

# HIDDEN DANGERS



*Dangers of owning property in  
the mountains & wildland  
urban-interface areas*

**JON BARRY**

# **HIDDEN DANGERS**

**BY**

**JON BARRY**



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Ember Alert book publishes this book to attract new customers. This book is designed to give new customers an overview of how dangerous wildfires are and how to mitigate the dangers by doing a few steps on their property. The Exterior Fire Protection System and working with your insurance agent will reduce the risks of losing everything to a wildfire.

# HIDDEN DANGERS

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# HIDDEN DANGERS

## WHY SHOULD YOU READ THIS BOOK?

No one wants to experience the loss of a home or business to fire. Beyond the stress and inconvenience of rebuilding, some victims of fire find themselves living in temporary housing like hotels, RVs, or with family members. Consequently, fire destroys more than just homes and precious items; it can cause upheaval in every part of life. Thankfully, there are ways to reduce homeowners' chances of experiencing the devastation a fire can cause. This book covers not only the Exterior Protection System, but also the hidden dangers of owning property in the mountains and wildlife urban-interface areas. Additionally, readers will learn ways to prevent damage from fire including the importance of creating defensible space around the home. Combining this valuable information with an exterior fire protection system will give property owners the best protection on the market.

## How would a fire impact your life?



This book is for people who live or plan to purchase personal or commercial property in wildfire-prone areas and wildlife urban-interface areas. A migration of people moving to the wildfire-prone and wildland urban-interface area has caused an increased chance of wildfires, as 88% of all wildfires are human-caused. Although homeowners have limited options to protect property from wildfires, 1472 Protection is a state-of-the-art Exterior Fire Protection System that increases protection against wildfires and is the best option for protecting property. The Exterior Fire Protection System is a 2-stage system built on the exterior of structures and built into the ground giving a defensible area from wildfires. Not only do homeowners get peace of mind that their investment is protected, but they can also benefit from reduced insurance premiums. The Exterior Fire Protection System provides clients satellite, cellular, and internet monitoring so that the home is protected whether residents are present in the home or not. 1472 Protection contacts the client if there is a wildfire in the area and then closely monitors the fire and is ready to activate the system when needed.

***Get peace of mind, lower insurance premiums, and a home protected from fire!  
Call 1.800. 284.3038 today to set up an appointment.***

# HIDDEN DANGERS

## INTRODUCTION

As you prepare for evacuation, walls of flames sweep towards your property faster than you could ever imagine; you feel helpless as you drive away because there seems to be nothing you can do but pray that the fire will spare your home or business. But, you are not helpless! 1472 Protection can help you fight against that wall of flames, even after you have evacuated to safety, and provide assurance that your property will not be destroyed by wildfire.

People move to the mountains for the beautiful, serene surroundings, but there are dangers that come with living in the mountains. These visually appealing surroundings can contain hazards that increase the chance of losing a structure to fire. Because of these hazards and the increased number of people moving to fire-prone areas, it is now more difficult to get insurance for homes and businesses in these areas. 1472 Protection was created in 2020 to help people protect their property beyond what local fire districts can provide, while making insurance on these higher-risk structures more affordable.

Growing up and living along the northern Front Range of Colorado for over 40 years, the owner of 1472 Protection has seen many wildfires and knows the devastation left in their wake. In the historic 2020 wildfire season, the state of Colorado had its three largest wildfires on record with Cameron Peak, Troublesome Creek, and Pine Gulch. The loss of 800 structures to the Cameron Peak and East Troublesome Fire cost hundreds of millions in insurance claims. This does not tell the story of the people whose lives were forever changed by their loss. 1472 Protection was created to help protect property from wildfires and people from the burden of starting over.

## How can 1472 Protection help you?

The 1472 Protection team has over 63 years of experience working with wildfires and constructing sprinkler systems including 30 years of experience in firefighting and wildfire fighting. Additionally, our construction crew has over 20 years of building experience. Assuredly, 1472 Protection is well versed in how to protect your property from wildfires.

1472 Protection goes above and beyond to protect your property. We will begin with a property assessment where we identify what is needed to achieve a defensible area around your structures. This assessment will include recommendations for tree, shrubbery, and fencing that pose a potential danger. Not only do these items become fuel for a fire, but trees that catch fire too close to a home could fall on the home causing irreparable damage and allow the fire to move past the protective gel provided by the Exterior Fire Protection System. Removal of these items is the first line of defense to protect your property.

Next, is the installation of The Exterior Fire Protection System which is a 2 stagesatellite self-contained system that will increase protection against wildfires. The fire system is custom-designed to fit each property. When activated, the system sprays a protective gel over structures and creates a water dome to keep temperatures down.



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## CHAPTER 1

### WHAT CAUSES WILDFIRES

#### **What causes a natural wildfire?**

A natural wildfire is Mother Nature's way of cleaning up a forest. It is mainly caused by lightning, volcano eruptions, and lava flow. Although we usually consider fire to be destructive, fire removes low-growing underbrush, cleans the forest floor of debris, opens it up to sunlight, and nourishes the soil. Reducing this competition for nutrients allows established trees to grow stronger and healthier. Fire clears the weaker trees and debris and returns health to the forest. With the beetle kill in Colorado and the western United States, these natural occurrences clean up the forest and allow for a more substantial forest to grow in its place.

#### **What causes most wildfires?**

Although fire is nature's way of cleaning up, most fires are caused by people. Around 88 % of wildfires over the past two decades were caused by human actions, such as throwing out lit cigarettes, not adequately extinguishing campfires, setting off fireworks, shooting guns, or driving vehicles that can spark dry grass.

#### **What causes wildfires to last longer?**

The increasing migration of people, plus laws restricting loggers from cleaning up the underbrush and infected beetle kill trees which become fuel for fires, has increased the wildfire season since 1980.. The wildfire seasons now last 76 days longer than in the 1970s and 1980s. Before 1986, the average wildfire lasted eight days. Since then, the average wildfire has burned for 37 days or longer, depending on the terrain.

#### **Why is the fire season longer?**

Wildfire season has become longer based on conditions that allow fires to start and burn—winter snows are melting earlier, and rain is coming later in the fall. These conditions make wildfires harder to control and allow forests to hold fire longer.

#### **How long is the wildfire season?**

What the US Forest Service once characterized as a four month long fire season starting in late summer and early autumn now stretches into six to eight months of the year. Wildfires are starting earlier, burning more intensely, and scorching swaths of land more extensive than ever before.

In Colorado, in addition to being in a drought, the climate is changing to a warmer average temperature year-round. With these changes, the wildfire season lasts about two months longer. In 2021, wildfires in Colorado still burned in December, a month longer than the average wildfire season.

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Wildfires burn longer because root systems still smolder, and it takes several feet of snow to cover the fire area and colder temperatures to ensure the root system is fully extinguished. Once the fire is out on the surface, it could be burning below the surface within the root system. Consequently, the Cameron Peak fire wasn't declared extinguished until February of 2021.

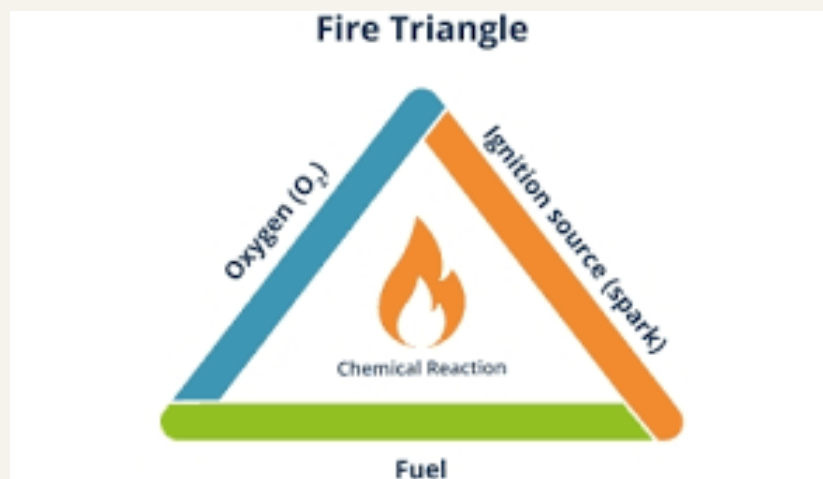
## Will global warming produce more frequent and more intense wildfires?

There isn't a direct relationship between climate change and fire. Still, researchers have found strong correlations between warm summer temperatures and extensive fire years, so there is a consensus that fire occurrence will increase with climate change.

Climate models tell us that average summer temperatures will continue to increase through this century, but ignition is the wild card. However, hot, dry conditions do not automatically mean fire—something needs to create the spark and start the fire. What will happen in the future is a more complicated story because we don't understand what will happen with convective storms and lightning.

**What starts a wildfire?** You need 3 things to start a wildfire; this is called the fire triangle:

- Fuel- Trees, Leaves, Pine Needles, Grass and Weeds
- Oxygen
- Ignition- Lighting, Fireworks, Cigarette Butts, Campfires, Lighters, these are just a few.



Take one of the 3 out of the fire triangle and it will put out the wildfire.



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## CHAPTER 2

### KNOW WHAT YOU'RE UP AGAINST - FIRE KNOWLEDGE

#### **Firestorms**

A large wildfire (50 + acres), or multiple wildfires in the same area, can cause a firestorm. A firestorm is characterized by strong to gale-force winds created by the fire (the Marshall Fire winds reached 120 mph - category three hurricane winds). A firestorm occurs when heat from a wildfire makes its wind system. This phenomenon can lead to bizarre weather effects. Everywhere around the fire perimeter, the buoyancy of the rising column of hot gases over the intense mass fire, draws in cool air from the periphery. By creating both rain and lightning in the area, the storm has the potential to create new fires with lightning strikes, as demonstrated in the figure below. On the forest floor, an average surface fire might have flames reaching three ft. in height and fire crowning the treetops with temperatures reaching 1,472°F or more. Smoke particles from pyro cumulonimbus storms can stay in the atmosphere for days to weeks and, in extreme cases, months.

#### **Burning Fire Embers/ Red Snow**

An active fire ember can stay lit for up to 24 hours after a fire. Embers travel as far as five miles ahead of the active front of a wildfire, and recent research has shown that up to 60% of wildland/urban interface home ignitions are from "red snow" landing on flammable roofs or in other flammable objects, which in turn ignites the home. During the Marshall fire in Boulder County (2021), a barn caught on fire, and then the winds came up (80 to 120 mph). In perspective, the winds sustained in the Marshall fire were category three hurricane winds, so the fire embers were blown miles from the actual fire. Over 1000 structures were lost to that fire - leading to millions of dollars in insurance claims and many people suffering losses.



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## **What is a fire tornado?**

A fire tornado is a whirlwind induced by a fire and often composed of flame or ash, like a dust devil. They start with a whirl of wind, often made visible by smoke, and may occur when intense rising heat and turbulent wind conditions combine to form whirling eddies of air. The size of the fire tornado is dependent on the size of the fire.



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## CHAPTER 3

### COST OF WILDFIRES

Wildfires threaten millions of residential and commercial properties worldwide. Currently, there are limited options for protecting property from wildfires, especially if that property is in suburban or rural locations. This lack of wildfire protection options spills over to higher insurance premiums for owners at high wildfire risk. Here are a few facts we face with the increase in wildfires and insurance claims costs.

There are limited options to help customers defend themselves from wildfires.

According to Thomson Reuters Foundation, Wildfire season in the western United States will cost insurers \$7 billion to \$13 billion in 2020 (qtd. in Lavietes).

- According to data from the National Interagency Fire Center, federal wildfire suppression costs in the United States have spiked from an annual average of about \$425 million from 1985 to 1999 to \$1.6 billion from 2000 to 2019 (qtd. in Roman).

Reasons why wildfires have become expensive and dangerous include:

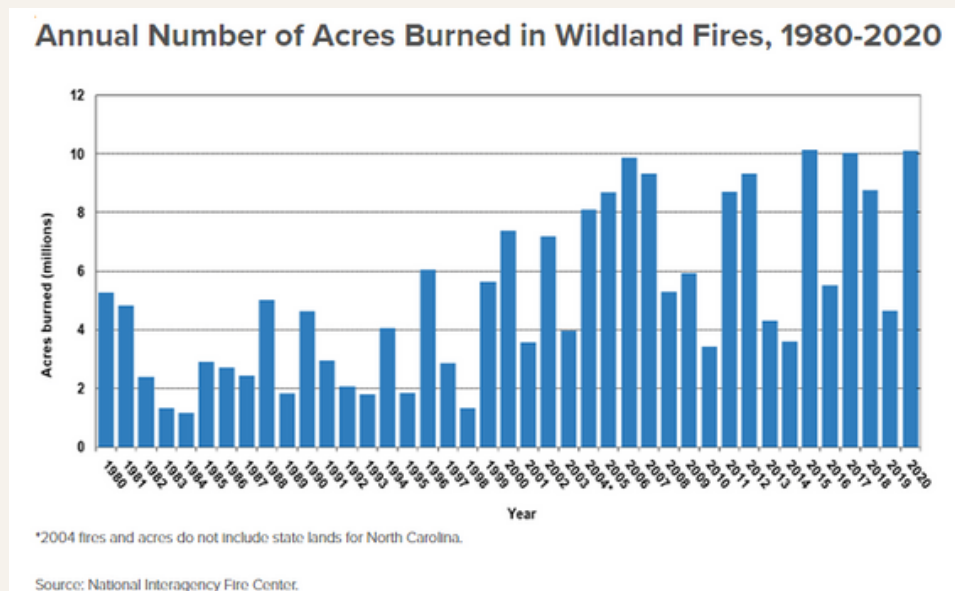
- The increased build-up of fuels resulted in part from past fire suppression policies.
- A warming climate, including drought in the West.
- Increased development of homes and businesses adjacent to fire-prone public lands.

In 2020, Colorado had a historic wildfire season with the three largest wildfires in state history, costing over half a billion dollars in insurance claims. The East Troublesome and Cameron Peak fires now total \$614 million from insurance claims. In comparison, the 2002 Colorado wildfire season, including the Iron Mountain, Coal Seam, Missionary Ridge, and Hayman Fires totaled \$70.3 million in insured losses.

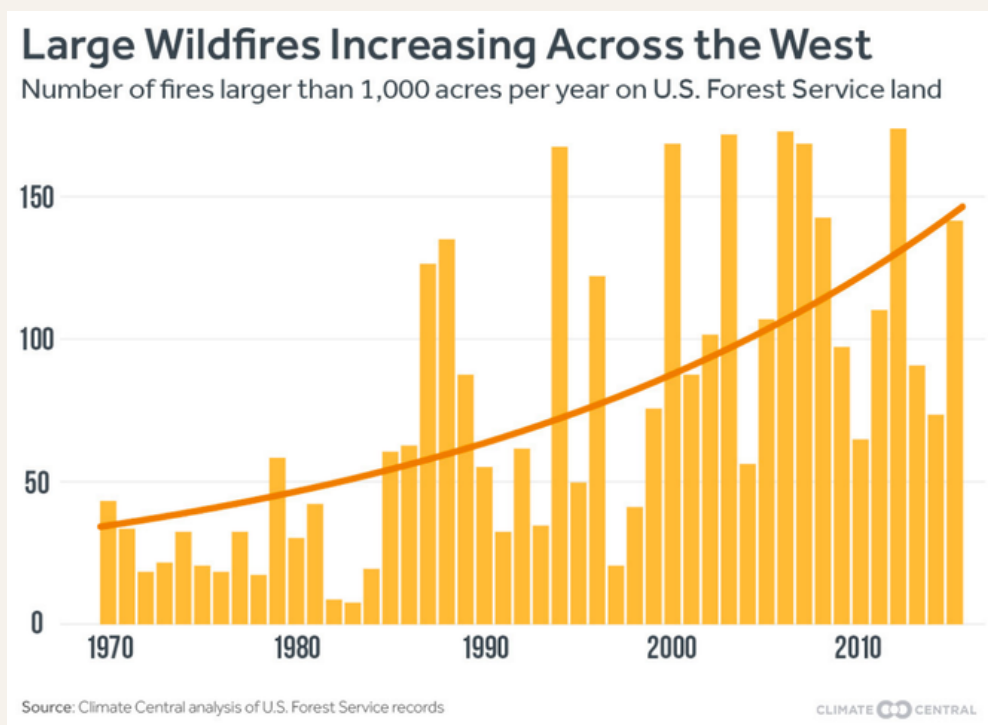
Let's compare the two largest costliest wildfires in Colorado history. The East Troublesome Fire insurance claims cost \$543 million, with 1602 claims and 366 homes lost in 2020. The Waldo Canyon Fire in Colorado Springs burned 346 homes and based on 6,648 claims filed, the insurance costs estimating \$453.7 million in 2012. There was a 100 million dollar difference with four times fewer claims from the East Troublesome fire, with 20 more homes destroyed. With the Exterior Fire Protection System installed, insurance companies will decrease premiums, and property owners will certainly be able to come back to their properties with minimal damage.

If you were to lose your property, what would you do? It's difficult to even imagine the struggle you would endure if you lost your home and possessions to fire. At 1472 Protection, we are determined to make sure you do not have to fight with insurance companies to replace your home or possessions, endure months of being displaced, or suffer overall loss that cannot be recovered.

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“Coordination and Cooperation in Wildland Fire Management.” *Welcome to the Nation's Logistical Support Center | National Interagency Fire Center, <https://www.nifc.gov/>.*



“Climate Change Is Tipping Scales toward More Wildfires.” *Climate Central, 23 June 2016, <https://www.climatecentral.org/news/western-wildfires-climate-change-20475>.*



# HIDDEN DANGRES

## CHAPTER 4

### HIDDEN DANGERS OF OWNING PROPERTY IN WILDFIRE PRONE AND WILDLAND URBAN-INTERFACE AREAS

Millions of people migrate to the mountains and wildland urban-interface areas to live. They are tired of city life and want the relaxation of living in a peaceful setting. Though living in the mountains can be exactly what you're looking for, there are dangers of living in wildfire-prone areas. Let's take a look at some things that could be a danger to your property:

1. **Having no defensive area around your structures.** 1472 Protection recommends a 150-300' cleared area. Trees can be in the area but far enough away so they will not fall on structures. This will give you a site that will be easy to manage and give you a barrier.
2. **Having trees too close to structures.** When trees catch on fire, they can crown around the tops of the neighboring trees, and if your structure is under them, it will burn your structure down. Additionally, the wind can push over a dead burning tree onto your structure, creating damage and starting a fire.
3. **Pine needles** Pine needles from the pine trees can dry up and blow all over your property. Once the pine needles dry out, they become fire starters; they act like kindling.
4. **Wood fences attached to your structure.** Wood fences are attached to your structure; fire follows the fence line to the structure and burns it down.
5. **Dried leaves from trees.** We all know they can be a pain to clean; nonetheless, they can ignite just as easily as pine needles. Once embers land in a stack of leaves, they can rapidly catch fire and burn your structure down.
6. **Grass around your structure** maintained and properly watered is a must. Dry grass around your structure can be a fire hazard, as the fire will use the grass to get to your structure.
7. **Wood stacks and debris around your structures.** Having cut wood stacks around your structures invites red snow to come and land on them and start a fire. The danger is reduced in the winter, making it feasible to stack wood against the structure as long as there is plenty of snow. In summer, move wood and debris away from the building a safe distance to prevent fire.
8. **Beetle kill or dead trees on the property.** Both beetle kill and dead trees have no defense against fires, and once lit, they will spread faster than a healthy tree contains sap and moisture as a defense mechanism.
9. **Limited road access to your property.** Most properties in the mountains only have one access road to their structures. If you can afford it, we suggest you put in another way to get in and out of your property.

Taking these steps will help you decrease the dangers. However, for increased protection, follow these guidelines and add the Exterior Fire Protection System for the best defense against wildfires

# HIDDEN DANGERS

Can you identify all of the dangers?



Look at this picture and list some possible dangers.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Did you find the dangers? Here are a few hazards within the picture:

1. Grass around the cabin. If the grasses stay green and well-watered, you're in good shape. It's hard for a fire to burn a well-watered area. But in the fall, when wildfires happen, the grass can dry up, and then you have a problem because the wildfire will take the road of least resistance to the cabin.
2. Vines on the brick walls. Once these vines dry out, they will become fuel for the wildfire.
3. Flower beds in the windows. The flowers and the flower boxes made out of wood can burn.
4. Pine trees around the outer rim of the property. There is a chance that dried pine needles have blown all over the grasslands and home.
5. Pine needles could blow into the gutters and clog up and downspouts. Pine needles act like kindling for fires.
6. The bushes are right on the wall by the steps. Once again, if they stay green, there's less of a possibility of burning, but once the creek dries up and everything turns brown, the bushes will give wildfire access to burning down your cabin. Keep your brush and grass trimmed and mowed.

# HIDDEN DANGERS

Let's take a look at another picture.



Look at this picture and list some possible dangers.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Did you find the dangers? Here are a few hazards within the picture:

1. Trees are too close. Trees act as fuel for the fire, and they could crown around the other trees and set the cabin on fire. If the wildfire is large enough, it could create a firestorm, and the wind could blow a burnt-out tree over onto the cabin and burn it down.
2. Many dried pine needles lie on the ground with so many pine trees. The pine needles act like kindling for fires.
3. Many cabins or homes get burned down by the fences attached to the home. The fence in front of the cabin could be a fire corridor to the house, burning it down. The fire could jump from the fence to the trees with everything in such close proximity.
4. There is NO defensible area at all. There is no open space around the cabin, so the fire could come right up to the wooden sides of the cabin and burn it down. You need at least 150-300 feet of defensible space to give your cabin a chance to survive a wildfire.



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Let's take a look at a property that has an obvious defensible area.



Look at this picture and list some possible dangers.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Looking at this picture of the cabin, did you pick out the dangers associated with the cabin and setting? Here are some of the dangers:

1. There is a good defensible area around the cabin. But if you look closely, there are a few areas of concern. Look at the bottom left under the deck. There are a few issues that might come up. The grass is only a few inches from the wooden pole of the deck. Second, the area under the deck is dirt, and we all know what happens over time with a dirt deck, weeds set in, so that could be a possible avenue for fire to come in and destroy the cabin. They did a 1.great job with the rocks around the home base except for the lower dirt deck.
2. Look out back at the garage. There are multiple trees around the backside of the structure. If they catch on fire, they could crown, and the garage will burn down.
3. 1. With the number of trees around the property, they have undoubtedly dropped pine needles, which over time will dry out, and if not correctly taken care of, will become a fire hazard to the property.



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4. The screens on the east side of the cabin area are on the enclosed deck. Screens make it easy for red snow or burning embers to attach to the screen. However, FireIce gel from the Exterior Fire Protection system will cover the screens and increase the protection from the embers.

5. One of the main dangers is how many access points you have to your cabin. Most homes only have one access road. If it is possible to add an access road for easier access to your property, you decrease the chance of losing your home to fire.

We hope you have learned what to look for when you buy property in the mountains and wildlife urban-interface areas.

**To learn more about other things to look for call 1.800.284.3038 or email us at [info@1472protection.com](mailto:info@1472protection.com). 1472 Protection can help you avoid the destruction that fire causes.**



**Take the steps to increase protection for your investments.**

**Call today 1.800.284.3038**

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## CHAPTER 5

### WILDLAND URBAN-INTERFACE

The wildland-urban interface is a zone of transition between wilderness and land developed by human activity – an area where a built environment meets or intermingles with a natural environment. Human settlements in the WUI are at a greater risk of catastrophic wildfire (“Wildland-Urban Interface”).

Here in Colorado, we just had the largest wildland-urban interface fire. The Marshall Fire destroyed over 1000 structures and burned over 6000 acres within hours of starting. The main reason for the horrific loss of structures was a combination of things happening simultaneously.

1. Category 3 hurricane winds of up to 120 mph - Winds at that speed make it nearly impossible to fight the wildfire.
2. Homes built close together - With the powerful winds, flames and embers from the affected structures were spread like a blizzard of red snow covering what would have been unaffected subdivisions and businesses.
3. Above normal temperatures which lead to dry conditions.

According to Colorado State Forest Service, nearly 3 million Coloradans live in wildfire-prone areas. This is up 45% since 2013. This number will increase as Colorado’s population continues to grow (Associated Press). The Front Range will become more and more populated, and with that said. There will be increasing chances of wildfires like the Marshall Fire happening. This is where 1472 Protection comes in with our custom design system to help combat wildfires.

The State of Colorado Wildland-Urban interface code for people who want to build in the wildland-urban interface areas is as follows:

**A wildland-urban interface (WUI) code** is specifically designed to mitigate the risks from wildfire to life and property. The standards within a WUI code will vary according to the scope that a community is willing to adopt and enforce. Typically, however, a WUI code includes the following topics:

**Structure density and location number of structures** allowed in areas at risk from wildfire, plus setbacks (distance between structures and distance between other features such as slopes).

**Building materials and construction:** roof assembly and covering, eaves, vents, gutters, exterior walls, windows, non-combustible building materials, and non-combustible surfaces.

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**Vegetation management:** tree thinning, spacing, removal of any vegetation growing under tree canopies (typically referred to as "ladder fuels"), surface vegetation removal, and brush clearance; vegetation conversion, fuel modifications, and landscaping..

**Emergency vehicle** access: driveways, turnarounds, emergency access roads, marking of routes, and property address markers.

**Water supply:** approved water sources and adequate water supply.

**Fire protection:** automatic sprinkler system, spark arresters, propane tank storage.

**A WUI code must also state where it applies.** The method to determine applicability is at the discretion of the jurisdiction and may be tied to one or more of the following: All new construction remodels and retrofits (including subdivisions and planned unit developments).

Broadly defined area at risk to wildfire, such as a WUI boundary map and/or definition. Designated overlay zone other than a WUI (such as a hillside overlay zone).

Parcel map that shows individual hazard ratings as determined by the jurisdiction.

Hazard rating based on professional site assessment.

A WUI code can also specify under what conditions additional standards may be required. For example, if a site visit determines that the hazard rating is above a certain threshold (e.g., high, very high, or extreme), the jurisdiction may require increased defensible space, an automatic sprinkler system, and a secondary emergency access in addition to the base level WUI code requirements ("Wild-Urban Interface Code").

As you can see, the WUI code is what we talked about in chapter 4 Hidden dangers of owning property in the mountains and wildlife urban-interface corridor. It is essential when you buy property in both wildfire-prone and Wildland-Urban Interface areas that you educate yourself on the hidden dangers of the property you are buying.

# HIDDEN DANGERS

## CHAPTER 6

### FOUNDING OF 1472 PROTECTION

Add a little b1472 Protection was founded in May of 2020 by Jon Barry. The mission of 1472 Protection is to provide a state-of-the-art wildfire protection system. Customers can increase the protection of their investments and have peace of mind knowing that they have a good chance of evacuating and coming back to undamaged property.

Jon created a concept of an external fire protection system that would cover structures and property. After researching wildfire protection systems, he was surprised how limited the options were for wildfires protection, plus the increasing insurance rates for people in wildfire and wildland-urban interface areas. Jon put a team together of business people and firefighters to help with Exterior Fire Protection System (EFPS). Along with the signature system, the EFPS 1472 Protection also offers fire equipment and the Drago Fire Cannon. It has taken two years of research and development to fine-tune the EFPS.

#### **Here are some advantages of getting the EFPS installed.**

- One of the most significant advantages is that your insurance premiums may be reduced by 10-50%. (Depends on your insurance company)
- For business, you can get tax incentives to deduct your installed system in the first year, up to 1.04 million dollars.
- Each system is custom designed to best maximize protection.
- Satellite/internet and cellular monitored system, so you do not need to worry about starting the system.
- You can focus on getting your family and pets out, and we will start the system for you.
- You do not have to be home to be protected since we monitor the area from our support center. The camera will only come on when there is a fire bearing down on your property.
- The EFPS is a self-contained system.
- You get alerts if a wildfire is in your area.

We conduct wildfire land assessments where we come in, assess your property, and develop a defensible area around your property; this is a 150-300 ft area of clearing dangers to the property.

- Business can reopen faster and your employees can come back to work faster.
- Reduce insurance claims.



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**Here are some disadvantages of not owning the Exterior Fire Protection System.**

- Losing your home and possessions and having to rebuild
- Not having enough insurance to cover all your expenses while your place is getting rebuilt.
- Living in a motel, RV or with family for a period of 12-24 months.
- Dealing with the mental stress of rebuilding your or your family's lives with little to no capital.
- Paying higher insurance rates or not getting insurance on your property because of you and your family living in a high risk area.
- Business, having to lay off workers or pay unemployment while your business is rebuilt, or you just close for good.
- Business cost of restocking the building with inventory.
- Longer downtime costs you money with no income coming in.

**Protect your investments and gain peace of mind! Call  
1.800.284.3038 or email us at  
[info@1472protection.com](mailto:info@1472protection.com).**



# HIDDEN DANGERS

## CHAPTER 7

### EXTERIOR FIRE PROTECTION SYSTEM(S)

The Exterior Fire Protection System is the state-of-the-art signature system created by 1472 Protection. The Exterior Fire Protection System is a universal system that can fit almost every kind of property. This chapter will show how the EFPS is designed and used.

#### **Exterior Fire Protection System**

The Exterior Fire Protection (EFPS) is a 1472 Protection signature fire protection system. The EFPS is a 2 stage exterior fire sprinkler system custom-designed and monitored by satellite, cellular, and internet. The EFPS has 2 stages. The system is a standalone system.

- Stage 1 of the EFPS is the fire gel stage 1472 Protection uses FireIce 561 fire gel. FireIce 561 is an eco-friendly fire gel approved by the U.S Forest Service on their product use list. It is used for endangered species areas. FireIce 561 is deployed on structures and the property via an exterior fire sprinkler system.
- Stage 2 of the EFPS is the water stage installed on structures. The water will deploy, creating a water dome when the wildfire is within a mile of the property line protecting the structure(s) from flying embers and any other flying debris, while maintaining a cooler temperature in the structure. The Exterior Fire Protection System can be built on residential or commercial properties.

#### **Vineyard Exterior Fire Protection System**

1472 Protection has designed a Vineyard Exterior Fire Protection System (VEFPS), increasing protection against wildfires. The VEFPS consists of up to 3 sections of protection.

- Section 1: is the basic exterior fire protection system that will cover the structures and property around the structures. It is a 2 stage system with fire gel and water.
- Section 2: The vineyard property has a ground sprinkler system and an above-ground sprinkler system (above the grapevines). The primary defense for the grapevines will be fire gel (can install a water system to create a water dome (mist) over the vineyard to go with the fire gel).
- Section 3: is a perimeter system consisting of fire gel sprinklers giving an extra wildfire barrier around the vineyard (40-60').

The Vineyard Exterior Fire Protection System (VEFPS) is a custom-designed system monitored by satellite, cellular, and the internet. 1472 Protection watches for wildfires and controls the VEFPS from its control center, so you do not worry about turning on the system. Just focus on getting you and your employees to safety.

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## **Subdivision Exterior Fire Protection System**

Subdivision Exterior Fire Protection System (SEFPS) is a custom-designed system designed to protect small mountain subdivisions and wildland-urban interface subdivisions. The SEFPS is a multi-stage a little bit of body text system. Like the VEFPS, the SEFPS will be designed similarly from the outside perimeter to the center of the subdivision. Like the VEFPS, the perimeter of the SEFPS will have an extensive sprinkler system consisting of 3" pipes and sprinklers that will lay down a 40-60 ft area that will deploy the FireIce 561. We will then stair-step the systems to the middle of the subdivision, creating a mote defense. The SEFPS is satellite, cellular, and internet controlled that will increase protection from wildfires. Numerous people are moving to wildfire-prone areas, increasing the chances of a wildfire starting. Why not take a proactive approach and protect your investment(s). 1472 Protection assesses the subdivision property and designs a SEFPS to fit your subdivision, increasing the protection factor significantly.

1472 Protection works hand in hand with Home Owners' Associations (HOA) to design and install the system to ensure that we have the best protection for the subdivision.

The Exterior Fire Protection System is a universal tool to protect your investments.

Here are other ways for usage:

- Historical buildings and statues
- Open properties
- Communication arrays
- Labs
- Resorts
- Endangered species areas
- Many more...

1472 Protection also offers a portable system that property owners can use to spray down the exterior home and other structures called the Rapid Response Unit (RRU). This unit can be put in the back of your truck; we also have portable units you can tow.

***Protect your investments by calling 1.800.284.3038 or  
email us at [info@1472protection.com](mailto:info@1472protection.com)***

# HIDDEN DANGERS

## CHAPTER 8 INSURANCE

### **Residential**

Insurance is a must-have when owning a property in the mountains or the wildland-urban interface. Increasing wildfires and more people moving into wildland urban-interface areas have made getting insurance for your property more complicated and expensive. In some instances, the property owner does not qualify for fire insurance. Many people do not know the difference between market value and replacement cost insurance. People need to get insurance that covers the replacement cost of their home, not the actual market value, especially in places like Colorado. Understanding property insurance can sometimes be difficult, especially when considering the difference between market value and replacement cost, and the amount of insurance you need.

**Market Value:** is used when you sell your home and differs depending on supply and demand.

**Replacement Cost** is the amount that will replace or repair your property and has many factors. Calculate by adding up the cost of replacing materials, energy, labor, and extra fees such as living expenses while displaced in a hotel or other temporary living for 12 to 24 months.

**Important tip:** Make sure your insurance policy is up to date. Around 60% of people let their insurance policies lapse, and when they get hit by a wildfire, they do not have insurance to cover losses According to CoreLogic.

Make sure you do not fall under the coinsurance clause of your insurance contract! If you have your home underinsured by 20%, you are personally responsible for making up the difference in the replacement cost before any repairs commence.

### **Commercial**

Fire is one of the most common and most expensive commercial insurance claims.

With a company located in the wildfire-prone and urban-interface area, you know your insurance will be more costly than a small town out on the plains. You're at high risk of having a fire insurance claim. Overall, 40% of business claims are fire-related.

Commercial business insurance covers businesses and corporations. It is designed to cover the company, its employees, and ownership. Since there are so many types of businesses with different needs and situations, commercial insurance is customized to fit your business needs. The explosion of new business owners moving into the wildfire-prone and wildland-urban interface areas of Colorado has increased your business's chances of encountering a fire.



# HIDDEN DANGERS

How does commercial insurance help you recover from losing everything in a fire?

A fire doesn't just destroy your property. It can leave you liable for damage to customers' or other third parties' property. It can also bring your business to a grinding halt ("Fire Insurance"). Let's break this down, even more, looking at just your business.

- Standard fire coverage gives you inventory coverage; if your inventory is less than 25k, over 25k of stock; you have to pay to get it covered.
- Another aspect you have to look at is employees; if your business burns down, do you have the right coverage to cover them with unemployment insurance?

How would you like to have lower insurance and have a great chance of returning to your business and maintaining your entire inventory? With the Exterior Fire Protection System, you will get increased fire protection and lower insurance premiums.

Here are some advantages of getting the system:

- 1472 Protection monitors your business property for wildfires.
- We contact you when there is a wildfire in the area.
- You do not have to be at your business for the system to work.
- It dramatically reduces the chances of you losing inventory.
- Decreases the time to get back up and running.
- Reduces the stress of deferring employees.

Reduces the stress of starting over



Some disadvantages of not having the system:

- The mental stress of starting over.
- Having to replenish your inventory and hoping you have enough insurance to cover everything.
- Losing employees and paying for unemployment insurance.
- Taking longer to reopen.

Having proper insurance and the Exterior Fire Protection System will have the best chances of your property withstanding a wildfire.

# HIDDEN DANGERS

## CHAPTER 9

### THE ISO FIRE RATING

One of the most important things people overlook when buying property is the ISO fire rating. When they buy in the mountains and wildlife urban interface, most people think the fire department will be there in a few minutes. Depending on where you live, it may take up to an hour to get to your home or business. Many factors go into your rating, and in this chapter, we will explain the ISO rating for your property.

Let's talk about the ISO fire rating or Public Protection Classification (PPC). ISO comes from a company called (Insurance Services Office) they came up with a rating system that insurance companies use to get your fire rating. When you get insurance, the agent will submit the data collected from you, and the ISO will send back a score. The rating is calculated on how well your fire department can protect your communities and home; they use a scale from 1-to 10, with 1 being the best score you can obtain and 10 being the worst.

Here are the four main criteria that make up the ISO Fire Suppression Rating Schedule rating score:

- 1)50% comes from the quality of your local fire department, including staffing levels, training, and proximity of the firehouse.
- 2)40% comes from water supply availability, including the prevalence of fire hydrants and how much water is available to put out fires.
- 3)10% comes from the area's emergency communications systems (911) quality
- 4)An extra 5.5% comes from community outreach, including fire prevention and safety courses.

Any area more than five driving miles from the nearest fire station is automatically rated a 10 (Fitzpatrick).

In some states, you can obtain a score of 106%, fire departments with a score of 90% or above receive the highest ranking, but only a few fire departments get that rank. Only 0.71% of all communities have only one department that receives that ranking. The average ranking of most fire departments is a 5. In the wildlife urban-interface area, you will receive a better PPC score than if you live in the mountains. The average PPC score is 8-10.

The ISO scores are not provided to the public, but you can find out your fire department score by contacting the fire department and providing your area ZIP code (Fitzpatrick).

#### **How does the ISO fire rating determine my insurance rates?**

The formula for the PPC score is very complex and changes. Your best chance of obtaining a lower PPC score is to live in a wildland-urban interface with a fire department within 5 miles of your business or home. But this is also determined by your insurance company and what metric they use. For instance, State Farm insurance uses its formula from past data to assess your fire rating and does not use ISO.

Living in the mountains, most likely you will be in the 8-10 range due to the time it will take the fire department to respond to your home or business. In most cases, there is no hydrant located in your home or business area, and the fire department has to bring enough resources to put out your fire via tanker trucks. Many mountain areas rely on volunteer fire departments. Unfortunately, this could lead to slower response time, as volunteers are paged and may have to go from their work or home to the firehouse to get the fire engine and medical and tankers. When you get insurance, this is considered. Places like Aspen and Vail have their own paid fire departments, so you might get a better PPC score because they will have a better response time. Additionally, if you live in a larger mountain town you may have a fire hydrant in your subdivision or on the street where your business is located. These scenarios will affect your PPC score. Living in a well-established area will have a better PPC score, and your insurance should be lower. The higher your PPC score is, the more costly your insurance will be.

This is where 1472 Protection comes into play. 1472 Protection Exterior Fire Protection System can help you reduce insurance premiums because we meet or exceed what the insurance company requires to obtain fire insurance. Insurance companies know that the system will keep your home safer from fires.

# HIDDEN DANGERS

*So, if you are ready to protect your home or business  
and lower your insurance rates, set up an appointment  
to talk about Exterior Fire Protection today at  
1.800.284.3038.*

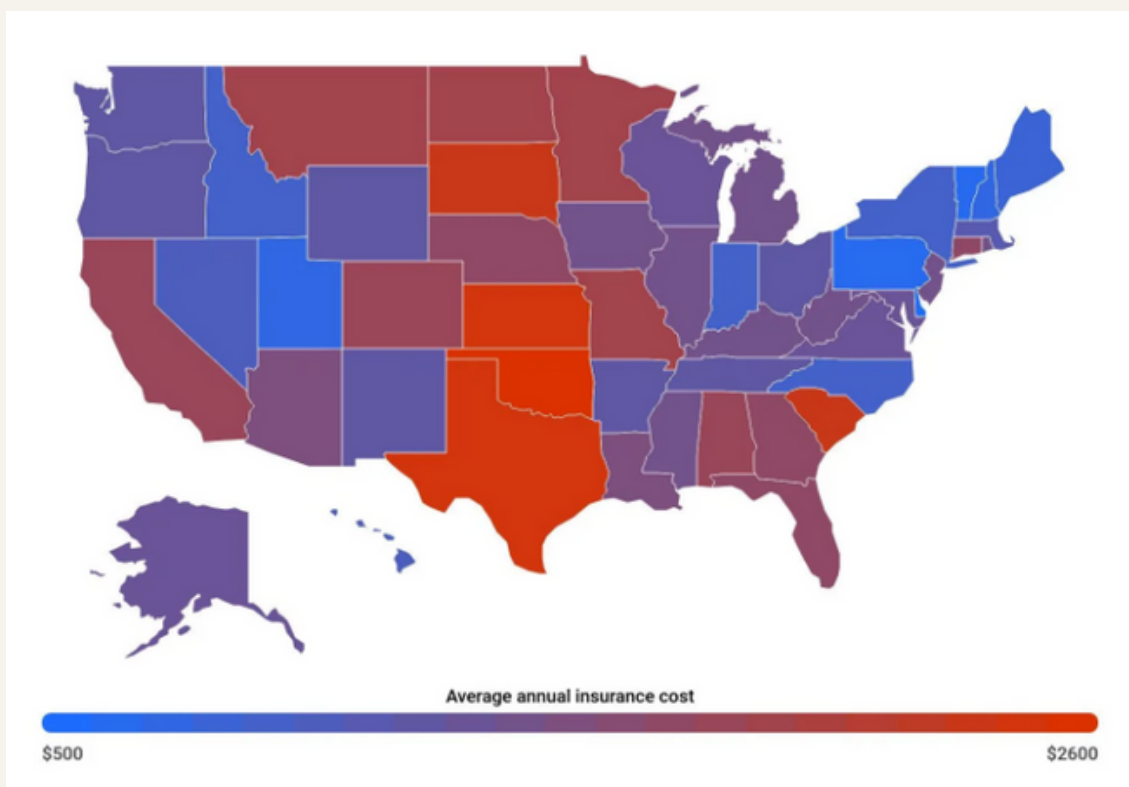


# HIDDEN DANGERS

## The most expensive states for homeowners insurance

Homeowners insurance costs an average of \$1,680 annually, but premiums vary greatly by state, from \$781 annually in the least expensive state, Delaware, to \$3,383 annually in the most expensive state, Colorado.

We collected thousands of homeowners insurance quotes and calculated the average premium for each state.



Fitzpatrick, Mark. "How Do ISO Fire Ratings Impact Homeowners Insurance Rates?" ValuePenguin, *ValuePenguin*, 8 June 2021, <https://www.valuepenguin.com/iso-fire-rating-home-insurance>.

# HIDDEN DANGERS

## THE NEXT STEP

Congratulations! You are one step closer to protecting your property from wildfires. We hope we have opened your eyes and given you the knowledge to see the hidden dangers of your mountain and wildland urban-interface property. Although wildfires are a destructive force, there are steps you can take to increase your protection from wildfires. With a defensible fire area and an exterior fire protection system, you will have the best protection from wildfires. You will have confidence knowing if a wildfire happens near your property, you will come back and see your home or business still standing. Additionally, knowing about fire insurance and how the ISO Fire Rating System works, can help you save money and obtain the right amount of insurance for your property.. Thank you for downloading our book and reading it. If you have any questions or want to find out more, we would love to speak to you.

*What are you waiting for? Give 1472 Protection a call today at 1.800.284.3038 or email us at [info@1472protection.com](mailto:info@1472protection.com) to see how we can help you increase your protection against wildfires!*





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# Book Review

My fire service career spanned 37-years, including 15-years as a battalion chief. I also led the wildland firefighting program for 7-years. Too many people who live in the wildland urban interface (WUI) are under the false impression that the fire department will be able to save their house and possessions during a wildfire. That is not always the case. To improve the chances of your house surviving and your ability to retain life-long memories, the property owner must take the steps to create a defensible space around the house and structures on the property. Jon's book not only addresses what to look for and how to create that defensible space, he outlines how his product can further increase the chances that your house will survive during a wildfire.

Rick Davis



## About Jon Barry

Jon has over 17 years as a business owner and has grown up around the fire department as his parents and family members ran the LaPorte volunteer fire department. His dad and uncle were the fire chiefs. Jon grew up in northern Colorado and has seen many wildfires. Seeing the devastation in people's eyes, he wanted to change the narrative and help people protect their investments and memories. The reason he created 1472 Protection is that there is hardly any t protection for home and business owners. The exterior fire protection system and a defensible area give the best defense against wildfires.

Jon served in the Navy, on firefighting teams, and fought fires on ships; as a member of the firefighting team, He was scene leader and assistant locker commander.

He has over 25 years as Environmental Health and Safety expert working in various jobs from construction, oil refinery turnarounds, ergonomics, industrial hygienist, and leading first response teams.