

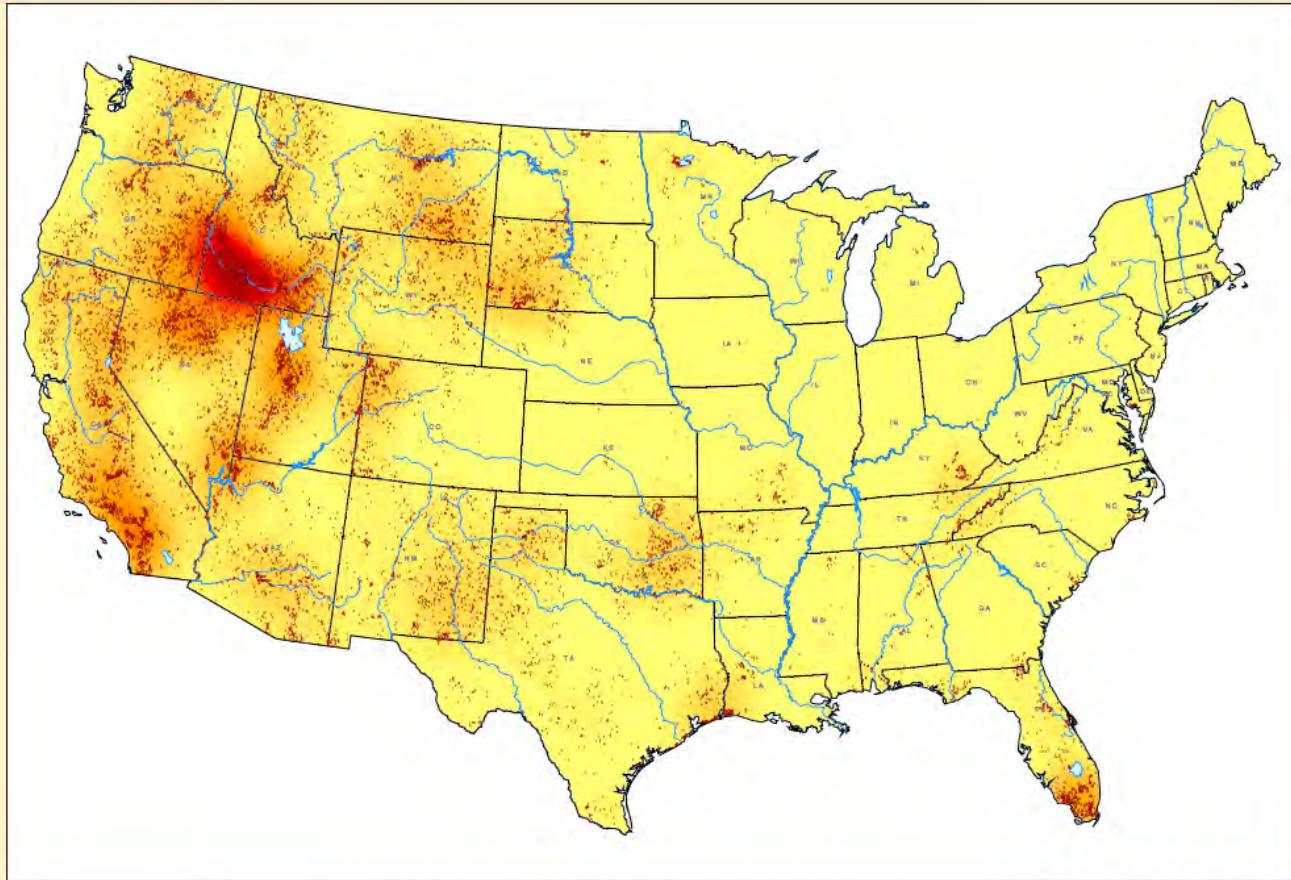
Firewise Landscaping



Roger Rosentreter &
Brett Van Paepeghem



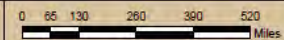
Local Conditions



Legend

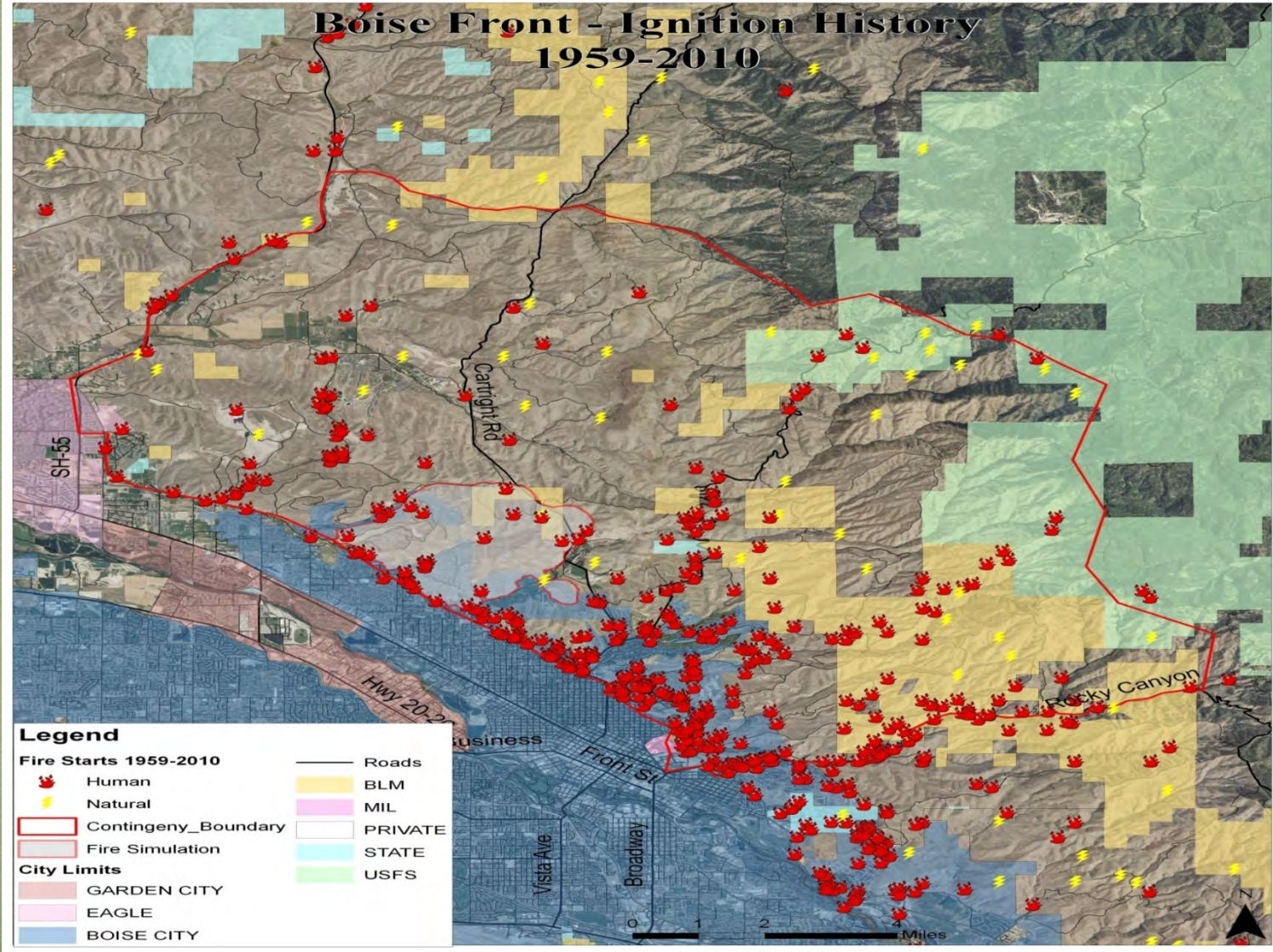
- Fire Locations (1970 -2007)
- Rivers
- Lakes
- State Boundaries

**Historical Fire Locations
(Larger than 300 acres 1970 - 2007)**

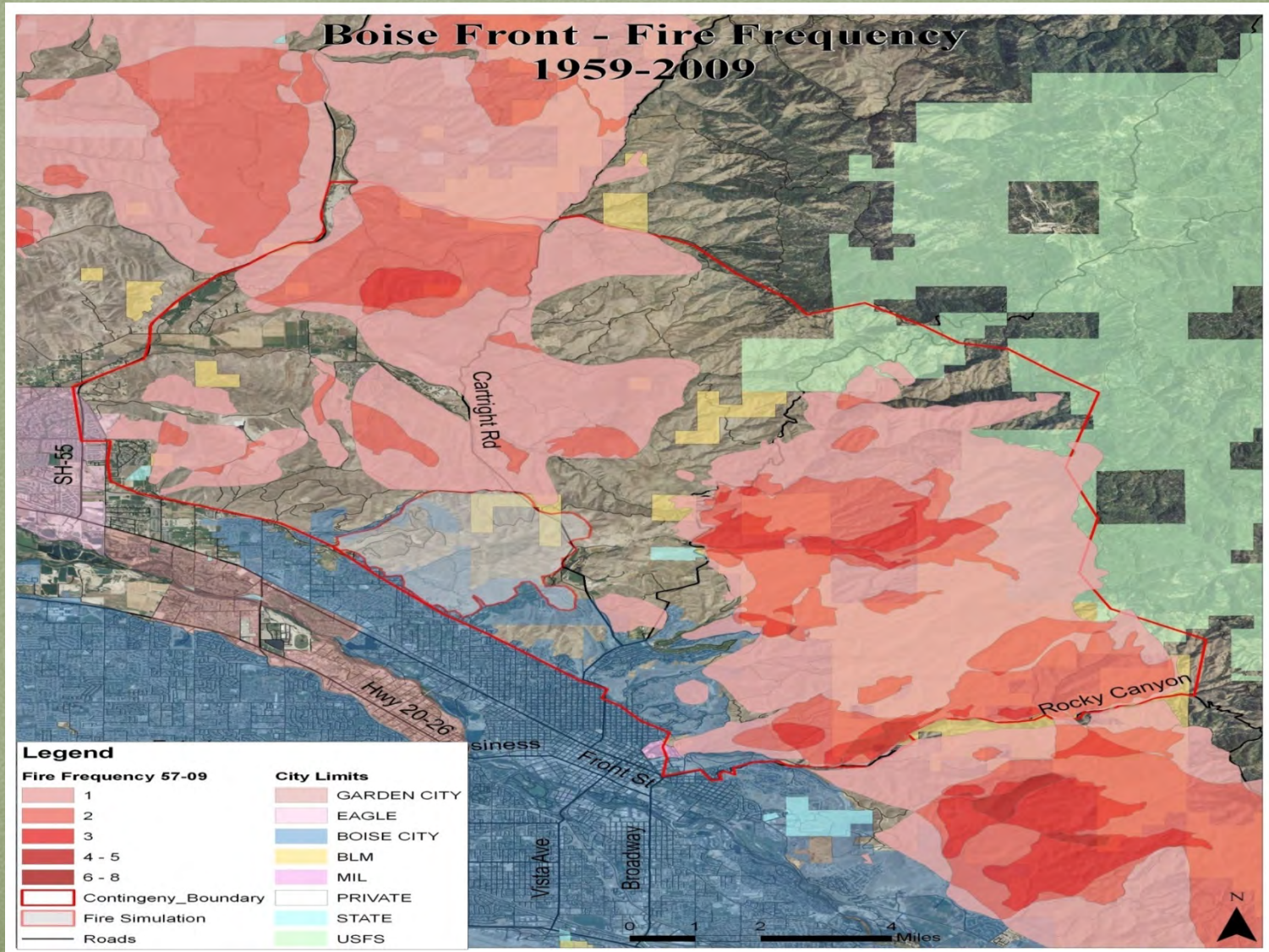


Albers NAD83 Projection
Central Meridian: -96
1st Std Parallel: 20
2nd Std Parallel: 60
Latitude of Origin: 40

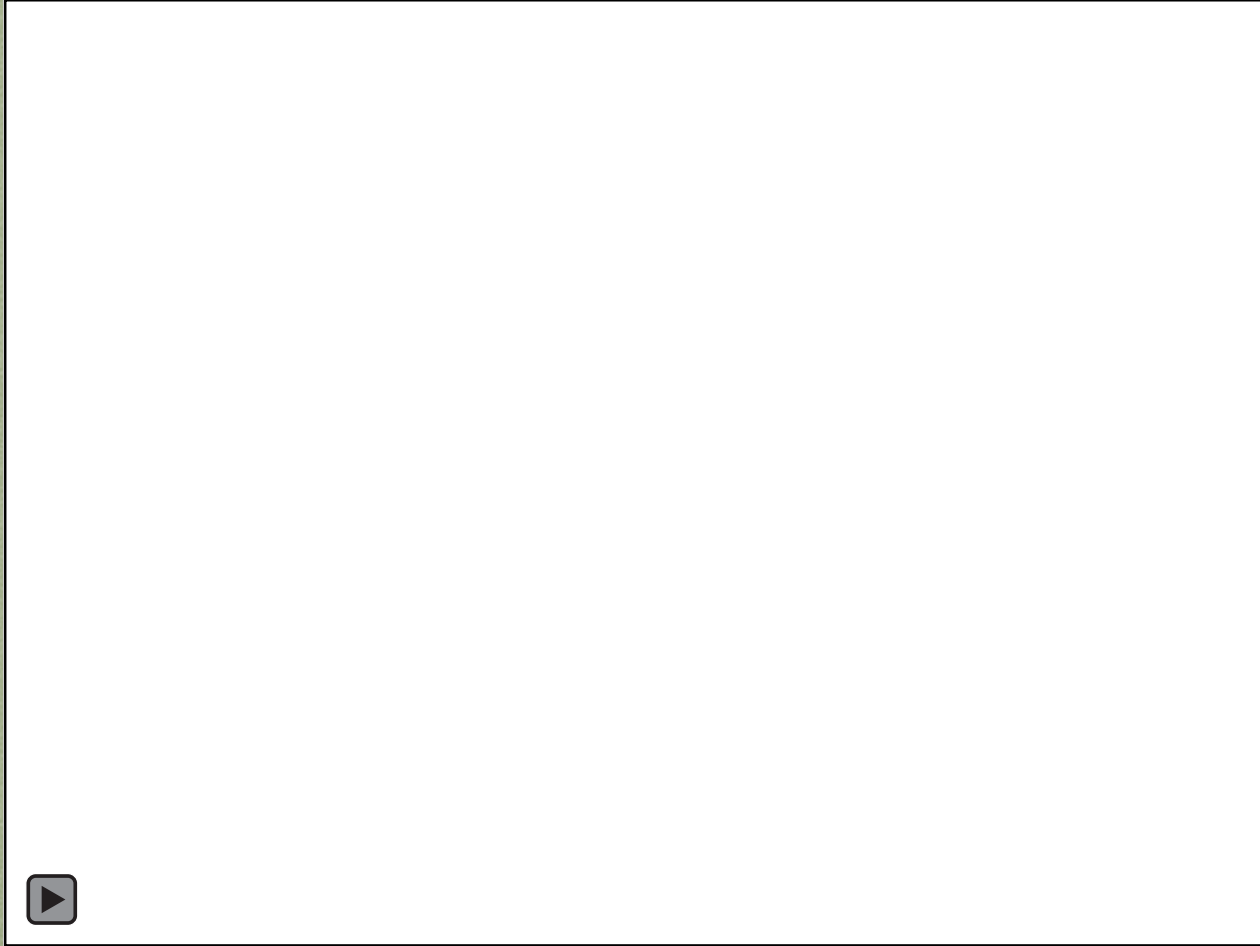
Historical Ignitions



Wildfire Frequency



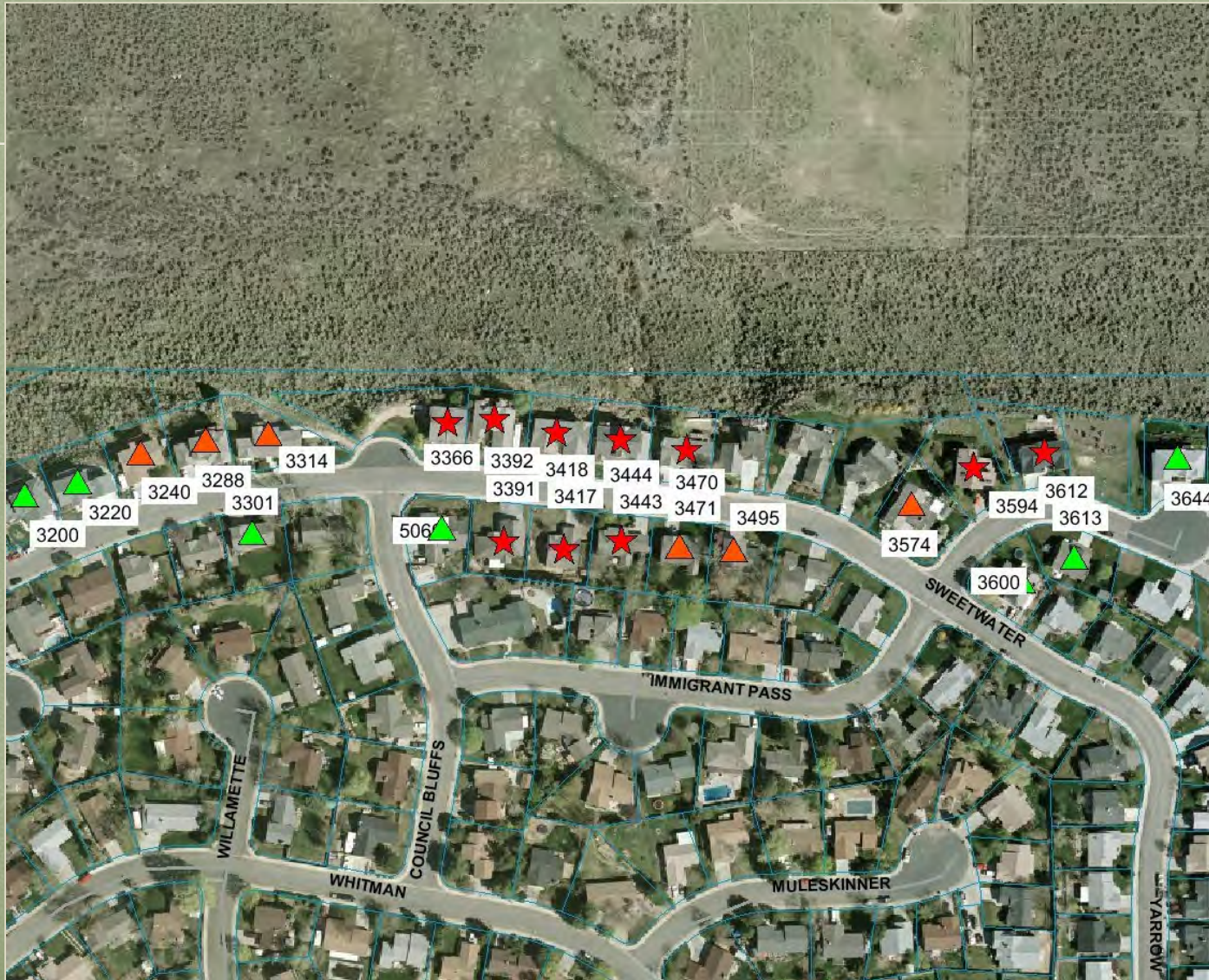
Oregon Trail Fire - 2008



Oregon Trail Fire Losses

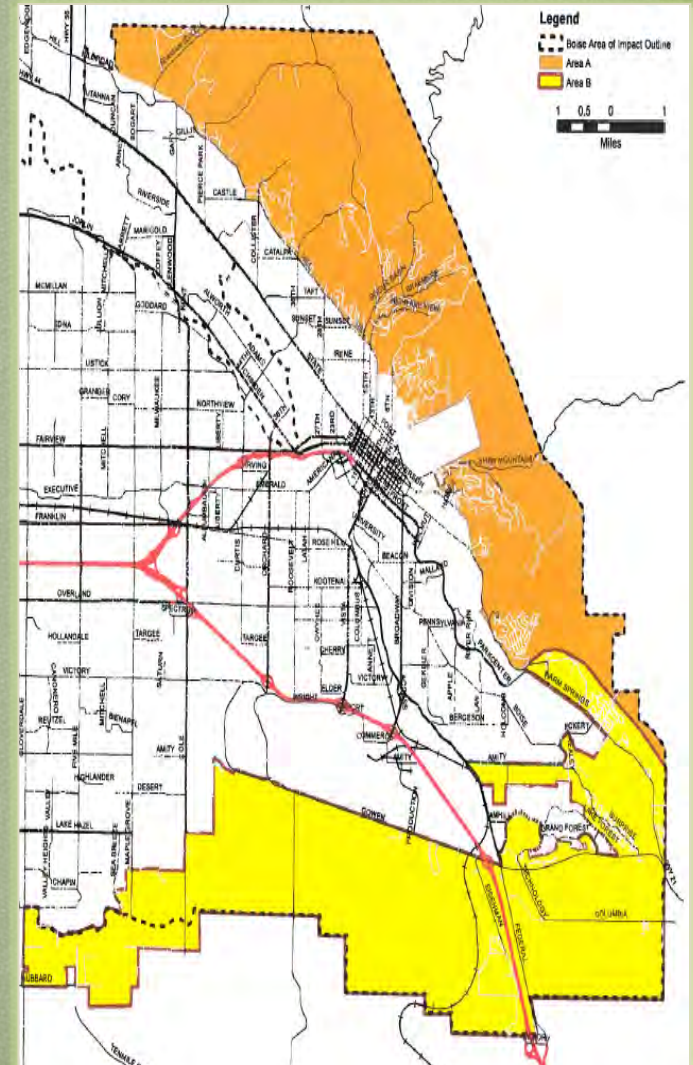


Oregon Trail Fire Losses



Codes and Ordinances

- Older non-conforming neighborhoods
- IWUIC
 - Adopted by Ada County and in part by the City of Boise
- Title 7 Boise City Ordinance
 - fire protection plan
 - defensible space
 - home hardening
 - revision process
- <https://www.planningforhazards.com/wildland-urban-interface-code-wui-code>



Create Survivable Space

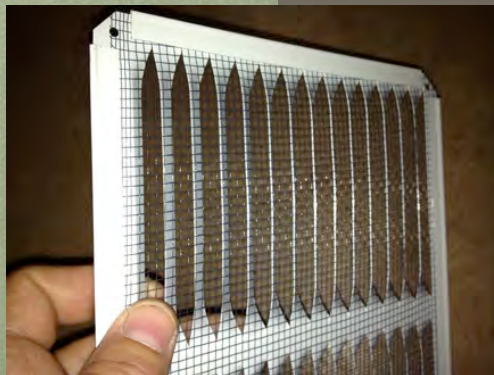


Start with the house itself

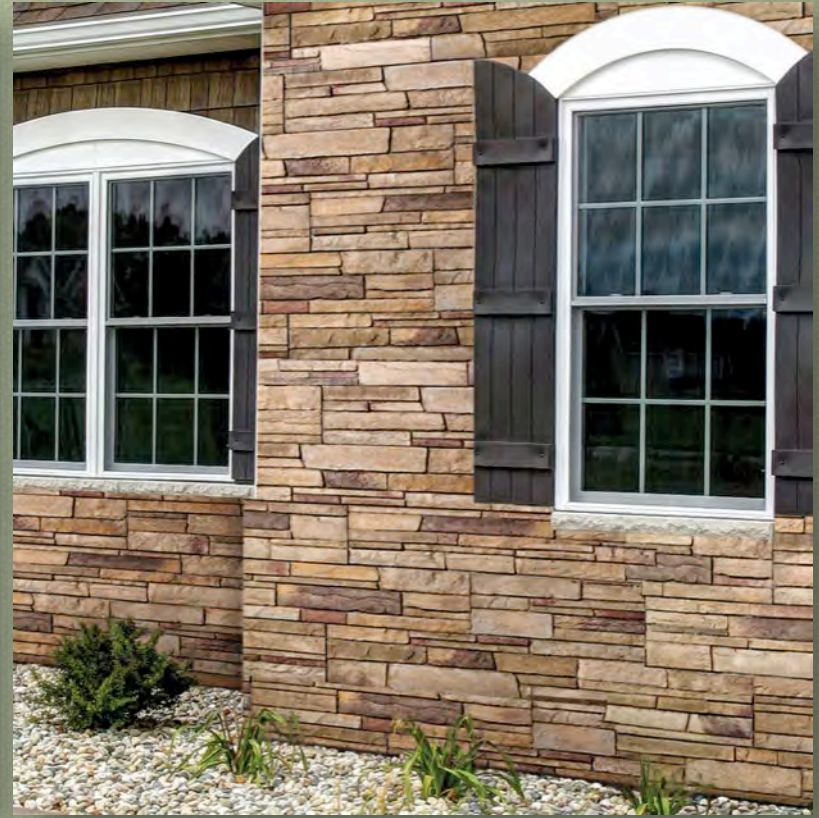
Immediate Zone (1)

The home and the area 0-5'

- ✓ Clean roofs & gutters
- ✓ Clean debris from attic vents & install 1/8" metal screening
- ✓ Replace or repair loose or missing shingles



Hardening the Home



Use class “A” fire rated roofing & siding

Potential Fuels for Fire

*Anything that can burn

- ✓ Decking
- ✓ Firewood
- ✓ Planters
- ✓ Doormats



- ✓ Patio Furniture
- ✓ Propane Barbeque
- ✓ Other Structures



Screen or box-in areas



...below decks

Fences

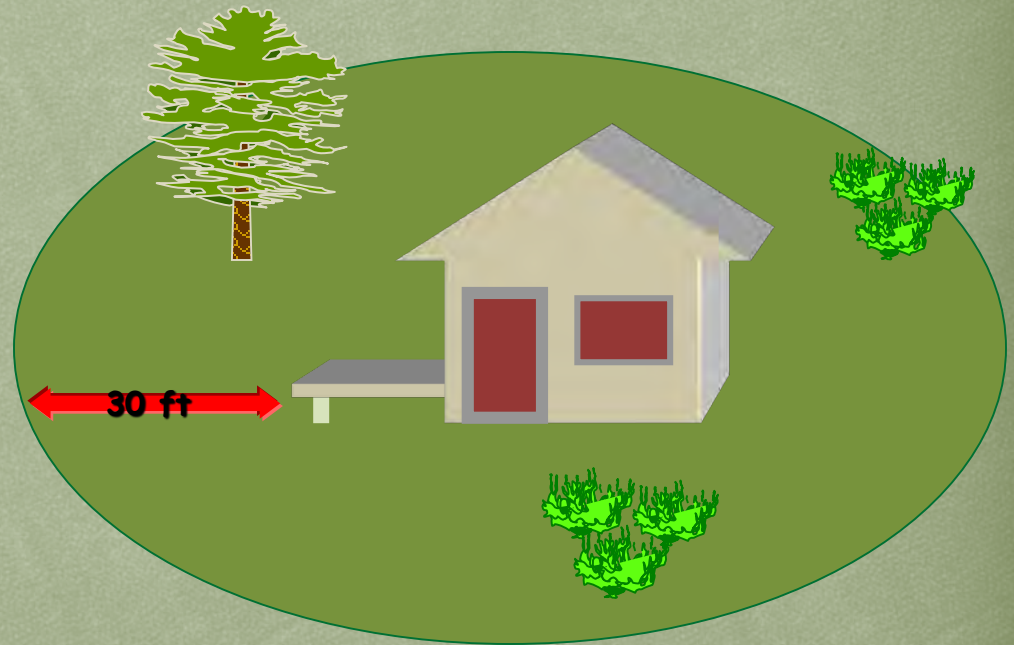


If it touches the home...it is considered part of the home

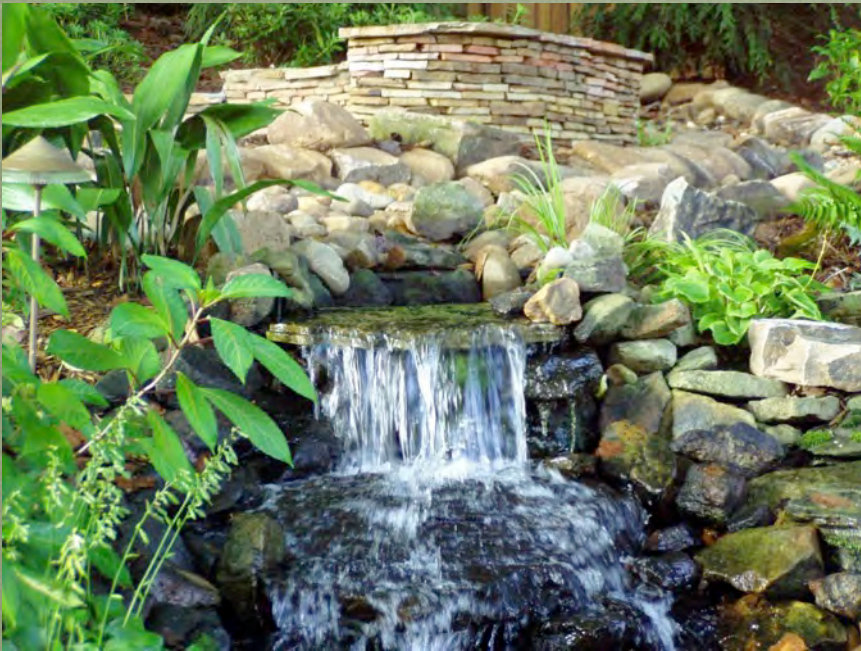
Intermediate Zone (2)

5-30' from the farthest point of the home

- ✓ Use low-growing, low ignition plants and **avoid conifers**
- ✓ Keep plants well pruned
- ✓ Remove dead plant material
- ✓ Mow or weed-eat grasses
- ✓ Use gravel mulch
- ✓ Keep well irrigated
- ✓ Create fuel breaks



Hardscapes



Minimize continuous fuels

Create a “Catch”

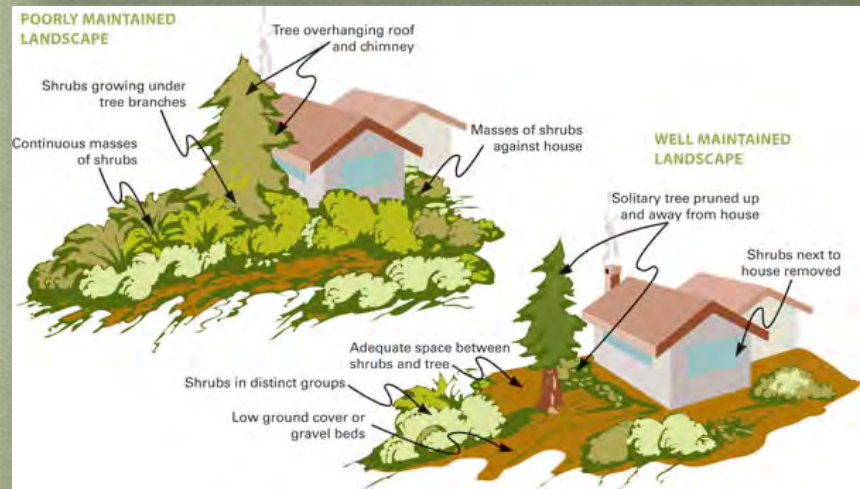


for blowing, burning
embers

Intermediate Zone (2)

5-30'

- ✓ Remove ladder fuels
- ✓ Prune trees up to 6-10'
- ✓ 18' **minimum** between crowns
- ✓ Mature canopy **at least 10'** from home
- ✓ Remove vegetation near propane tanks
- ✓ Plant in small clusters to break up continuity of vegetation



Extended Zone (3)

30-100' out to 200'

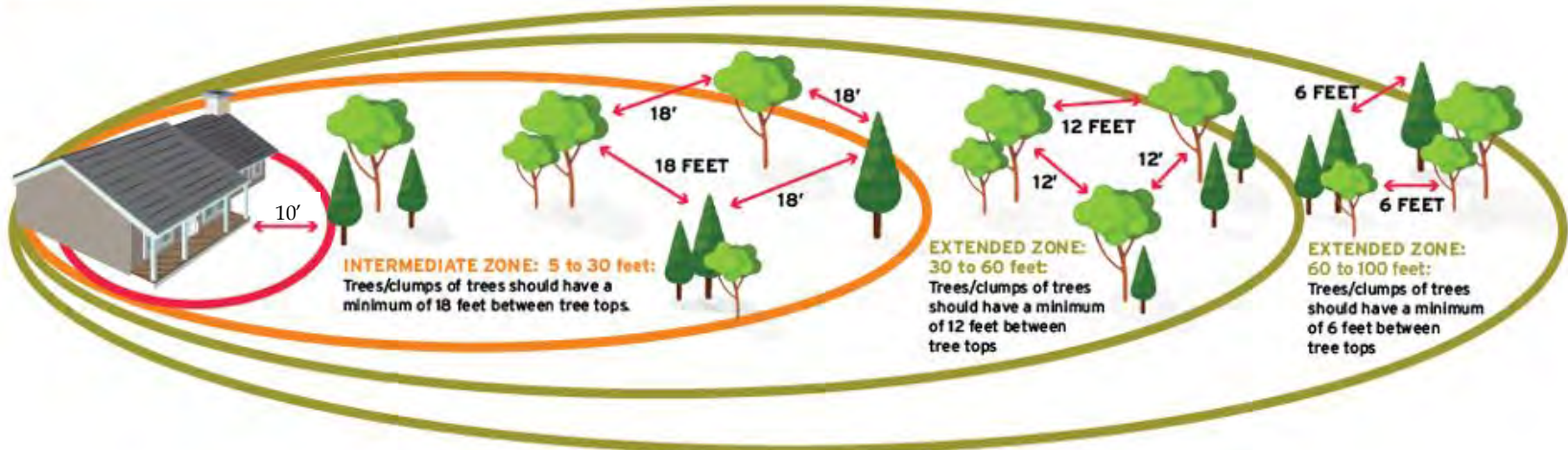
- ✓ Dispose of heavy accumulations of ground litter/debris
- ✓ Remove vegetation adjacent to any outbuildings
- ✓ Remove dead plant and tree material

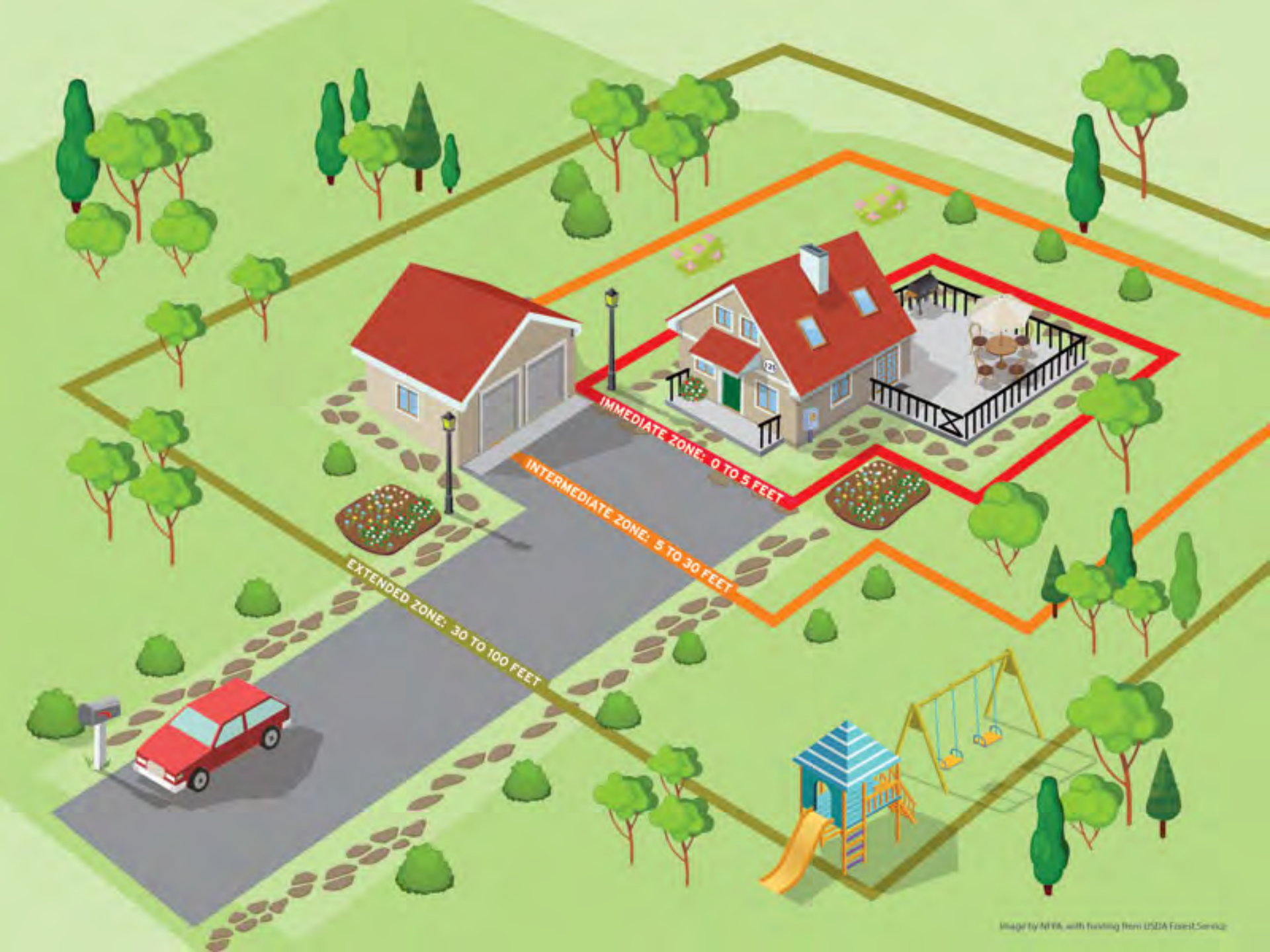


Tree Spacing

- ✓ Trees 5-30' from the home – at least 18' between canopy's
- ✓ Trees 30-60' from the home – at least 12' between canopy's
- ✓ Trees 60-100' from the home – at least 6' between canopy's

TREE SPACING





Plant Chemistry Is Important



Avoid plants that contain volatile oils, resins and terpenes, which ignite easily and burn hot!

Some Natives are Extremely Flammable

Artemisia tridentata

Sagebrush

Purshia tridentata

Bitterbrush

Juniperus occidentalis

Western juniper

Cercocarpus ledifolius

Curl-leaf mountain mahogany

Achillea millefolium

Yarrow

Fallugia paradoxa

Apache plume

Chamaebatiaria millefolium

Fernbush

Pinus spp.

Pine

Any large statured native grasses



Xeric but...

Not if highly flammable



- ✓ Fine fuels ignite easily
- ✓ Ornamental Grasses are fine fuels



Xeric but...Oil content



Perovskia atriplicifolia

Russian Sage



Saponin

- ✓ Is an organic chemical found in some plants
- ✓ Plants that contain saponin can usually be worked into a lather
- ✓ Soap is a fire suppressant



Hydrangeaceae (contain saponin)

Philadelphus lewisii



Syringa, Mock Orange (Idaho State Flower)

'Cultivars'



'Buckley's Quill' Mock Orange

Philadelphus hybrid

(4 - 5 feet tall)

Caryophyllaceae (contain saponin)

Dianthus gratianopolitanus



'Firewitch' Dianthus

Caryophyllaceae

Gypsophila spp.



Baby's Breath

Agavaceae

Yucca spp.



Soapweed Yucca

Rhamnaceae (contain saponin)

Ceanothus americanus



New Jersey tea

Rhamnaceae continued...

Not all species in the Genus *Ceanothus* are suggested

Ceanothus velutinus, Snowbrush



High in oil content

Fabaceae (contain saponin)

Lathyrus odoratus



Sweet pea

*Other Fabaceae include native *Astragalus* spp.

Saponaria ocymoides



Rock soapwort



Pectin

Malus spp.



Crabapple

*Fruit trees are a good choice



'Lipstick' Strawberry

Caprifoliaceae (contain pectin and saponin)

Symphoricarpos albus



Snowberries

Caprifoliaceae continued...

Sambucus caerulea
(pectin & high moisture)



Elderberry

Euphorbiaceae (contain saponin & latex)

Euphorbia characias

E. epithymoides



Spurge

*Note: many Euphorbia species are invasive

High Moisture Content



'Angelina' Stonecrop
Sedum rupestre



Hardy Ice Plant
Delosperma cooperi

Hens & Chicks



Sempervivum spp.

Cactus



Opuntia spp.

Compact Growth Form

Use of 'Cultivars'



Sand cherry

Prunus pumila
(6 feet tall)



'Pawnee Buttes'

Sand cherry

(3 feet tall)

© Plant Select (Colorado Based)

'Pawnee Buttes'



'Spitfire' Quince



Chaenomeles speciosa

Oak Leaf Sumac



Rhus trilobata
(6 – 12 feet tall)

Sumac 'Cultivars'



'Autumn Amber'

Sumac

Rhus trilobata

(2 feet tall)



'Gro-Low' Sumac

Rhus aromatica

(3-4 feet tall)



Informational sign with a small image of a plant and text, likely providing details about the surrounding vegetation.

Plant Types

Succulents

More Fire Resistant

Ground Covers

Turf

Vines

Annuals

Perennials

Deciduous Trees

Shrubs

Grasses

Conifers

Less Fire Resistant

Plant Attributes & Rating Fire Resistance

✓ Moisture Content



✓ Mineral Content

(Soap, Salt, Pectin, Latex)



✓ Volatile Oil / Resin Content



✓ Height / Compactness



Ranking Attributes



Mineral Content

(Soap,
Salt, Latex,
Pectin)

- ✓ High
- ✓ Medium
- ✓ Low



Soap lather from *Philadelphus* leaf



'Buckley's Quill' Mock Orange

Philadelphus hybrid

Moisture Content	Moisture Score	Mineral Content	Mineral Score	Height x Width	Height / Compactness Score	Volatile Oil/Resin Content	Volatile Score	Score For Fire Resistance
High	2.5	High	2	4' x 4'	2	Low	2.5	9

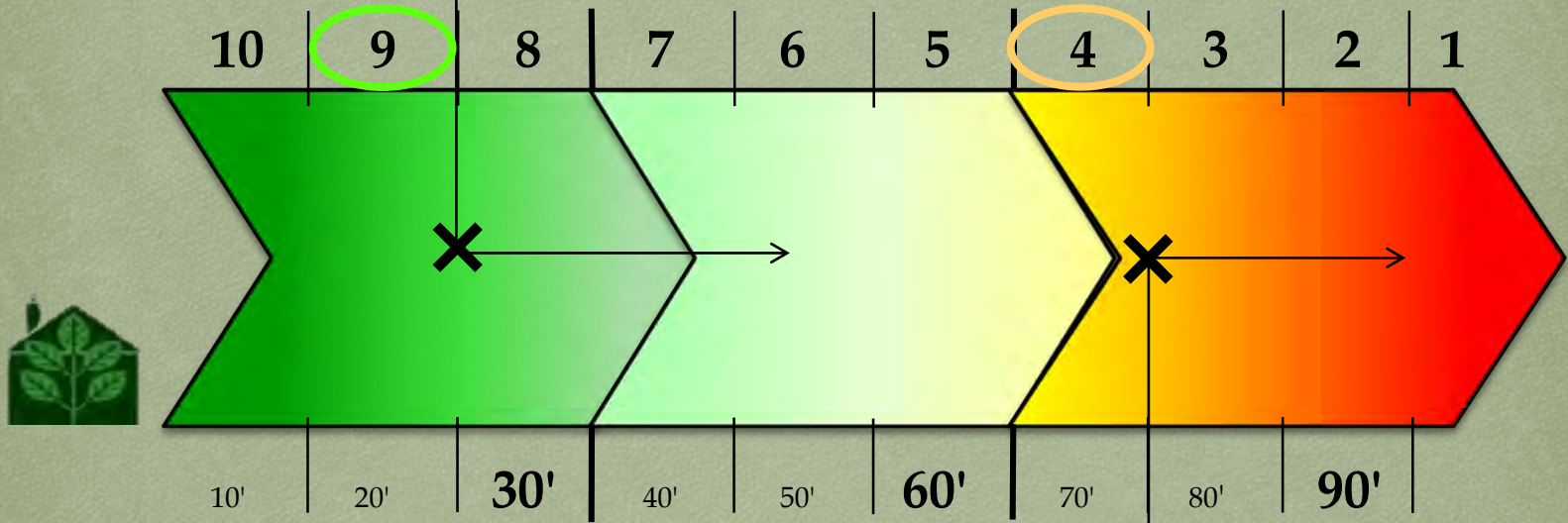


Saskatoon Serviceberry

Amelanchier alnifolia

High	2.5	Low	0	20' x 15'	-1	Low	2.5	4
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'Buckley's Quill'



Saskatoon Serviceberry

Flammable Plant Alternatives

PLANT THIS



'Autumn Amber'

Sumac
Rhus trilobata

Score
8

NOT THAT



Creeping Juniper

Juniperus horizontalis
Contains resins

Score
3

Alternatives

PLANT THIS



Rocky Mountain

Penstemon

Penstemon strictus

Score

8

NOT THAT



Russian Sage

Perovskia atriplicifolia

Contains oils

Score

2

'Walker's Low' Catmint



Nepeta x faassenii





Firewise Landscaping

Makes A Difference

There are not enough fire engines to be at every home during every wildfire.



Firewise landscaping and building materials may be the only defense for a home.

Idaho Firewise Garden Cooperative



In summary

- ☞ Fire-resistant **does not** mean **fireproof**
- ☞ Avoid invasive species when selecting plant materials
- ☞ Vegetation clearance, Firewise construction and roof composition are key to ignition prevention
- ☞ This presentation is based on research and professional judgment and is intended to serve as a guide.

It is not a guarantee!

For More Information

Firewise Websites:

idahofirewise.org

nfpa.org

fireadaptednetwork.org

nifc.gov