

Colorado Wildland Fire Conference Pueblo, CO 2017



Schelly Olson, Grand County Wildfire Council / Grand Fire



Paul Cada, Wildfire Program Administrator for Vail Fire



Jeremy Taylor, Fuels Program Coordinator for Colorado Springs



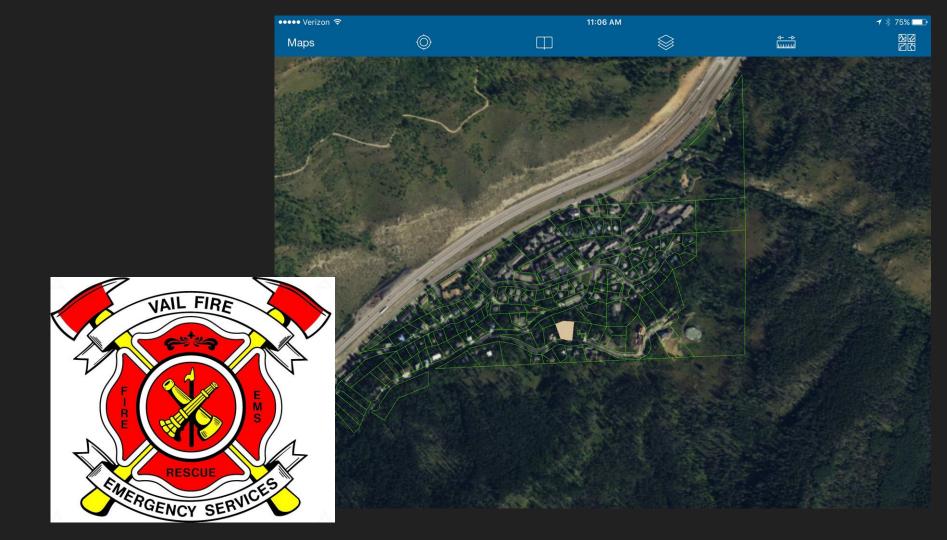
Lilia Falk, Director of the West Region Wildfire Council



Clark Woodward, Chief Technical Advisor for Boulder Wildfire Partners



Eric Lovgren, Wildfire Mitigation Specialist for Eagle County



Property Address:	Parcel ID:	Date:
Mailing Address:	Property Owner Name:	Evaluator:

Informational	General Slope of Area	0-9%	10-20%	21-30%	31-41% >40%		
	Homes position on slope or proximity to features that adversely affect wildfire behavior	Bottom 1/3 of slope		Middle 1/3 of slope	Top 1/3 of slope, ridge top, addle or adjacent to steep canyon or box canyon.		
	Separation of structures that can contribute to fire spread/ behavior	30 feet or	greater	20-29 feet	Less than 20 feet		
	Architectural styles that contribute to home ignition	Complex	oof designs	Interior corners/ roof dormers	Large overhangs		

Unable Meets Does Not to Guideline Meet Assess Guideline

Built Zone- The structure itself

	UA	Non-combustible roof materials present
	UA	Non-combustible siding material present on 75% or more of the structure
uideline	UA	Deck Built with ignition resistant materials
pin	UA	Absence of combustible attachments (i.e. fences, window boxes, accessory buildings)
9	UA	Spark arrestor on chimneys
	UA	4" or larger address displayed where it is visible from the road

Lean, Clean and Green Zone-Within 5 feet of structure

37	UA	Branches removed from within 10 feet of the structure
ii.	UA	Leaves, needles and other flammable materials removed from gutter and roof
Guideline	UA	Leaves, needles and other flammable materials removed from on top and beneath decks, steps and overhangs
	UA	No plants, leaves, needles and other flammable material within 5 feet of structure

Wildland Fuel Reduction Zone- Within 100 feet of the structure

	UA	Grass mowed to 4 inches or less in height							
	UA	Trees thinned to spacing guidelines on back							
ideline	UA	Shrubs thinned spacing guidelines on back							
	UA	Flammable brush removed from beneath trees							
B	UA	Trees limbed to a minimum of 6 feet above ground (10 feet desired, do not limb more than 1/3 of the total height of the tree)							
	UA	Dead or dying material removed from the lower 10 feet of all trees and bushes							

Vali Fire and Emergency Services has conducted a wildfire home hazard evaluation of your property. Following these recommendations will help your home survive in the event of a wildland fire. For more information refer to the http://www.valigov.com/departments/fire/wildland

Wildfire will threaten your house in three ways:

- Contact by Flames: This type of threat occurs when vegetation and other fuels burning near the house produce flames that come in contact with the home and ignite it. Often it happens when fire burns through a uniform layer of vegetation right up to the house. It is important to reduce wildland vegetation on the property to reduce this treat.
- Radiated Heat: Radiated heat is produced by electromagnetic waves that travel out in all directions from a
 flame. When a house receives enough radiated heat for a sufficient amount of time it will ignite. Sometimes
 radiated heat can burst windows and allow burning embers to enter the house. It is important to construct
 homes with fire resistant materials to reduce this threat.
- Flying Embers: More houses burn due to flying embers than any other reason. If fire conditions are right,
 embers can be lofted high into the air and transported more than a mile. Burning embers can also be carried by
 wind and fire whirls. If these burning embers land in easily ignitable materials a new fire can start. Wood shake
 roofs are especially vulnerable to ember ignition. It is important to remove flammable materials on and near
 homes such as pine needles, wood piles and shrubs, to reduce this threat.

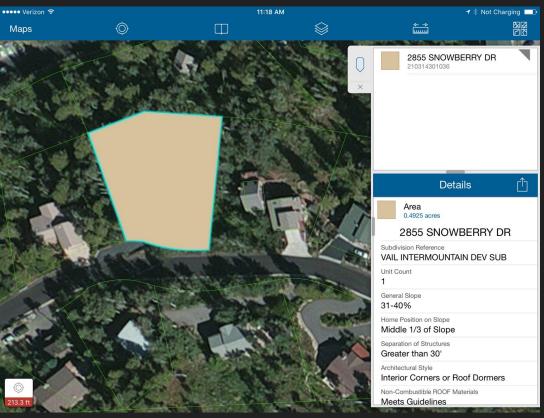
Shrub Spacing Guidelines

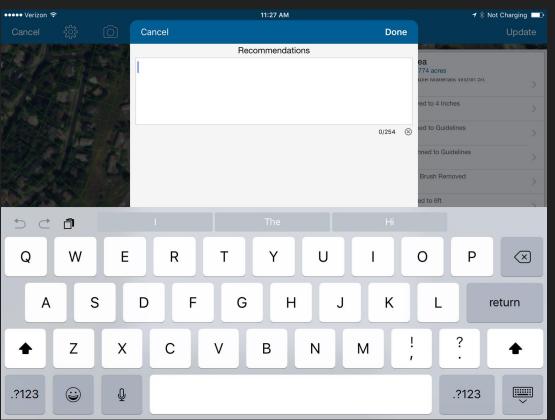
- 0-5 feet from the structure: There should be no combustible vegetation in this zone. Water-dependent and
 irrigated vegetation is acceptable if kept free of dead needles, leaves and debris.
- 5-30 feet from structure: Vegetation in this zone should be limited to single, well-spaced specimen plants. No
 dead vegetation should exist in this zone. If you decide to allow some flammable brush to remain such a juniper
 bushes, they must be thinned and maintained to the extent that it cannot transfer fire to the structure or other
 vegetation. These specimen plants should not be left under the drip line of any overstory trees in this zone.
- Beyond 30 feet from the structure: Flammable brush in this area should be removed from under the drip line of
 any trees. A good rule of thumb for thinning brush in open areas is to create a distance between shrubs of twice
 the height. For example, if a shrub is 3 feet high than the distance to the next shrub should be at least 6 feet.
 This spacing should increase as slope of the lot increases.

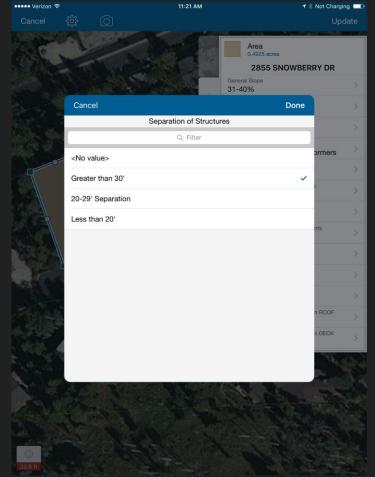
Tree Spacing Guidelines

- O-5 feet from the structure: No trees or branches should be within this zone. Trees and branches should not
 touch or overhang the structure. If trees must be kept in this zone they should be limbed up a minimum of 10
 feet and be free of dead limbs. needles and leaves.
- 5-30 feet from structure: A few Individual well spaced trees can be kept in this zone. All trees in this zone should be limbed to a height of 10 feet, but never prune branches on more than 1/3 the total height of the tree.
- 30-100 feet from the structure: Trees in this zone should be well spaced and maintained. Trees should be
 spaced an average of 10 feet from drip line to drip line of the trees. Small clumps of trees can be left if desirable.
 Treat each clump as if it were a single tree and create spacing between the clumps. All dead and diseased trees
 in this zone should be removed.
- A permit is required for the removal of all trees in the Town limits. Permits can be obtained from the Town Community Development Department at 75 S Frontage Rd W. or 970-479-2138.





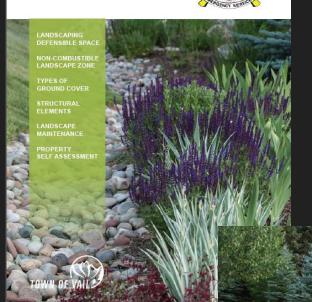




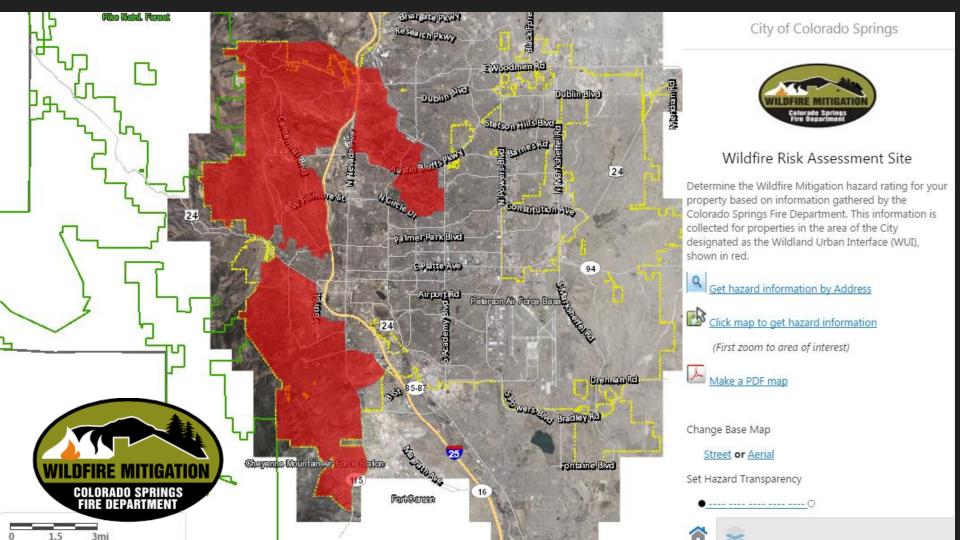
FIRE-RESISTANT LANDSCAPING

A "how to" guide for protecting your home



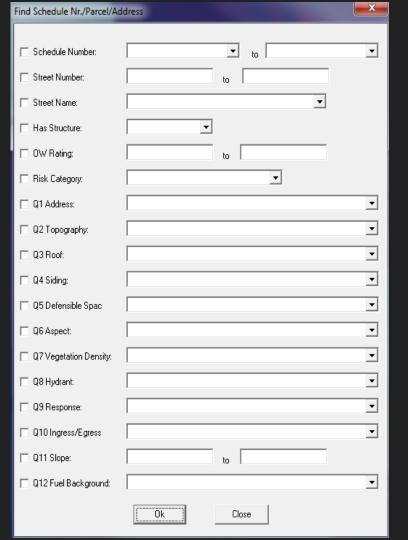




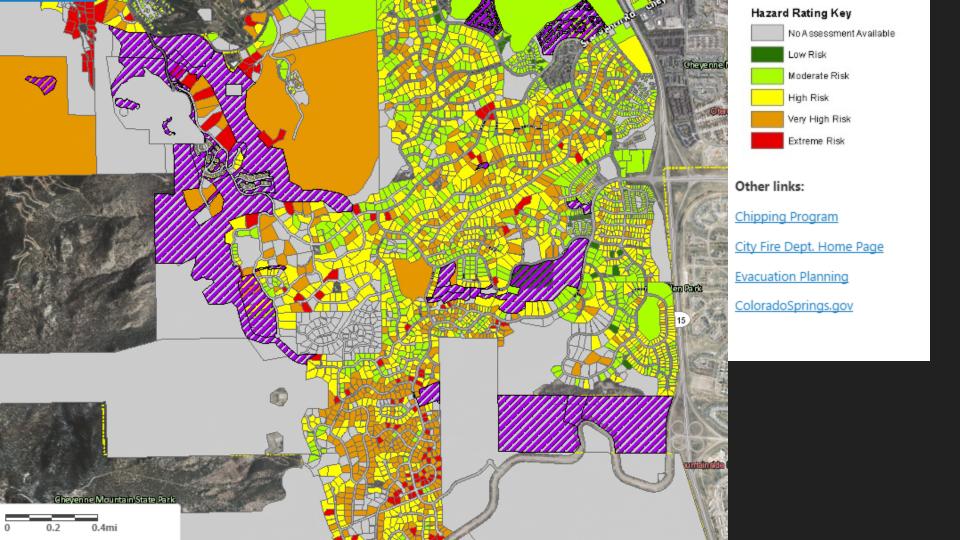


WHINFOE Model

Wildfire Hazard Information Extraction Model









Wildfire Hazard Rating Report

Address

160 BALMORAL WAY

Building/Lot Identification

Typical city address plate displayed

Distance Between Structure and Chimney, V-Canyon, Saddle, or Ridgetop

Predominant Roofing Material

Class A/Non-combustible

Predominant Siding Material

Masonry, concrete, or stucco

Defensible Space Around Structure

< 20"

Vegetation Density

Moderately dense conifers and/or brush w/in 30' of structure

Weighted Rating

4

Risk Category

VERY HIGH

Last Rating Date

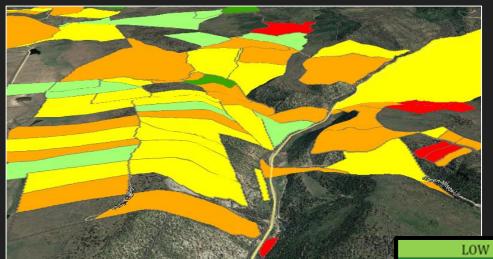
6/17/2010 12:00:00 AM

No A ssessment Available Low Risk Moderate Risk High Risk Very High Risk Extreme Risk





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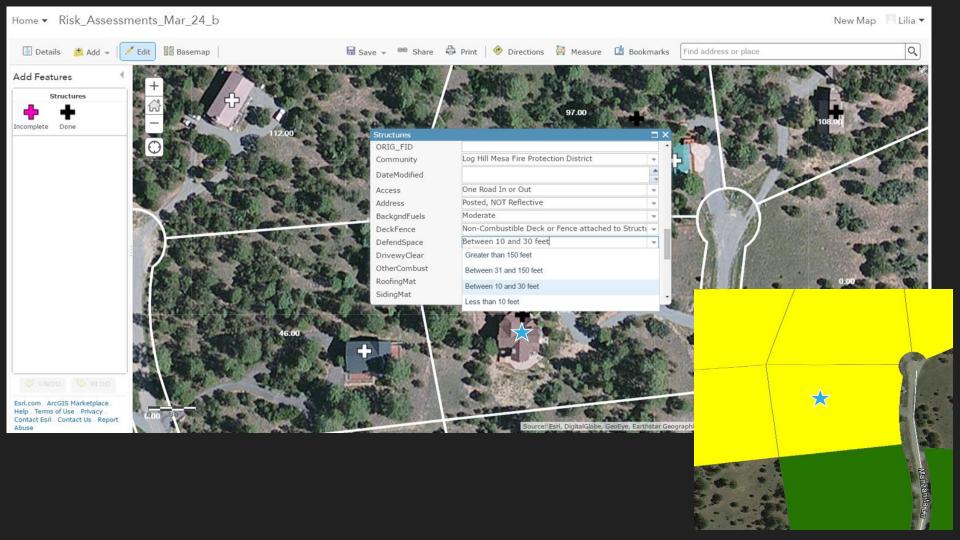


- 1. Posted, reflective addressing
- 2. Ingress/egress
- 3. Driveway width
- 4. Distance to dangerous topography
- 5. Background fuel
- 6. Slope
- 7. Defensible Space
- 8. Roofing Material
- 9. Building exteriors
- 10.Location of other combustibles
- 11.Decking & fencing













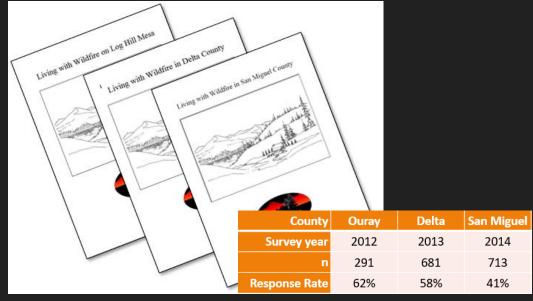












Most agree mitigation is effective and would be willing to remove trees.



77%

Said specific information on what needs to be done would encourage them to reduce their risk.



43%

Said financial assistance would encourage them to do mitigation.



Working Together to Reduce Wildfire Risk



October, 2016

Dear Cedaredge Resident,

We recently sent you a letter about wildfire risk. We are reaching out again to encourage you to learn more. Our outreach is part of a shared effort between the Cedaredge Volunteer Fire Department and the West Region Wildfire Council (WRWC) to help residents reduce the risk of losing their homes to a wildfire. We all need to work together to reduce our risk from wildfire.

As part of the 2014 Community Wildfire Protection Plan, WRWC conducted a wildfire risk analysis in your area to determine how residents can be better prepared in the event of a wildfire. We thought you might be interested in the following information about your wildfire risk:

Your community's overall wildfire risk is rated as: HIGH

Your own property's wildfire risk rating is: VERY HIGH

The average wildfire risk rating of your ten closest neighbors: HIGH

LOW

MODERATE

HIGH

VERY HIGH

EXTREME

West Region Wildfire Council has additional information about your property's wildfire risk and what you can do about it. To learn more, you can visit a website built and maintained by WRWC that is specific to your home.

Go to (www.COwildfire.org/myhome) and type in this code when asked: AA123

To learn more about programs and funding available to assist you in your efforts to reduce your wildfire risk, please contact Jamie Gomez, Mitigation & Education Coordinator for Delta County at (970) 615-7300.

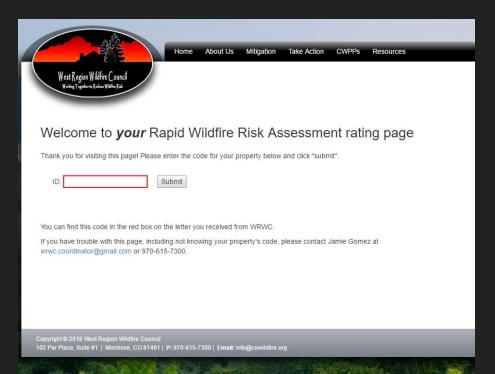
This is the second letter that we have sent out related to wildfire risk. If you received the first letter, have already viewed your property specific website and do not have any further questions you may disregard this letter. Thank you for your time.

Sincerely,

Iamie Gomez

Mitigation & Education Coordinator West Region Wildfire Council Bob Starr Fire Chief

Cedaredge Volunteer Fire Department







Welcome to your Rapid Wildfire Risk Assessment rating page

In 2013, the West Region Wildfire Council (WRWC) conducted a Rapid Wildfire Risk Assessment of every Wildland Urban Interface (WUI) dwelling within your fire district. This page shows results for:

21932 2225 RD CEDAREDGE, CO.

Properties were assessed from public roads and/or driveways. Each home was assessed in eleven categories, organized by theme:

- Background Risk Factors
- Home Hardening
- Defensible Space
- Emergency Access

Results shown are specific to your home and property. Photos are for general information only and do not show your specific property. A summary of the cumulative risk factors is shown at the bottom of this page, followed by contacts for information on taking action to reduce your wildfire risk.



THEME A: Background Risk Factors

Background fuels	Light	Moderate	Heavy
	Consists mainly of grasses and/or fuels less available to fire.	Consists mainly of light brush and/or isolated trees that are available to fire. Fuel loading and distribution will moderately contribute to extreme wildfire behavior.	Consists mainly of dense brush and/or dense trees that are available to fire. Fuel loading and distribution will significantly contribute to extreme wildfire behavior.
Your property's rating:			_



The proximity of a home to certain topographic features may significantly impact that home's survivability during a wildfire. Such features include over-steepened slopes, chimneys, drainages, gullies, narrow canyons, ridges, etc. These features are areas where wildfires can move quickly, increase in wildfire intensity and impact wildfire behavior. This is as an approximate measure of the proximity of your home to any such topographic feature.















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Greater than 150'	Between 50' - 150'	Less than 50'
<u> </u>		

THEME B: Home Hardening



Roofing assemblies have been shown to have a dramatic impact on the ignitability of a home during a wildfire event. The materials that compose the roof, the design and orientation of the roof line in relation to exterior walls as well as the construction assembly of the roof all impact the roof's overall vulnerability to ignition during a wildfire. Click here for more information on roof ratings (link opens a .pdf).

Class A Roof Assembly	Class B, C, or Unrated Roof Assembly
<u> </u>	



Your property's rating

The design, materials and construction assembly of a structure's exterior walls also have an impact on the ignitability of home during a wildfire event.

Non-combustible	Log, heavy timbers	Wood, vinyl, or other combustible material
<u> </u>	0	



Combustible materials that are in any way attached to the main structure present a significant ignition vulnerability. Decks and fencing present a significant hazard due to the expansive horizontal surfaces that are exposed to both wind driven embers (from above) as well as convective and radiant heat from the side and below.

Control of the last of the las			
And the second s	None	Non-combustible deck with a fence attached to the structure	Combustible deck with fence attached to the structure
Your property's rating:	_		



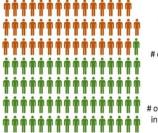
Other combustible materials that are within Zone 1 (0-30 feet) of the defensible space zones of your home present an additional ignition vulnerability. Any material that is combustible is considered during the assessment period. Common examples of combustible materials include wicker patio furniture, ornamental decorations, firewood, kindling, bark mulch. None within 30 feet of Combustibles observed Combustibles observed





2016 Wildfire Mitigation Activities



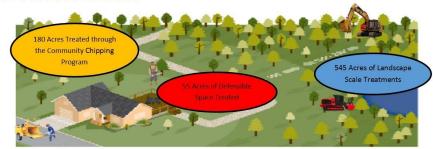


of total site visits

of site visits that resulted in the design of a project

780

ACRES TREATED AFFECTING 332 HOMES



















WRWC Cost Share Funds vs. Landowner Hard Match Funds



LANDOWNERS CONTRIBUTED 2,027 HOURS IN-KIND, WHICH IS A TOTAL OF 84 DAYS

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THIS ACCOUNTS FOR AN IN-KIND CONTRIBUTION OF \$52,621

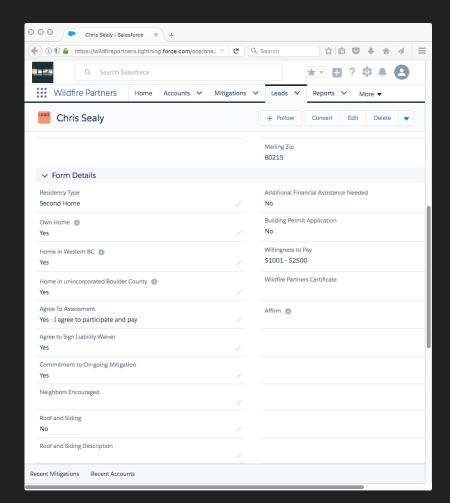
WILDFIRE MITIGATION CHECKLIST Good Job! No mitigation is necessary at this time. For details and photographs of the required Mitigation is recommended in this area. and recommended mitigation, please see the Mitigation is required to obtain certification. page numbers listed. Check this box when ROOF & EAVES (Page 5) completed. The roof edge is free of gaps and protected from ember penetration. Mitigate openings, cracks, or gaps in the roof that are larger than 1/8 inch. Dormers and other complex features are properly mitigated. The roof is free of combustible debris. The roof edge is protected by metal flashing and gutters are noncombustible. The eaves are properly mitigated. EXTERIOR WALLS, SIDING, & OPENINGS (Page 6) The siding is free of gaps, holes, or areas where embers could accumulate. Combustible components of the siding are properly protected from ignition. Your Specialist identified one or more vents to mitigate. Overhangs and other exposed areas are properly protected. All other openings are properly mitigated. DECKS, PORCHES, & STRUCTURE ATTACHMENTS (Page 7) Wood fences attached to the structure are properly mitigated. The area where the deck attaches to the structure is protected from ignition. The deck boards are in good condition. Remove combustible materials from the deck.

Wildfire Mitigation Checklist

All other strucural attachments are properly mitigated.



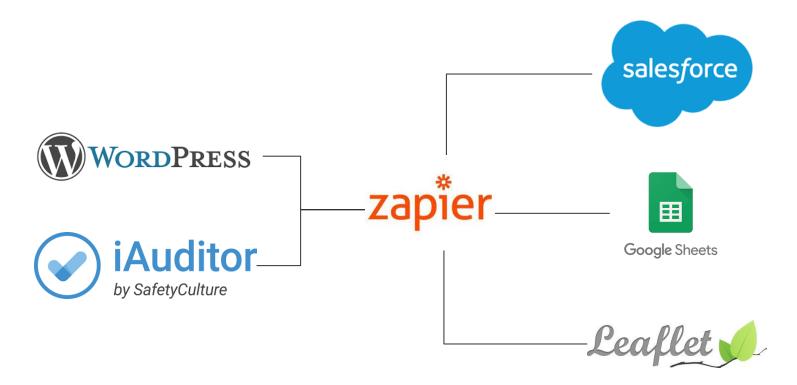
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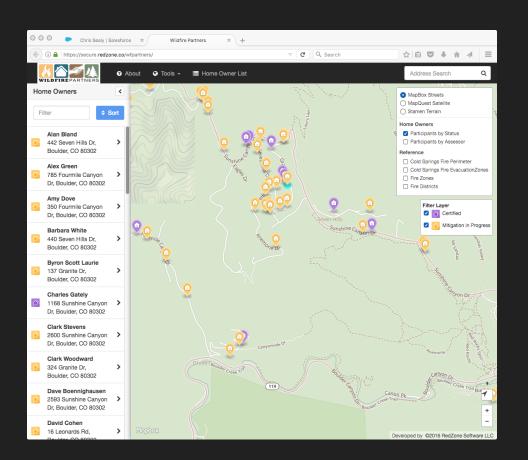














Metrics

- \$691/home program funding
- \$3,208/home (homeowner cashaverage)
- \$650 (homeowner cash-median)
- 66 hours (homeowner laboraverage)

What Is REALFire®?

Voluntary property assessment program in Eagle County

Promotes education and mitigation action

Reduces wildfire risk in the HIZ

Implemented at local level

Mobile assessment app (Android and iOS)

Database and web-portal





REALFire® Property Assessments

On-site professional assessment to identify wildfire vulnerabilities

Mobile assessment app with 50 attributes

Roof down, walls out approach

Roof and eaves

Sinding, vents & openings

Decks, porches, and fences

Garages and detached structures

Zone 1A (foundation - 5 ft)

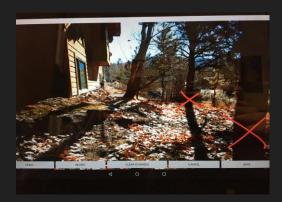
Zone 1 (5 - 30 ft)

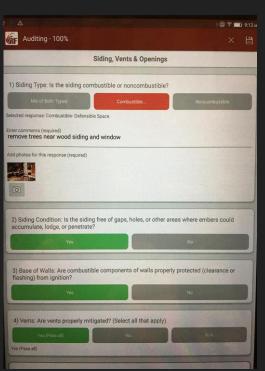
Zone 2 (30 - 150+ ft)

Emergency preparedness

ance coverage

Evacuation planning





REALFire® Detailed Report

Customized

Annotation feature

Uploaded from app

Admin approval

.PDF format

Access via website





Property Assessment

Prepared For

123 Any Street Town Of Vail

Last Updated Assessor's Email

June 28, 2016 Kelly Johnston

kelly@wildlandprofessional.c

kpjohnston73@gmail.com Current Status



All information collected within this application remains confidential and will not be shared with third parties without the explicit written nermission of the nonnerty owner

REALFire Property Assessment **Full Assessment Report**

Siding, Vents & Openings

Siding Type: Is the siding combustible or noncombustible?

Siding Condition: Is the siding free of gaps, holes, or other areas where embers could accumulate, lodge, or

Page 6 / 15

Base of Walls: Are combustible components of walls properly protected (clearance or flashing) from ignition?

Vents: Are vents properly mitigated? (Select all that apply). No-Gable

Required Actions: screen vent with 1/8 inch screen LP



Windows: Are all single-pane windows properly mitigated? (Select only one),?

Unenclosed floor area; Are overhangs and other exposed areas properly protected? (Select all that apply). Yes (Pass all)

All information collected within this application remains confidential and will not be shared with third parties without the explicit

REALFire® Outreach Tools – Realfire.net

Home / Application / FAQs / Program Participants / Resources / News

SHORTCUT

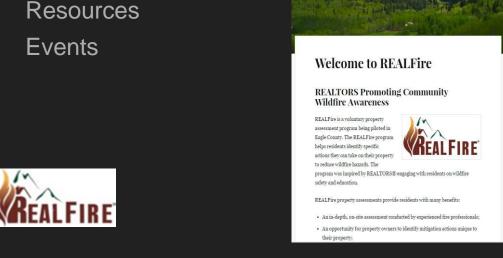
→ Home

- Application

+ Contact

+ Program Participants

Program Information Online Application Report Access Contact







FACO Sponsored Learning Exchange FACO

FIRE ADAPTED COLORADO

Dates: June 2017

Location: Eagle County, Colorado (classroom and field)

Purpose: A great opportunity for wildfire practitioners to share information about wildfire risk assessment tools/ apps.

FACO 'Core Members' will be provided with travel support and first priority for the

exchange.



Questions?

Schelly Olson, Assistant Chief, Grand Fire Protection District No. 1 / Chairperson for the Grand County Wildfire Council - solson@grandfire.org - 970.887.3380

Paul Cada, Wildfire Program Administrator, Vail Fire and Emergency Services - <u>pcada@vailgov.com</u> - 970.477.3475

Jeremy Taylor, Fuels Program Coordinator, Colorado Springs Fire Department Wildfire Mitigation Unit - itaylor@springsgov.com - 719.385.7281

Lilia Falk, Director, West Region Wildfire Council - wrwc.lilia@gmail.com - 970.729.1418

Clark Woodward, Chief Technical Advisor, Boulder Wildfire Partners - clark@redzonesoftware.com - 303.956.9864



FINALLY

An app that is actually useful.



DAMN... I wish there was an app for that! :D

KEEP
CALM
THERE'S
AN APP
FOR THAT!