

Lake County Wildland Fire Risk Assessment



Working Partnership

🔥 Caroline Schaefer : Coalitions and Collaboratives, Inc



🔥 Leadville/Lake County Fire-Rescue



🔥 Colorado State Forest Service



Wildland-Urban Interface (WUI)

- 🔥 WUI is where homes intermix with the forest.
- 🔥 Fire in a WUI = danger to human life and property
- 🔥 63% of Lake County lives in rural areas, potentially threatened by wildfire

(Lake County CWPP)



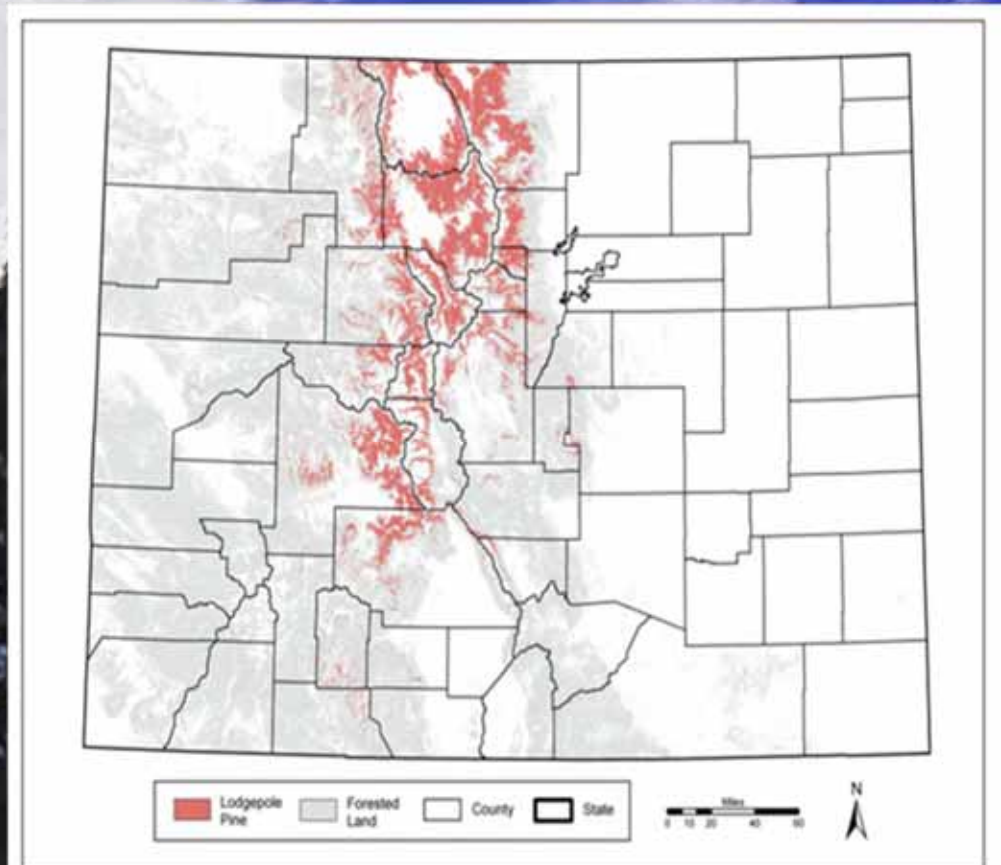
Wildfire in Lake County? It snowed last week...

Table 1: Historical Natural Fire Regimes

Fire Regime	Frequency (years)	Severity	Example of Areas in Lake County
I	0 – 35	Surface & mixed	Twin Lakes
II	0 – 35	Replacement	Beaver Lake Estates
III	35 – 100+	Surface & mixed	Twin Lakes, Hayden Meadow
IV	35 – 100+	Replacement	Leadville and surrounding area, Sylvan Lakes Subdivision, Outward Bound
V	200+	Replacement, mixed & surface	Higher elevations (starting at approximately 10,500 ft) throughout Lake County

Lodgepole Pine Fire Ecology

- 🔥 8,000 – 10,000 feet in elevation
- 🔥 Grow in uniform, dog-hair stands
- 🔥 Disturbance driven
- 🔥 Stand-replacing, crown fires
- 🔥 New forests regenerate quickly
- 🔥 Serotinous cones



Lodgepole Pine



Fire Behavior

Fire Triangle: Oxygen, Heat, Fuel

- 🔥 Combustion
- 🔥 Control one you control it all!

Fire Behavior Triangle:

- 🔥 Topography: Slope & Aspect
- 🔥 Weather: Wind speed, Temperature, Relative humidity
- 🔥 Fuel: loading (aerial, surface, ground)
1-, 10-, 100-, 1000- hour surface fuels,
Arrangement, Moisture content



How Does Fire Spread?

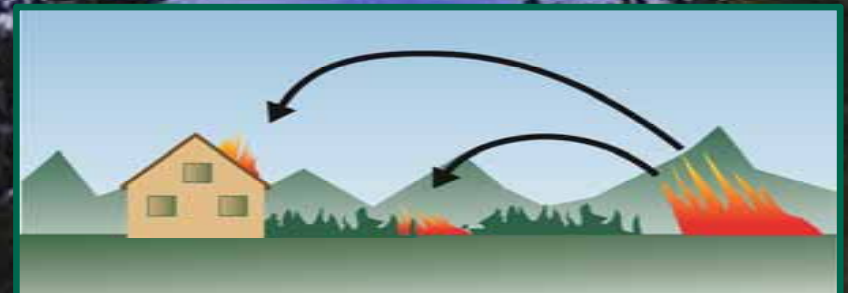
🔥 Three ways:

🔥 Direct flame contact

🔥 Radiated heat

🔥 Flying firebrands

🔥 Fire can create its own weather conditions, winds carry embers



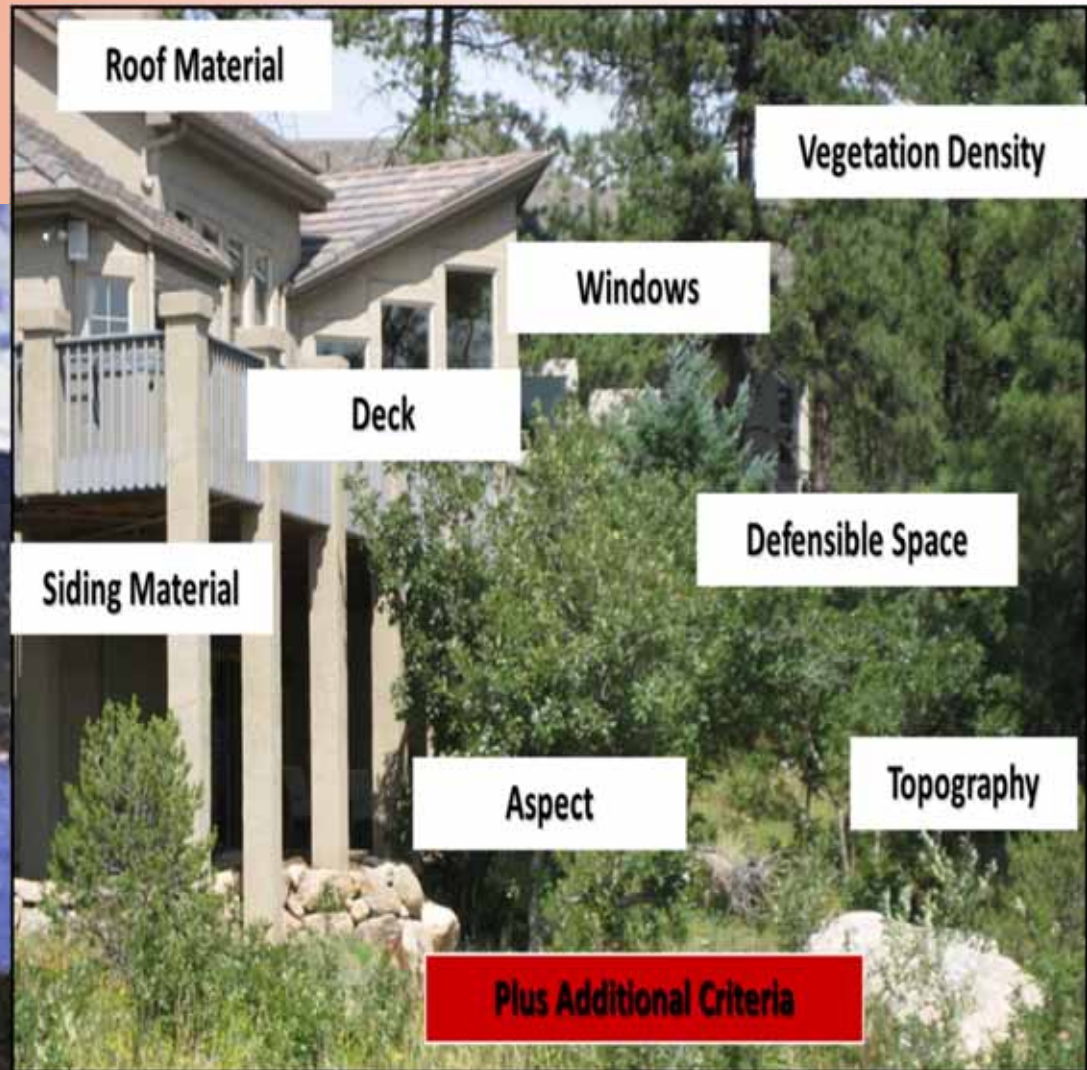
How Does Fire Spread?

- 🔥 Vertical/Ladder Fuels
- 🔥 Shrubs and low branches that allow fire to climb to the tree canopy
- 🔥 Surface Fuels
- 🔥 Logs, branches, slash, wood chips, pine needles, grasses
- 🔥 Crown Fuels
- 🔥 Tree canopies burn quickly and intense



Home Assessment

- 🔥 Roof
- 🔥 Vents
- 🔥 Siding
- 🔥 Vulnerable Structure Pieces
- 🔥 Deck
- 🔥 Vegetation



Home Assessment



CSFS Wildfire Risk Rating Key

Date	<input type="text"/>
Collector	<input type="text"/>

Category	Observed Condition	Points
Address Visible	Posted and reflective	0
	Posted, NOT reflective	5
	Not visible from road	15

Access	Two or more roads in/out	0
	One road in/out	10

Slope	Less than 20%	0
	Between 20%-45%	20
	Greater than 45%	40

Back Ground Fuels	Light	25
	Moderate	50
	Heavy	75

Defensible Space	Greater than 100'	0
	Between 30'-100'	50
	Between 10'-30'	75
	Less than 10'	100

Structure Triage	
Overall Total Rating	Action
Low	Standalone
Moderate	Prep and Hold
High	Prep and Leave
Very High	Prep and Leave
Extreme	Rescue Drive By

Category	Observed Condition	Points
Roofing Material	Class A: non-combustible	0
	Class B or C: Combustible (wood)	200

Building Exterior	Non-combustibles	0
	Log, heavy timbers	20
	Weathered wood, vinyl	60

Other Combustibles	None, greater than 30' from structure	0
	Between 10'-30' from structure	10
	Less than 10' from structure	30

Decking and Fencing	None	0
	Non-combustible deck/fence attached	20
	Combustible deck/fence attached	50

Water Source	Yes	0
	No	20

Other	None	0
	Low	10
	Medium	20
	High	30

Total Rating	<input type="text"/>
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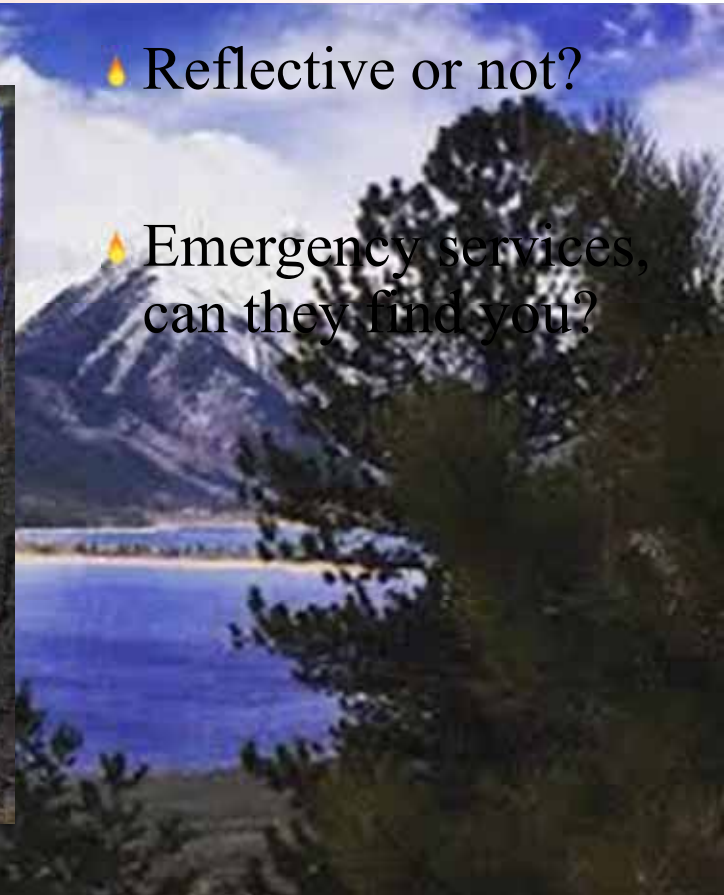
Overall Total Rating	Min	Max
Low	25	150
Moderate	151	225
High	226	250
Very High	251	349
Extreme	350	630

Address Visible



🔥 Reflective or not?

🔥 Emergency services, can they find you?



Access

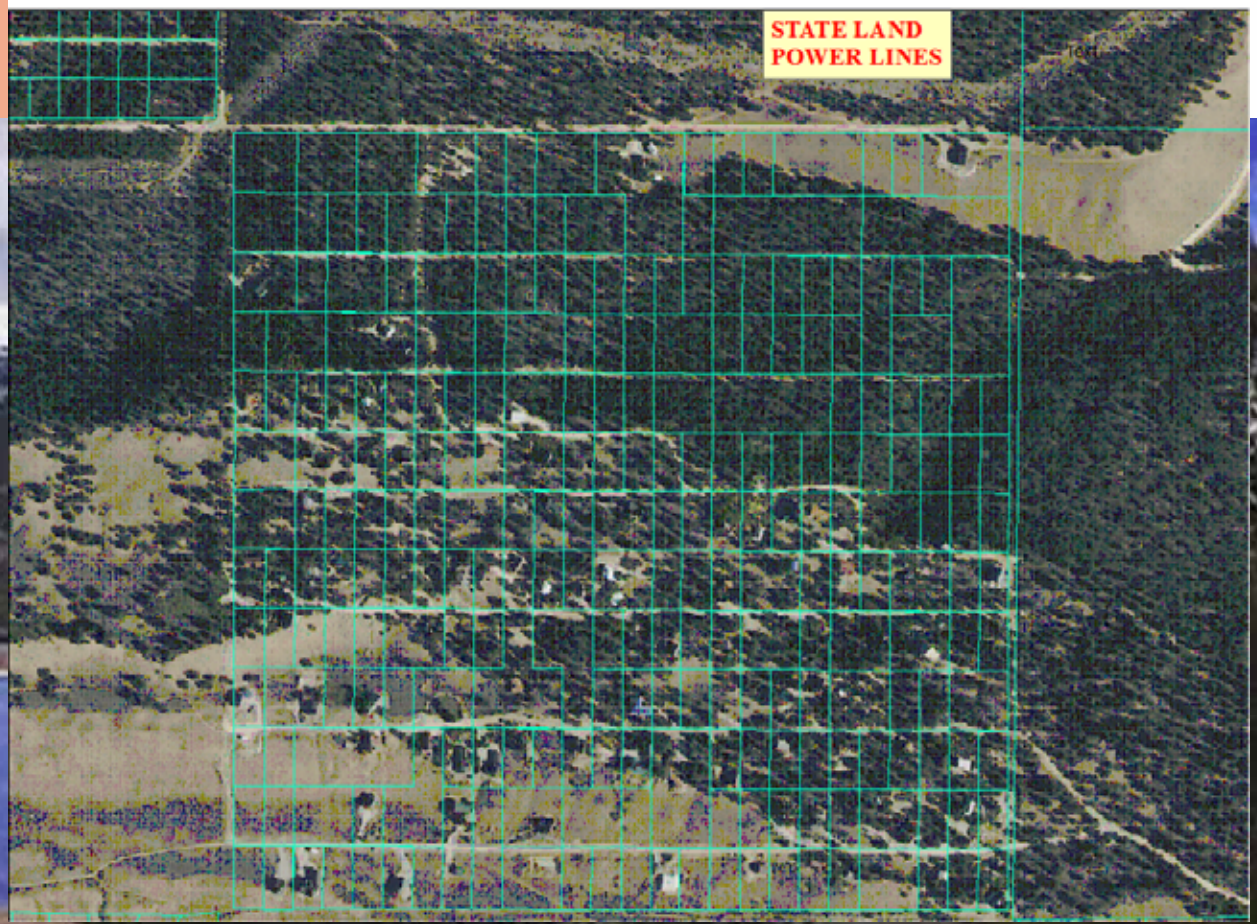
🔥 Home location

🔥 Street Access

🔥 Ingress egress

🔥 Firefighter Safety

Pan-Ark Lower 1/3



Defensible Space- Zone 1

- 🔥 Extend out to 15-30 feet
- 🔥 Remove as much vegetation as possible
- 🔥 Install nonflammable ground cover within the first 5 feet of home
- 🔥 Widely spaced, low-growing shrubs are okay
- 🔥 Don't plant under windows! Don't plant junipers
- 🔥 Prune and maintain shrubs
- 🔥 Irrigate grasses and vegetation
- 🔥 Mow grasses to 6 inches or less in height
- 🔥 Ideally, no trees in zone 1
- 🔥 Remove debris from gutters/roof



Defensible Space- Zone 2

- 🔥 Designed to lessen fire intensity as it approaches your home
- 🔥 Extend to at least 100 feet
- 🔥 Work with adjacent property owners if necessary
- 🔥 Firewood piles/propane tanks located here (not in Zone 1)
- 🔥 Use roads or other barriers as fuel breaks
- 🔥 10 feet between trees and other vegetation
- 🔥 Prune trees and vegetation
- 🔥 Mow grasses to 6 inches in height or less
- 🔥 Decorative landscaping (rocks, stones, etc)



Defensible Space- Zone 3

- 🔥 100 feet +
- 🔥 Proactively manage your forest to reduce wildfire intensity, protect water quality, improve wildlife habitat, boost the health and growth rate of your trees, and increase tree survivability during a wildfire



The Goal:

**Remove
continuous
and ladder
fuels**



Roofing Material



Building Exterior

- 🔥 Non-combustible
- 🔥 Log, Timber
- 🔥 Weathered wood, vinyl



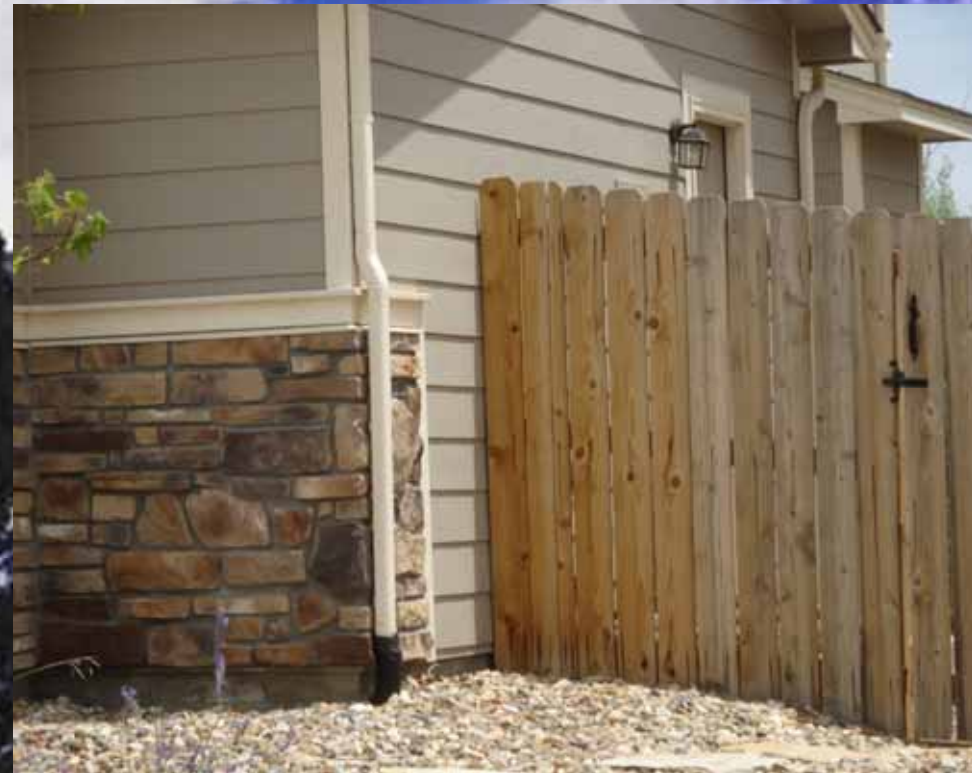
Attached & Detached Structures

🔥 Combustible
(wood)

🔥 Non-combustible
(Trex)



Attached & Detached Structures



Firebrands (embers)



Water Sources

🔥 Water sources in relation to structures



Other



Pan-Ark Estates Mitigation

Before



After



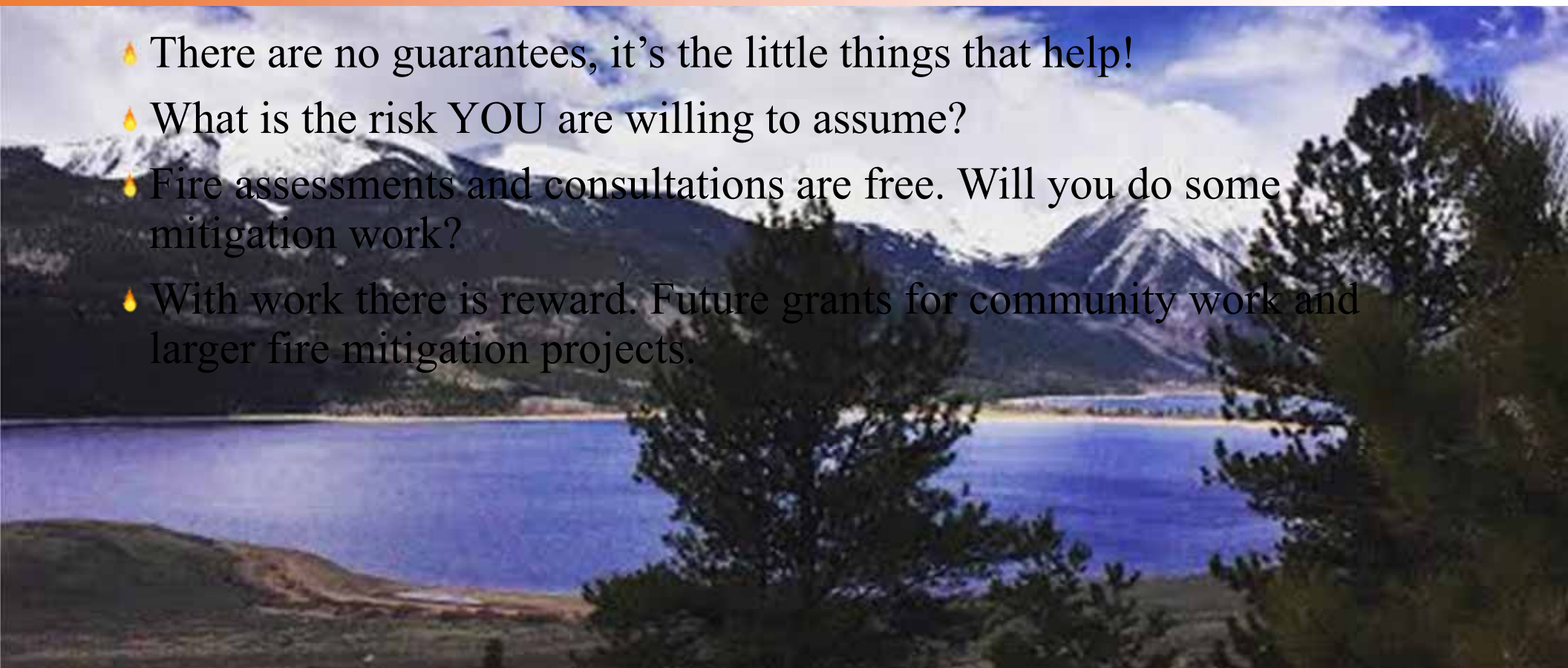
What's the point?

- 🔥 Protect homes and communities
- 🔥 Encourage healthy forested landscapes
- 🔥 Reduce risks for firefighters and emergency service responders



Prevention is KEY, but.....

- 🔥 There are no guarantees, it's the little things that help!
- 🔥 What is the risk YOU are willing to assume?
- 🔥 Fire assessments and consultations are free. Will you do some mitigation work?
- 🔥 With work there is reward. Future grants for community work and larger fire mitigation projects.



Chipping Program



Wildland fire in Lake County isn't a matter of if it'll happen, but when will it happen . Let us be fire wise and prepared!



Burning Questions???
Thank you for your time!



Click on the image to enlarge

THICKWOOD HEIGHTS 201 SIMCOE WAY

3 BR/3 BA Own this beautiful home in spacious Thickwood Heights, slight smoke damage and charred liv

Large outdoor BBQ area with natural fire source.

Act fast on this SMOKIN deal! Sizzling opportunity for the new homeowner!

For Sale by Owner, \$249,999

Area:	Thickwood Heights	Address:	201 Sim
Bedrooms:	3	Bathrooms:	
For Sale By:	Owner	List Price:	
Open House Date:	2016-05-07	Open House Start Time:	

Wildland Fire Preparedness Resources

- 🔥 <http://www.firewise.org> Fire Wise
- 🔥 <https://disastersafety.org/wildfire/> Insurance Institute for Business & Home Safety
- 🔥 <http://www.wildlandfirersg.org/> Ready, Set, Go
- 🔥 <http://csfs.colostate.edu/wildfire-mitigation/> CSFS Fire Mitigation



Questions & Concerns

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