Swannanoa Fire & Rescue

WILDFIRE & THE URBAN INTERFACE

Information – Evaluation - Evacuation

What is the Wildland-Urban Interface?



The **"wildland"** portion of this threat has always referred to the forest, grasslands, or any combination of vegetation. Such events may be labeled as "Wildland Fire", "Forest Fire", or "Brush Fire".

The threat is damage to timber resources, wildlife, air quality concerns and future erosion issues.

The **"Urban"** portion refers to homes, businesses, outbuildings, cell towers, campers, vehicles and other items.

These items are anything but the natural environment.

Fires are typically high heat producers in a smaller space.



Combining these two concerns presents an incident where

a wildfire now threatens a home or a structure fire now threatens the forest.

What affects wildfire?

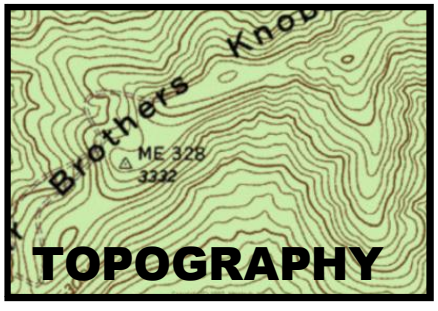
FUELS in a wildfire can range from leaves, twigs, grasses, laurel bush, ornamental shrubs, pines and others, each with their own burning characteristics.

Now, with Urban-Interface, we add in structures and other fuels that we add into the space. The burning of these fuels is greatly affected by the other two.



TOPOGRAPHY will affect the speed, direction and intensity of the fire.

The steeper the slope, the greater effect convection *(movement of air currents) effects* the fire, and from radiation which pre-heats fuels uphill, generating faster and more intense burning. So, fire generally burns faster uphill than downhill.



The ***WEATHER*** is one of the factors that remains the least predictable. Higher temps, lower humidity and winds can combine to form an extremely intense burning fire. When different weather systems move in and out of the area it may result in trouble even starting a campfire to extreme difficulty suppressing fires .

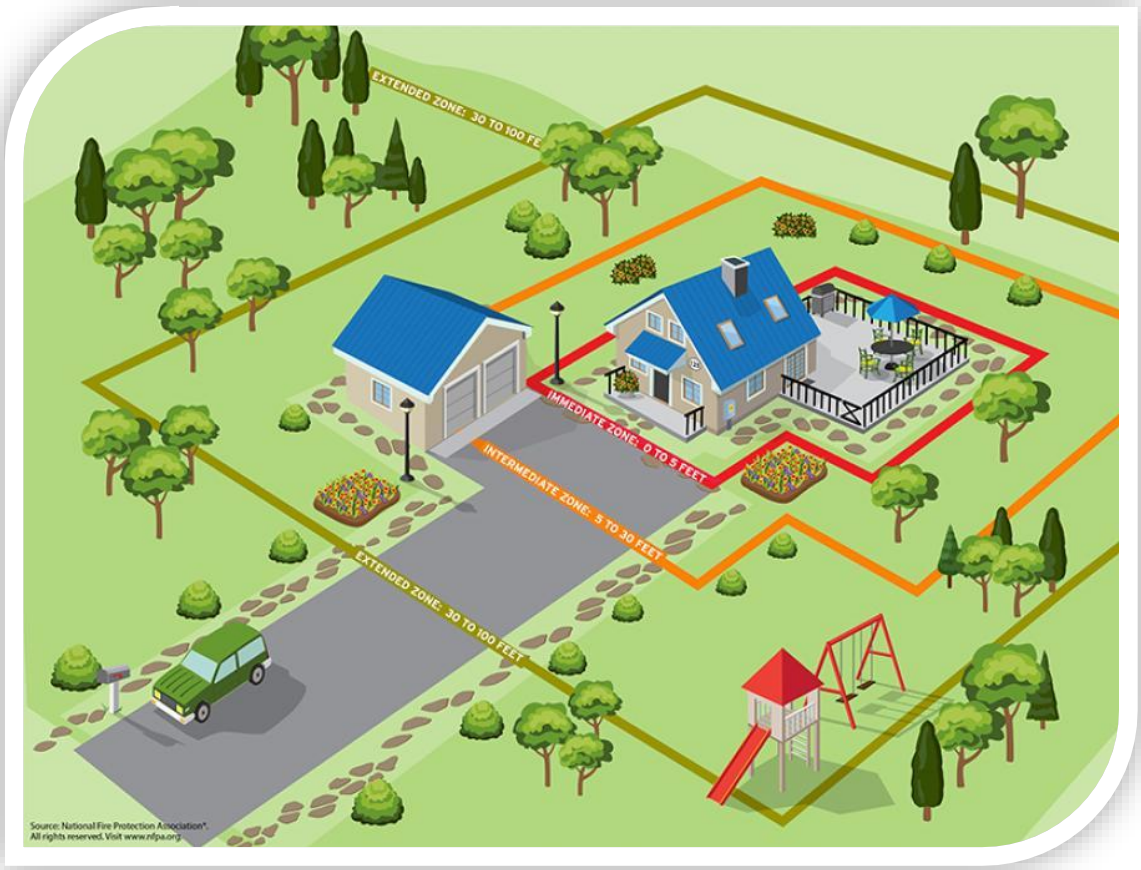


CAN change this factor	CANNOT change this factor	Changes constantly
More fuel, more fire	Steeper means faster spread	Dry & windy = fast spread

What can you do to protect your home?
It must be understood that protecting your home from wildfire depends greatly on the **preventative actions** of the home owner, not just on firefighter's efforts. With a collaborative effort between homeowners and fire agencies, we will achieve the best outcome from a potentially catastrophic event.

First, we look at the area around homes as **defensible space** or the **HIZ (Home Ignition Zone**). Does the design and maintenance of the property help defend itself? What can be done to help firefighters use the defensible space around your home to protect it during a wildfire?

Your home is your castle and even castles are protected in zones. High walls, moats, and other features aid in layering protective measures.



Immediate zone
The home and the area 0-5' from the furthest attached exterior point of the home; defined as a non-combustible area. Science tells us this is the most important zone to take immediate action on as it is the most vulnerable to embers. START WITH THE HOUSE ITSELF then move into the landscaping section of the Immediate Zone.
Intermediate zone
5-30' from the furthest exterior point of the home. Landscaping/hardscaping- employing careful landscaping or creating breaks that can help influence and decrease fire behavior.
Extended zone
30-100 feet, out to 200 feet. Landscaping – the goal here is not to eliminate fire, but to interrupt fire's path and keep flames smaller and on the ground.

What level of fire risk do you have?

Each component is essential in evaluating the risk from wildfire. Not every hazard or problem is covered, but is designed to assist in helping you recognize problem areas. In addition, ONE item could be a critical element when the time comes and a "Low Risk" rating NEVER means "No risk".

My area has the following: *Subtotal here:* ☐

☐ 2 No sign for your street OR subdivision
☐ 2 Your house # is not clearly visible
☐ 2 There is only one road to get into the area I live
☐ 2 The road is steep, has sharp turns and no turn-arounds for emergency equipment
☐ 3 No municipal water supply
☐ 2 No alternate water such as ponds, lakes, other
Notes _____
_____
_____

My home is on a slope that is: *Subtotal here:* ☐

☐ 1 Mild 0-5%
☐ 2 Moderate 6-15%
☐ 5 Steep 16-25%
☐ 8 Extreme 26%+
(A 100% slope is a 45˚angle)
Notes _____
_____
_____

My home has the following: *Subtotal here:* ☐

☐ 7 Less than 30' of defensible space. (Area that should have no leaves, dry grass, shrubs, hedges or other flammable materials)
☐ 4 No secondary protection area 30-100' that consists only of sparse and well irrigated vegetation
Notes _____
_____
_____

My siding is made of: *Subtotal here:* ☐

☐ 1 Rock, brick, other non-combustibles
☐ 2 Specially fire treated sidings
☐ 4 Wood sidings *(not including shakes)*
☐ 5 Vinyl and other plastics
☐ 7 Cedar / wood shakes
Notes _____
_____
_____

My roof is covered with: *Subtotal here:* ☐

☐ 1 Metal, slate, tile, non-combustibles
☐ 2 Specially fire treated roofing
☐ 4 Composite shingles
☐ 7 Cedar shake / wood shingles
Notes _____
_____
_____
_____

My roof has the following *Subtotal here:* ☐

☐ 1 Valleys (of which embers may collect)
☐ 2 Gutters with leaves /materials in them or flammable materials on roof
☐ 2 Unscreened or covered vents or soffits
☐ 2 Roof overhangs more than 1'
Notes _____
_____
_____
_____

My home has the following: *Subtotal here:* ☐

☐ 1 Large bay windows
☐ 1 Automatic foundation vents (temperature)
☐ 2 Large surface areas of glass
☐ 2 Single pane or windows with poor sealing characteristics
☐ 2 Unscreened porches that are covered
☐ 2 Open crawlspace
☐ 2 External fuel sources that are unprotected (fuel oil/kerosene tanks, propane)
☐ 2 A deck overhanging a slope
☐ 2 Built on poles or stilts
☐ 2 Has firewood close to the home
Notes _____
_____
_____

Add up all the numbers in the boxes =☐
0-15 Lower risk **16-30 Moderate risk**
31-45 High risk **46-60 Very high risk**
60-72 Extreme risk

EVACUATION

GO BAG ESSENTIALS:

☐ Important documents
☐ ATM, credit/debit cards and cash in small bills
☐ Medications, Rx numbers
☐ Non-perishable food and water for 24 hours
☐ Driver's license
☐ Computer backup files, methods ready
☐ Inventory of home contents (video inventory +)
☐ Photographs of the exterior
☐ Address book or contacts in device
☐ Cell phone charger, and battery packs
☐ Personal toiletries
☐ Enough clothing for 1-3 day
☐ Family heirlooms, photo albums and videos
☐ Batteries if needed

PREPARE FAMILY MEMBERS:

☐ If possible, evacuate all family members not essential to preparing the house for wildfire
☐ Plan several evacuation routes
☐ Designate a safe meeting place/contact person
☐ Relay your plans to a contact person
☐ Designate a "safe area" where people can wait out a wildfire (i.e., ballfields, pastures or parking lots)
☐ Register for a local emergency notification system such as "CodeRED"

PREPARE PETS:

☐ Have identification on your animal
☐ Vet records and medications
☐ Transport food, water and bowls in containers
☐ Dogs and small pets should be securely crated with leashes prepared or in use

HORSES, LIVESTOCK & OTHER LARGE ANIMALS:

☐ Have a livestock trailer available
☐ Practice loading and towing before an emergency

WHAT TO WEAR:

☐ Wear cotton clothes Not polyester etc.), including long pants, long-sleeved shirt/ jacket, hat, and boots
☐ Carry gloves, water to drink, and goggles
☐ Keep cell phone, flashlight, with you at all times
☐ Tune to a local radio and listen for instructions
☐ NIOSH N95 or P100 mask

PREPARE VEHICLE:

☐ Keep your vehicle's gas tank full
☐ Park facing out, backing takes time
☐ Roll up the car windows (Embers can come in)
☐ Close the garage door (Can you open manually)
☐ Place essential items in the car
☐ If you do not drive, make plans in advance

INSIDE THE HOME:

☐ Close all interior doors
☐ Leave a light on in each room
☐ Remove lightweight, non-fire-resistant curtains and other materials from around windows
☐ Close fire-resistant drapes, shutters, and blinds
☐ Turn off all pilot lights
☐ Move overstuffed furniture, such as couches and easy chairs, to the center of the room
☐ Close fireplace dampers & doggie-doors
☐ Lock-up firearms or valuables

OUTSIDE THE HOME:

☐ Place combustible patio furniture and barbecues in the house, garage or away from the home
☐ Shut off propane/NG at the tank or meter
☐ Close all exterior vents, doors, and windows
☐ Leave gates unlocked
☐ Turn on outside lights
☐ If available and if there's time, cover windows, attic openings, and vents with ½" or greater plywood
☐ Ensure that all garden hoses are connected to faucets and turned off
☐ Don't leave sprinklers on, or water running; they can affect critical water pressure

30 seconds, 5 minutes, 1 hour, 6 hours, 1 day. When must you go?

Customize your evacuation plan to you, your family, and a variety of time frames