

# WILDFIRE MITIGATION

## A Survival Guide

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# WHAT IS A WILDFIRE?

- A Wildfire is an unplanned fire burning in natural or wildland areas such as forests, shrub lands, grasslands, or prairies.\*
  - Wildfires Have existed Since There Were Forests.
  - Most Recently The Lobo Fire Consumed 6 Acres In The Area North Of The 101 Freeway Near Parkway Calabasas.
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- \*Federal Emergency Management Assistance (FEMA)

# WHAT IS A MEGA-WILDFIRE?



# WHAT IS A MEGA-WILDFIRE?

- The U.S. Interagency Fire Center defines a megafire by its size: It is a wildfire that burns more than 100,000 acres of land. Other wildfire experts expand the definition of a megafire beyond “acres burned” to mean wildfires that have an unusually large impact on people and the environment.
- Example: In August, 1988 in Yellowstone National Park a megafire burned 1.2 million acres of forest!

# LESSON ONE

- Wildland fires are INEVITABLE, and
- ESSENTIAL for maintaining ecosystem health and diversity.
- Even if we wanted to eliminate wildfires, nature would find a way to cause them anyway.

# THEN WHY ARE WE HERE TONIGHT?

- Mega-wildfires have been happening more frequently.
- Prior to 2000, wildfires typically destroyed 1,000 structures per year.
- In contrast:

# THEN WHY ARE WE HERE TONIGHT?

- The 2018 Camp Fire in Paradise
  - Burned 180,000 structures, and
  - Caused 85 deaths.
- The 2018 Woolsey Fire
  - Burned 96,947 acres,
  - Destroyed 1,643 structures,
  - Mandated the evacuation of 295,000 residents,
  - Resulted in 3 deaths, and
  - Required the deployment of 3,242 fire personnel.



# DISTURBING WOOLSEY SIDE NOTE

- Calabasas has 2 fire stations, but.....
- Through a Mutual Aid Agreement if a fire overwhelms our crews, assistance from neighboring fire departments can be requested.
- Since mutual aid works both ways, fire stations as far away as Texas can - and do – send help.
- By 5:15 am on November 9, 2018 Woolsey Fire Command had requested **574 additional fire teams** through mutual aid....
- **But only 285 were sent!**

# NOT DISTURBED ENOUGH YET?

- There is a reasonably high likelihood that the Fire Department will not be there to save your home from a mega-wildfire!
- In order of importance, a Fire Department's top three priorities are:
  - Saving human lives.
  - Protecting human structures.
  - Protecting the plants and animals.
- Calls to 911 for human distress will be given priority over 911 calls for home fire protection.

# A FEW WORDS ABOUT EVACUATION

- First, the California Standard Statewide Evacuation Terminology was changed in May, 2020. "Voluntary Evacuation" and "Mandatory Evacuation" orders have been replaced. Now it's:
  - Evacuation Warning : Potential threat to life and/or property. Those who require additional time to evacuate, and those with pets and livestock should leave now.
  - Evacuation Order: Immediate threat to life. This is a lawful order to leave now. The area is lawfully closed to public access.
  - Shelter In Place: Go indoors. Shut and lock doors and windows. Prepare to **self-sustain** until further notice.

# DISTURBING WOOLSEY SIDE NOTE 2

- Residents who stayed behind after the “Mandatory Evacuation” order had been issued generated **1,800** calls to 911!
- Fire fighters who had been assigned to fight the fire were instead required to respond to the human-in-need calls.
- Why did so many people disregard the mandatory evacuation order?

# ARE YOU PREPARED?

- So, if Mega-wildfires are inevitable, is it time to call a realtor?
- Heck no! And you wouldn't anyway. It's why you signed up for this lecture instead of the one on home staging.

# LESSON TWO

- Wildfires are inevitable...
- Structure destructions ARE NOT inevitable!
- Fire professionals have been studying wildfires for decades and their conclusion is...

# LESSON TWO

- We don't have a wildfire problem...
- We have a structure ignition problem,
- And YOU can fix it!

# LESSON TWO

- But I'm not a firefighter you say?
- Well neither am I but I know the most effective way to fight a fire is to keep it from starting.
- It's not **where** you live but **how** you live.
- And here's where we can all help protect our homes, neighborhoods, and City.



# Lesson Three

- Wherever there are big flames you can expect the television crews to be there. Crown flames (the upper part of the tree) make for the most spectacular and dramatic coverage.
- The typical crown fire, however, burns out within 90 seconds. It will smolder thereafter but will not be generating sufficient heat to ignite structures after its flames die out.
- Crown flames are the ignition source for less than 10% of structure fires.

# Lesson Three

- Grass and chaparral fires are a little less dramatic than crown fires but can still deliver an ignition source to other fuels.
- Grass and chaparral fires also burn out fairly quickly and are responsible for less than 10% of structural damage.
- So what's responsible for the fires that cause 80% of structural damage in wildfires?

# LESSON THREE

- **Flying Embers**
- Flying embers are burning pieces that can travel – depending on wind conditions – up to a mile ahead of that spectacular wall of flames.
- The Woolsey Fire easily crossed the 12 lane Ventura Freeway. How? Flying embers. The embers didn't need to burn the freeway, they just needed a place to land where there was fuel.

# LESSON FOUR

- Nobody wants you to be a fire fighter!
- We all want you to be fire ***preventers!***
- What does a fire need? Fuel, Oxygen and an Ignition Source. Remove one of the three and the fire ends. If you can keep the fuel and ignition source separated, the fire doesn't even begin!

# HERE'S HOW TO HARDEN YOUR HOME

- Protect The Structure (Your home and any out buildings)
  - Class-A Fire rated roof
  - **Maintain a 5 foot ember resistant zone around the house**
  - Noncombustible 6 inches at the bottom of exterior walls
  - Ember and fire resistant vents
  - Double paned and tempered glass windows
  - Enclosed eaves

# HERE'S HOW TO HARDEN YOUR HOME

- Protect the Immediate Surroundings (0 to 30 feet from structures)
  - Clear vegetation and debris from under decks
  - Remove/move combustible materials like sheds, wood piles, propane tanks, door mats and seat cushions at least 30 feet from structures
  - Keep vegetation LEAN & GREEN
  - Maintenance, maintenance & maintenance

# HERE'S HOW TO HARDEN YOUR HOME

- Accept that you are a community of neighbors
- Lead by example
- Talk to your neighbors – particularly the ones most at risk

# WHERE DO YOU START?

- A good place to start is with a Home Ignition Zone Evaluation (HIZE) performed by a trained evaluator.
- Contact: [briancameron@epic-fsc.com](mailto:briancameron@epic-fsc.com)
- Visit our website: [www.epic-fsc.com](http://www.epic-fsc.com)
- You may also contact: [www.rcdsmm.org/what-we-do/home-ignition-zone-evaluations/](http://www.rcdsmm.org/what-we-do/home-ignition-zone-evaluations/)