

Shelter-in-Place...

...If You Can't Evacuate

A tested,
modern
approach to
living safely
in a
Wildland
Urban
Interface
community.



www.rsfire.org

Living with Wildfire

The Rancho Santa Fe Fire Protection District contains multiple communities nestled within the wildland urban interface, areas where wildland vegetation is intermixed with structures. As we saw in October 2007, warm climate, dense brush, flammable vegetation, drought conditions, and steep terrain combine for a volatile wildfire equation.

2007 Witch Creek Fire



When living within the wildland urban interface, planning ahead for wildfires is a necessity. Fire strikes without warning and moves alarmingly fast, often leaving residents with limited time to gather household belongings and mementos. More and more communities are being developed within wildland-urban interface areas, placing people, pets, and homes at risk of succumbing to wildfire. Every year, communities throughout San Diego County experience the devastation of such disasters, which is not surprising when you consider the fact that 1/3 of all homes in San Diego County are located in the wildland urban interface.

Preparing for wildfires before they happen is your best defense against the flames. Your community was designed and built to help protect you and your home should a wildfire threaten your neighborhood. You live in a Shelter-in-Place, master-planned community, which means that your home is ignition-resistant and a safe place to wait out the fire if you are not able to evacuate.

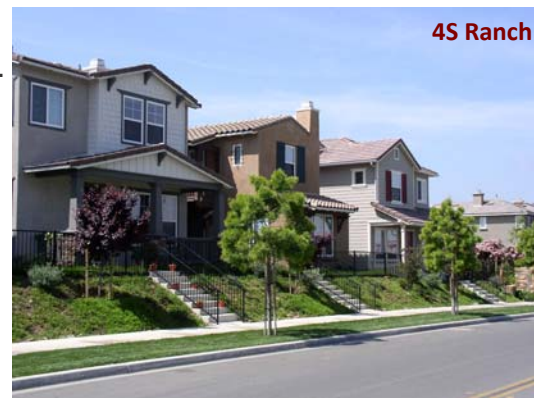
This guide has been developed for you, the shelter-in-place resident. Inside, you will learn about the features that make your community ignition-resistive, how to prepare for potential wildfires, the steps to take when a wildfire approaches, and most importantly, the ways to maintain your shelter-in-place community for the future.

What is Shelter-in-Place?

Sheltering-in-place is a community approach to protecting your neighborhood and home from wildfire. These communities are built to specific standards that allow residents who are unable to evacuate during a wildfire to remain inside their ignition-resistant house until the emergency is over.

To be considered shelter-in-place, an entire community must be designed to withstand heat and flames from an approaching wildfire. In other words, the entire community must be built with and share the same ignition-resistant design qualities, including:

- A well-maintained, fire district approved landscape and vegetation management plan.
- Adequate roadway and driveway widths, designed to accommodate two-way traffic and large firefighting apparatus.
- Adequate water supply and water flow for firefighting efforts.
- Vegetation modification zones surrounding your community.



In addition, every home in your community was built with the following ignition-resistant features:

- Boxed-in, heavy timber, or ignition resistant eaves with no vents.
- Life-safety residential fire sprinklers.



The Lakes

- A well-maintained, fire district-approved fire-resistant landscape with a minimum 100-foot defensible space surrounding all structures.
- A “Class-A,” ignition-resistant roof.
- Dual pane (one being tempered) glass windows.
- Chimneys with spark arrestors containing a minimum ½” screen.

To remain a shelter-in-place community, each of these design qualities must be maintained year-round. Additions or changes in landscaping require fire district and association approval.

When a Fire Approaches

As a wildfire nears your shelter-in-place community, you are advised to evacuate. If there is time, you may also do the following:

- Listen for fire updates on the television or radio. Since the electricity may go out, have a battery or solar-powered television or radio on hand, with extra batteries.
- Do not attempt to pick up children from school or daycare. Staff members are trained to protect your children and will institute proper emergency procedures on site.
- Bring pets inside. Put livestock and horses in a secure place.
- If you must go outside, wear a long-sleeve cotton shirt and long pants comprised of cotton or wool; never wear synthetics. To minimize smoke inhalation, cover your nose and mouth with a damp cloth.
- If time and conditions permit, move anything that can catch fire away from the exterior of your home, including combustible lawn furniture, cloth awnings, barbecues, portable propane tanks, trash can, and fire wood. Re-locate these items to the furthest point in your yard, away from your home and neighboring structures.
- Close your garage door(s). If your garage door operates on electricity, disconnect the unit and operate the door manually.
- If you have a wooden fence that connects to the exterior of your home (which is NOT allowed by the fire district), prevent flames from spreading from the fence to your house by propping open the gate, or removing the portion of your fence that touches your home.
- If time and conditions permit, attach garden hoses to outdoor spigots. Place hoses so they can reach around any area of your home.
- Do not climb on your roof to wet it down. The slippery surface presents significant safety issues. Remember, your roof is already comprised of non-combustible materials designed to resist heat, embers and flames.
- Turn off all fans and air conditioning/heating units. Close all glass doors to your fireplace, and close fireplace dampers, if possible.
- Close all interior and exterior doors and windows to prevent embers from entering your home.
- Draw draperies and window coverings wide open, well past the perimeter of the window. This will prevent radiant heat from catching the window coverings on fire. Do not cover the inside of windows with foil or any other materials.
- Move interior furniture away from windows and sliding glass doors to prevent radiant heat from catching the furniture on fire.



Cielo

Evacuation is still your best option. Be ready to go and go early. Make sure to register with www.AlertSanDiego.org, San Diego County's mass emergency notification system, to receive emergency information through your home phone, cell phone and e-mail.

Evacuation Route Map

Wildfire fatalities most commonly occur when people leave their home too late or are over-taken by fire. If you live in an area that's at high risk for fire, it's important for you to decide *now* whether you're going to evacuate early or stay and defend your home.

Sheltering in place, or staying to defend your home, requires considerable planning. Fire agencies cannot make that decision for you. It's up to you to determine whether you are capable of staying and defending your home.

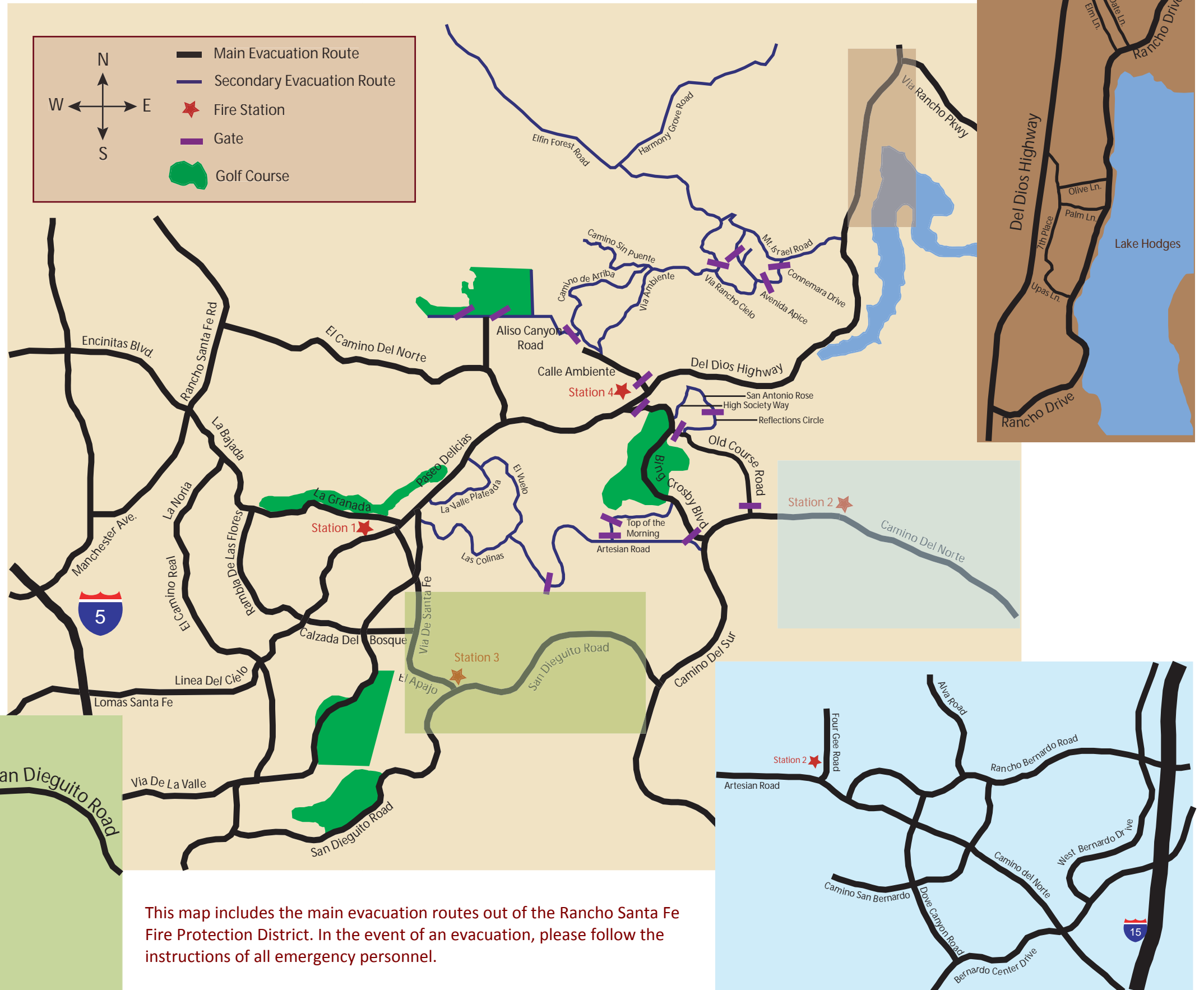
If you decide to leave, relocate early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to evacuate, don't hesitate!

"Should I stay or should I go Quiz":

- Are you physically fit to fight spot fires in and around your home for up to **10 hours or more**?
- Are you and your family members mentally, physically and emotionally able to cope with the intense smoke, heat, stress and noise of a wildfire while defending your home?
- Can you protect your home while also caring for members of your family, pets, etc.?
- Do you have the necessary resources, training, and properly maintained equipment to effectively fight a fire?
- Does your home have defensible space of at least 100 feet and is it cleared of flammable materials and vegetation?
- Is your home constructed of ignition resistant materials?

If you answered "No" to any of these questions, then plan to evacuate early.

REMEMBER: By evacuating early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.



This map includes the main evacuation routes out of the Rancho Santa Fe Fire Protection District. In the event of an evacuation, please follow the instructions of all emergency personnel.

If You Can't Evacuate

If the fire approaches too rapidly for you to be able to safely evacuate from the area, your home is the safest place for you to seek shelter in which to wait out the fire. The following outlines the safest way to shelter-in-place:



- Stay indoors and wait for the wildfire-front to pass, usually within 10 to 15 minutes.
- Call your out-of-town emergency contact to let them know you are sheltering-in-place. If local phone lines go down, try using a cellular phone as an alternative, or correspond via email if possible.
- Shelter in rooms at the opposite end of your home from where the fire is approaching. Stay away from the perimeter walls.
- *If the interior of your home catches fire, go to a neighbor's home.*
- Once the fire front has passed, thoroughly check your home, yard, roof, attic, etc. for fire. Use a garden hose or fire extinguisher to extinguish any spot fires or smoldering embers.

For further information on Sheltering-in-Place, you may contact the Fire District, 858-756-5971.

Maintaining Your Community

All homes within a shelter-in-place community are built to the same ignition-resistant standards and must remain that way. Even when remodeling or putting an addition on to your existing home, be sure your plans match the shelter-in-place guidelines:

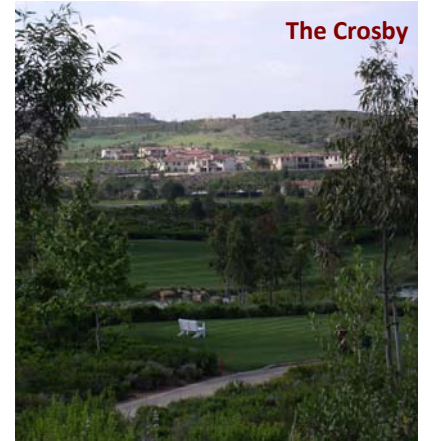
- Exterior walls must be ignition-resistant. Any wood siding must be treated or ignition resistant.
- Eaves must be boxed or constructed of heavy timber and all vents must be screened to prevent fire embers from entering the inside of your home.
- Windows must be dual-pane (one being tempered) glass.
- Chimneys must have spark arrestors with a minimum ½" screen.
- Residential fire sprinkler systems must be maintained.
- Roof must be comprised of Class-A, non-combustible materials like tile, slate, cement, asphalt or metal. No wood shingles.
- Wood fences should be at least 5 feet from your home.
- Trellises, patio covers and other auxiliary structures must be made with non-combustible materials. Minimum timber size requirements are 4" x 6", and columns must be masonry and stucco or precast concrete. The structure's covering must remain at least 50% open, or Class-A roof is required.
- Decks should be non-combustible or constructed of heavy timber or fire retardant-treated wood.
- Landscape **MUST** be fire-resistant and well-maintained.
- Keep 100 feet of "defensible space" around your home. Trim trees and vegetation well away from the exterior of your home, rooftop, and chimney(s).
- Replenish dead and dying vegetation with fire-resistant trees and plants; do not replant with flammable vegetation.



Emergency Supply Kit

Emergency supply kits can be used for various disaster situations like wildfires, earthquakes and floods. Supplies should be stored in easy-to-carry crates or backpacks. Your emergency supply kit should be updated twice annually and contain the following items:

- A 3-day water supply providing one gallon of water per person, per day.
- A 3-day non-perishable food supply including a can opener and kitchen utensils.
- One change of clothing and shoes per person.
- Enough blankets and/or a sleeping bag for each person.
- First aid kit, including family prescriptions and spare eyeglasses.
- Emergency tools and work gloves.
- A battery-powered radio or television and extra batteries.
- Flashlights with extra batteries.
- Matches and/or a lighter kept in a water-proof container.
- Sanitation and hygiene items.
- Special items for infants, seniors and those with disabilities.
- A credit card and cash; personal identification; extra set of car and house keys.
- Extra pet food, leash(es), and enough pet carriers to transport all pets.
- Sunglasses and/or goggles (for high wind and blowing embers).
- Entertainment (i.e., books and games for the family).
- Cell phone and charger.
- Computer/external drive.
- Sturdy boxes for packing supplies.



A System Approach

Maintenance is the key to keeping your community ignition-resistive. A system approach makes a shelter-in-place community only as effective against fire as its weakest system component.

System Components

Boxed or Heavy Timber Eaves
Fire Sprinklers
Landscaping
Defensible Space
Tempered Windows

Non-Combustible (Class-A) Roofing
Ember-Resistant Vents
Roadway Width
Spark Arrestors
Water Supply

Homes with every component intact in the shelter-in-place system have survived wildfires. Weaken one component in the system, though, and your home, family, and entire community are at risk. Every property owner must do their part to keep the system complete in order to remain a shelter-in-place community.

Frequently Asked Questions

Has the concept of Sheltering-in-Place during a wildfire ever been tested?

YES - Australia has been using the Shelter-in-Place (SIP) concept for years and Pepperdine University in Malibu, California has used the method to protect students during wildfires in the area. In our district, not a single SIP house was lost to the 2007 Witch Creek Fire, the first wildfire to come through the area since the SIP communities were built.

If I live in a Shelter-in-Place community do I have to stay in my home during an approaching wildfire?

If you know or see a wildfire is approaching your home, you may have a choice to stay or leave. If you chose to leave, leave EARLY, well before the fire arrives at your home. If an evacuation is ordered, evacuate the area immediately.

What if I want to leave but the way into my community is blocked by fire?

It is important have at least two ways out of your community, including secondary access routes. (See Evacuation Map on pages 4 and 5.) If all routes are congested, you would be safer in your home than being stuck in traffic trying to evacuate.

How long will I need to stay sheltered-in-place?

The fire front usually moves through a community in about 30 minutes, based on fire and weather conditions. Stay inside until the fire front passes.

Won't the smoke and radiant heat still be a danger to the home's occupants, even if the house itself doesn't burn?

Your home has been built to prevent smoke or fire embers from entering the home if all the windows and doors are properly closed. The Health Department also recommends staying inside to reduce the amount of smoke you breathe.

Once my community and home has been deemed shelter-in-place, do I need to do anything to keep it that way?

YES - You need to maintain your 100-foot fuel modification zone clear of any dead or dying vegetation and maintain the 10-foot clearance from the drip line of ornamental trees to your home. Any landscaping changes should be reviewed and approved by your HOA and the Fire District.

How is it possible that it is safer to stay in my home than it would be to evacuate?

Your home and community are designed with fire safety in mind. In the 2003 Cedar and Paradise Fires, 16 people died because the fire overtook them during evacuation. Your community, home, and landscaping have been designed to reduce and prevent fire brands or embers from entering your home. Do your part by keeping all doors and windows closed.

I have pets. Can they safely shelter-in-place too?

YES - However, they may easily become upset or frightened. Keep them restrained when possible.

What about houses that had 100-foot clearance but were still burned?

This would indicate the home was not secure and that fire brands or embers had entered the home.

What if my kids are at school? Should I go pick them up?

NO - Schools have pre-plan emergency procedures to take care of your children during different types of emergencies. Picking the kids up may be very difficult because of road closures and visibility due to fire and smoke.

