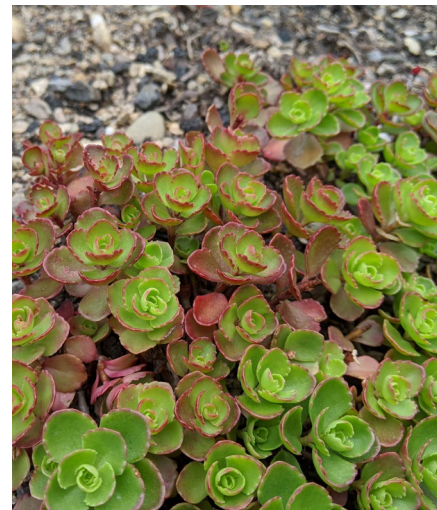
- ✓ Remove fuels in Zone 1, 0-5'
- ✓ Use hardscapes to break up continuous fuels
- ✓ A watered, maintained lawn is a firewise lawn
- ✓ Group fire-resistant plant materials in islands
- ✓ Choose mulch wisely
  - Provide adequate spacing between trees and shrubs
  - Remove ladder fuels

## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Succulents

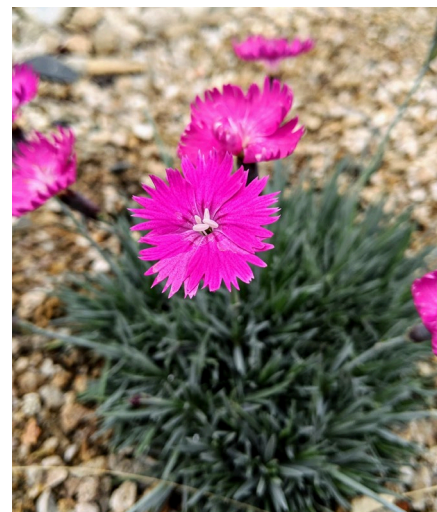


## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Saponin-Soap Content

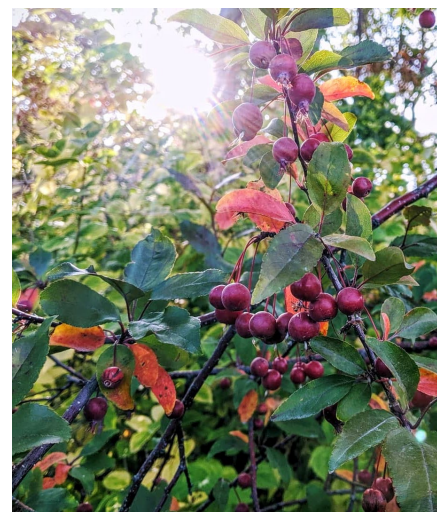


## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Pectin Content

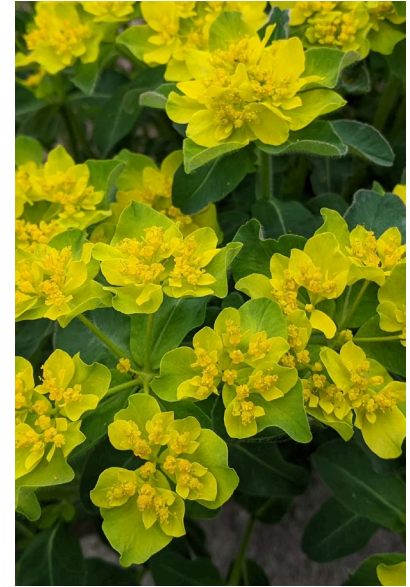


## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Latex Content



## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Compact Growth Form

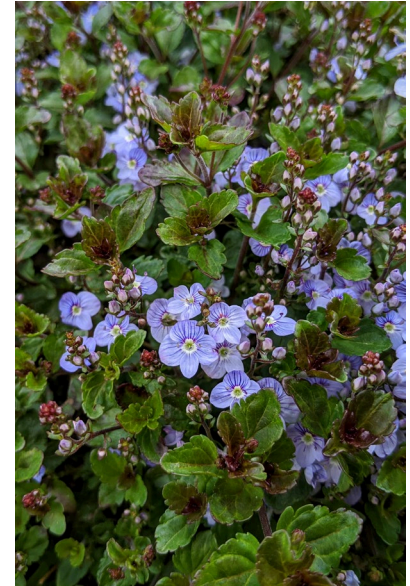


## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Utilize Ground Covers



## *Plant Chemistry Is Important*

### Attributes of Fire-Resistant Plants:

- High in moisture, soap, pectin, latex and/or salt content
- Smaller in size – ground covers, shorter perennials, shrubs, trees
- Minimal amounts of volatile oils and resins
- Usually, can withstand some amount of drought

## Utilize Spring-Flowering Bulbs



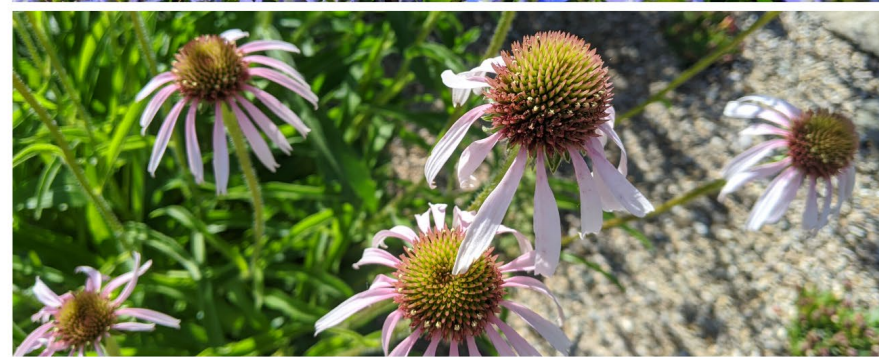
# Firewise Perennial Plant Combinations Multi-Season

1. *Veronica liwanensis* Turkish Veronica
2. *Oenothera macrocarpa* Evening Primrose
3. *Echinacea angustifolia* Narrow-Leaved Coneflower
4. *Hylothelephium* 'Autumn Joy' Stonecrop

Intermediate Zone 5-30'  
& Extended Zone 30-100'

Low growth form  
High moisture content  
Drought tolerant

*Fire-Resistant, Waterwise, Habitat for  
Pollinators*



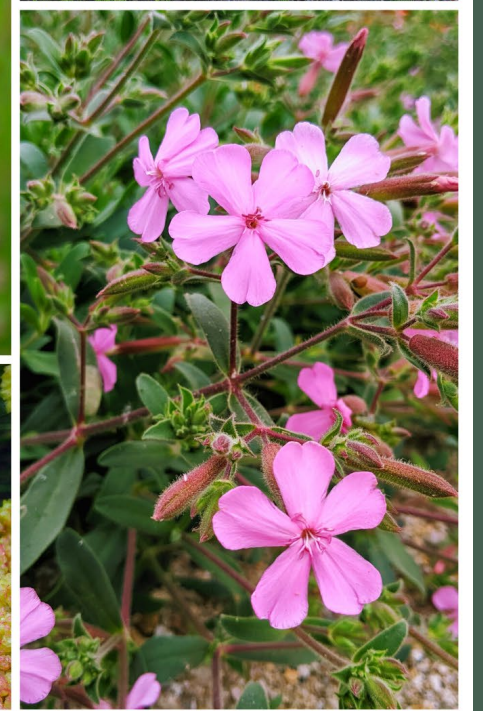
# Firewise Perennial Plant Combinations Multi-Season

1. *Penstemon strictus* Rocky Mtn Penstemon
2. *Penstemon pinifolius* Pineleaf Penstemon
3. *Eriogonum umbellatum* Sulphur Flower
4. *Saponaria x lempergii* 'Max Frei' Giant Flowered Soapwort

Intermediate Zone 5-30'  
& Extended Zone 30-100'

Low growth form  
High moisture content  
Drought tolerant  
Soap content

*Fire-Resistant, Waterwise, Habitat for  
Pollinators*



# Firewise Perennial Plant Combinations Multi-Season

1. *Fragaria* x 'Lipstick' Strawberry
2. *Nepeta* 'Walker's Low' or 'Junior Walker'
3. *Erigeron* 'Darkest Of All' Daisy Fleabane (or *E. speciosus*)
4. *Solidago sphacelata* 'Golden Fleece'  
Dwarf Goldenrod

Intermediate Zone 5-30'  
& Extended Zone 30-100'

Pectin content  
Low growth form  
Compact growth form  
Drought tolerant

*Fire-Resistant, Waterwise, Habitat for  
Pollinators*



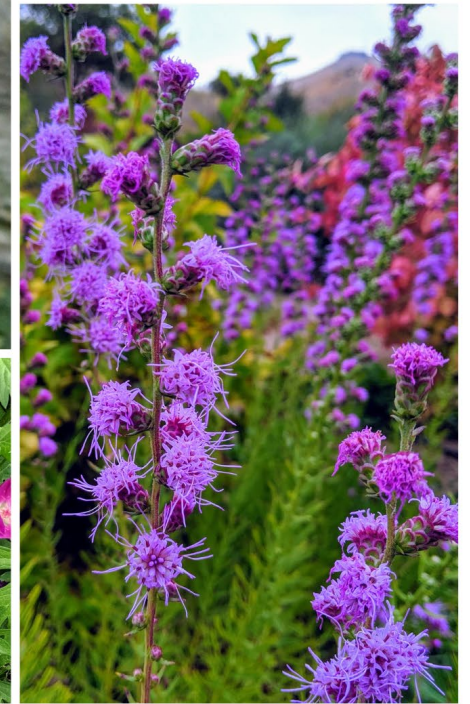
# Firewise Perennial Plant Combinations Multi-Season

1. *Sphaeralcea munroana* Globemallow  
(or *S. ambigua*)
2. *Artemisia versicolor* 'Sea Foam' Artemisia
3. *Callirhoe involucrata* Poppy Mallow
4. *Liatris aspera* Blazing Star (or *L. ligulistylis*)

Intermediate Zone 5-30'  
& Extended Zone 30-100'

Low growth form  
Drought tolerant

*Fire-Resistant, Waterwise, Habitat for  
Pollinators*



# Plant Select® Firewise Suggestions

1. *Arctostaphylos x coloradoensis* - 'Panchito', 'Chieftain'
2. *Prunus besseyi* Pawnee Buttes®
3. *Veronica* Crystal River®, *V. liwanensis*
4. *Delosperma* hybrids
5. *Monardella macrantha* 'Marian Sampson'
6. *Hesperaloe parviflora*

And many more! Schedule a tour with Andrea to learn more.



[www.plantselect.org](http://www.plantselect.org)

**Plant Select®**  
plant smarter



PLANT SELECT®

# In Conclusion

- Analyze Zone 1 0-5', harden this area as much as possible – upkeep and maintenance is key (embers!)
- Zone 2 5-30', complete an inventory and analysis of the current landscape
- Based on your analysis, prioritize any changes and do so in phases as your time and finances allow
- Zone 3 30-100'+ (if this is your scenario), retaining native plantings and taller trees is fine, especially the closer you get to 100'. Select the healthiest specimens to remain in your landscape, complete thinning annually to reduce overcrowding.
- Incorporate hardscapes and remove ladder fuels wherever possible.
- The goal is to slow the progression of fire's pathway moving towards your home.





# CONTACT US

[andrea@idahofirewise.org](mailto:andrea@idahofirewise.org)  
[brett@idahofirewise.org](mailto:brett@idahofirewise.org)  
[ivy@idahofirewise.org](mailto:ivy@idahofirewise.org)  
[erica@idahofirewise.org](mailto:erica@idahofirewise.org)

[www.idahofirewise.org](http://www.idahofirewise.org)

WUI Culture > Library >  
Garden Resources & Suggested Plant Material