

Fire Adapted Communities: The Next Step in Wildfire Preparedness

ELKO COUNTY



University of Nevada
Cooperative Extension

Do You Know What It Takes To Survive Wildfire?

Fire Adapted Community:

A community located in a fire-prone area that requires little assistance from firefighters during a wildfire. Residents of these communities accept responsibility for living in a high fire-hazard area. They possess the knowledge and skills to...

- Prepare their homes and property to survive wildfire.
- Evacuate early, safely and effectively.
- Survive, if trapped by wildfire.



It is critical that residents of Elko's wildfire-prone areas commit to the goal of becoming a Fire Adapted Community. Photo courtesy of the Boise Fire Department.

Rural Nevada at Risk

Elko County has more rural communities located in high- and extreme-wildfire hazard areas than anywhere else in Nevada. The potential for loss of human lives, property and livelihoods due to wildfire is growing. It is not a matter of "if" wildfire is going to occur, but "when." Unfortunately, many residents and their homes are not prepared to survive wildfire. In response, the area's local, state and federal firefighting agencies; University of Nevada Cooperative Extension; and Elko County have come together to promote the Fire Adapted Community concept. They believe that this is the best response to our wildfire threat.

There are proven steps that homeowners can take to improve the odds of human life and home survival during wildfire. The Northeastern Nevada Fire Prevention Group's goal is to promote and teach these steps. Once implemented at the neighborhood level, these suggestions will assist communities in becoming Fire Adapted Communities.

The Northeastern Nevada Fire Prevention Group consists of fire prevention staff from all federal, state and local fire suppression entities located within Elko County. The group was established to provide an interagency approach to communication and coordination for wildland fire prevention and education to the residents of Elko County.



Who Wins, Who Loses

Why do some houses survive a wildfire, while others are destroyed? Research findings prove that house survival during wildfire is not random, miraculous or dumb luck. Rather, it is the features of the house, the characteristics of the adjacent vegetation and other fuels, and routine maintenance that often determine which homes burn and which survive. These types of actions are called prefire activities. Prefire activities are actions completed before a wildfire occurs that improve the survivability of people and the home. The winners will be the people who implement prefire activities. When everyone in the neighborhood completes their prefire activities, they start becoming a Fire Adapted Community. Photo courtesy of Kevin Hull.

A Fire Adapted Community Can Survive Wildfire With Little or No Assistance From Firefighters.

Before the Fire



During the Fire



After the Fire



Prior to the fire, this homeowner changed the roof material from wood shakes to fire-resistant tiles and reduced the amount of flammable vegetation surrounding the home. These prefire activities helped this house survive the fire. Photos (left and right) courtesy of University of Nevada Cooperative Extension, and (center) Candice Towell/ Reno Gazette-Journal.

The Elements of a Fire Adapted Community

Community Protection

Well-designed fuelbreaks and safe areas protect the community.

Defensible Space

Proper management of vegetation surrounding the home reduces the wildfire threat.

Access

Good access helps emergency responders arrive in a timely manner.

Evacuation

Prepared communities can evacuate safely and effectively.

Built Environment

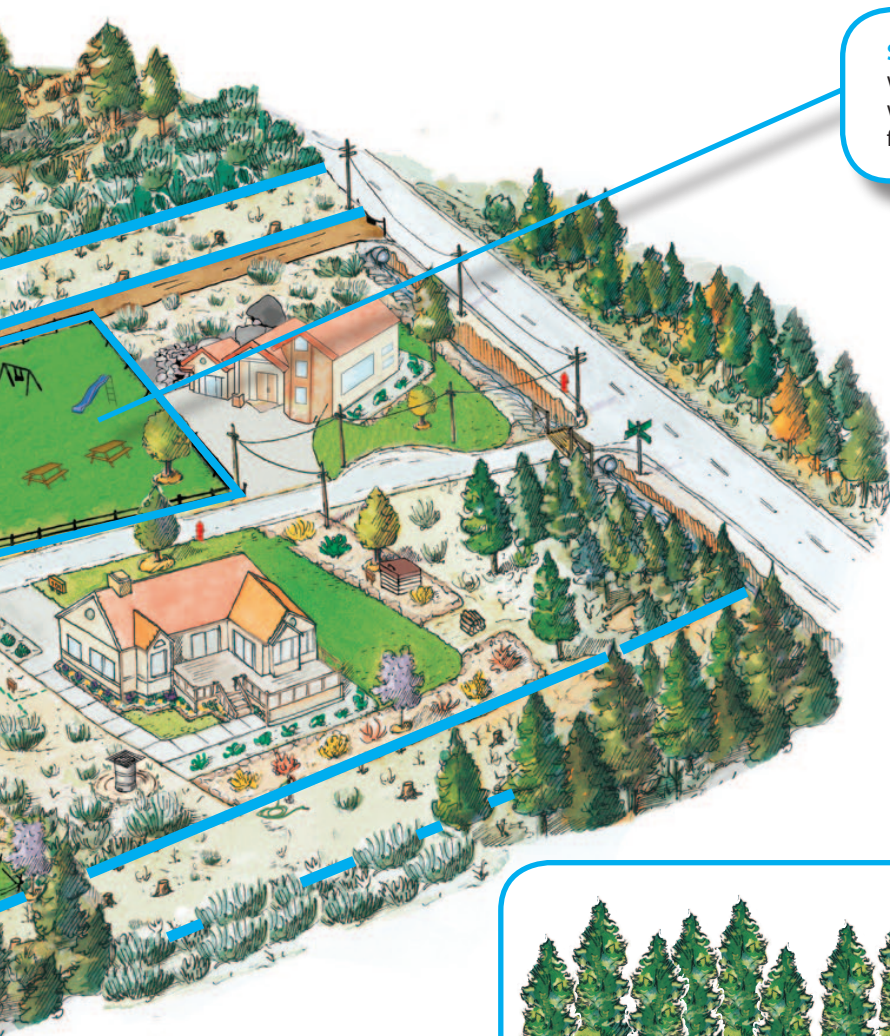
Appropriate home construction and maintenance resists ignition.



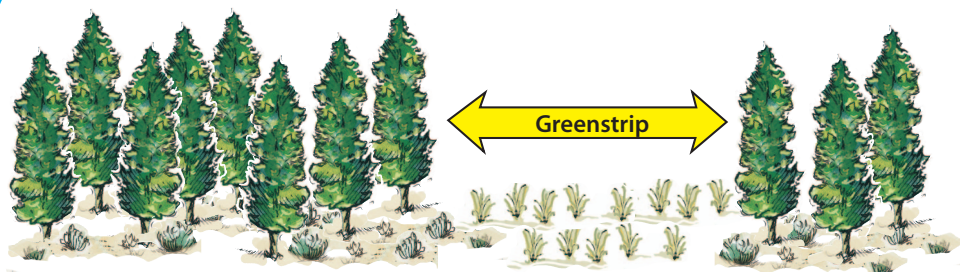
Community Protection



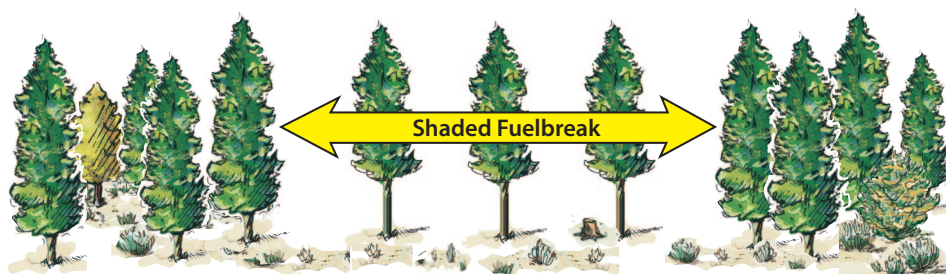
Fuelbreak: A fuelbreak is a strip of land where highly flammable vegetation is removed to reduce the wildfire threat. Fuelbreaks change fire behavior by slowing it down, reducing the length of flames, and preventing the fire from reaching tree canopies. Fuelbreaks can improve the success of fire retardant dropped from the air, provide a safer area for firefighters to operate, and allow for easier creation of firelines (a strip of bare ground established during a wildfire). **Shaded** and **greenstrip** are types of fuelbreaks as shown on the right. Community fuelbreaks are particularly effective when integrated with the defensible space of adjacent homes. They can be manmade or naturally occurring (rock outcrops, rivers and meadows).



Safe Area: A safe area is a designated location within a community where people can go to wait out the wildfire. Often, safe areas are ball fields, irrigated pastures, parks and parking lots.



Greenstrip: A greenstrip is a type of fuelbreak planted with less flammable vegetation. Crested wheatgrass is often planted in Nevada greenstrips.



Shaded Fuelbreak: A shaded fuelbreak is created on forested lands when trees are thinned, tree canopies raised by removing lower branches, and the understory vegetation managed to reduce the fire threat.

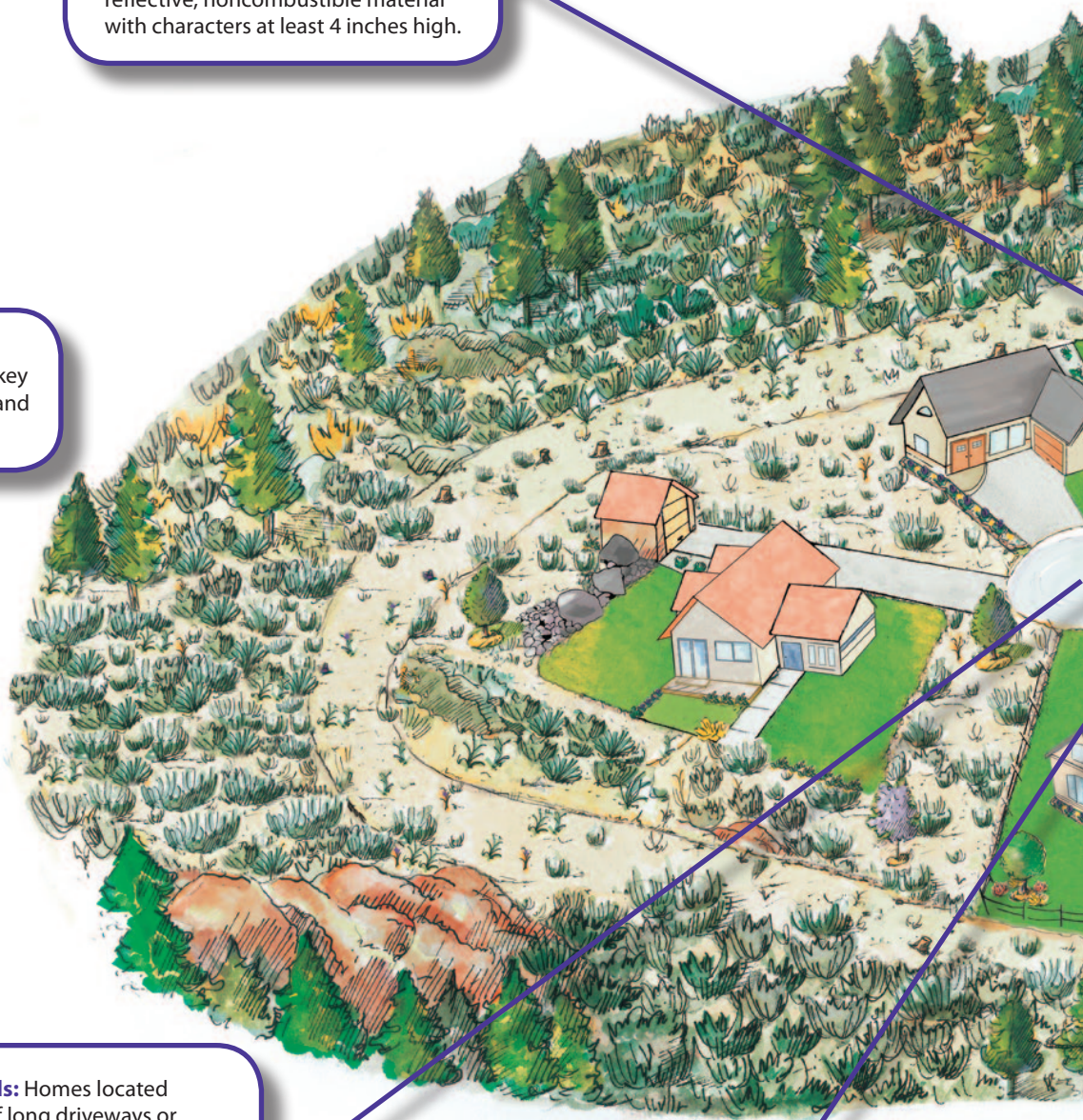
Access

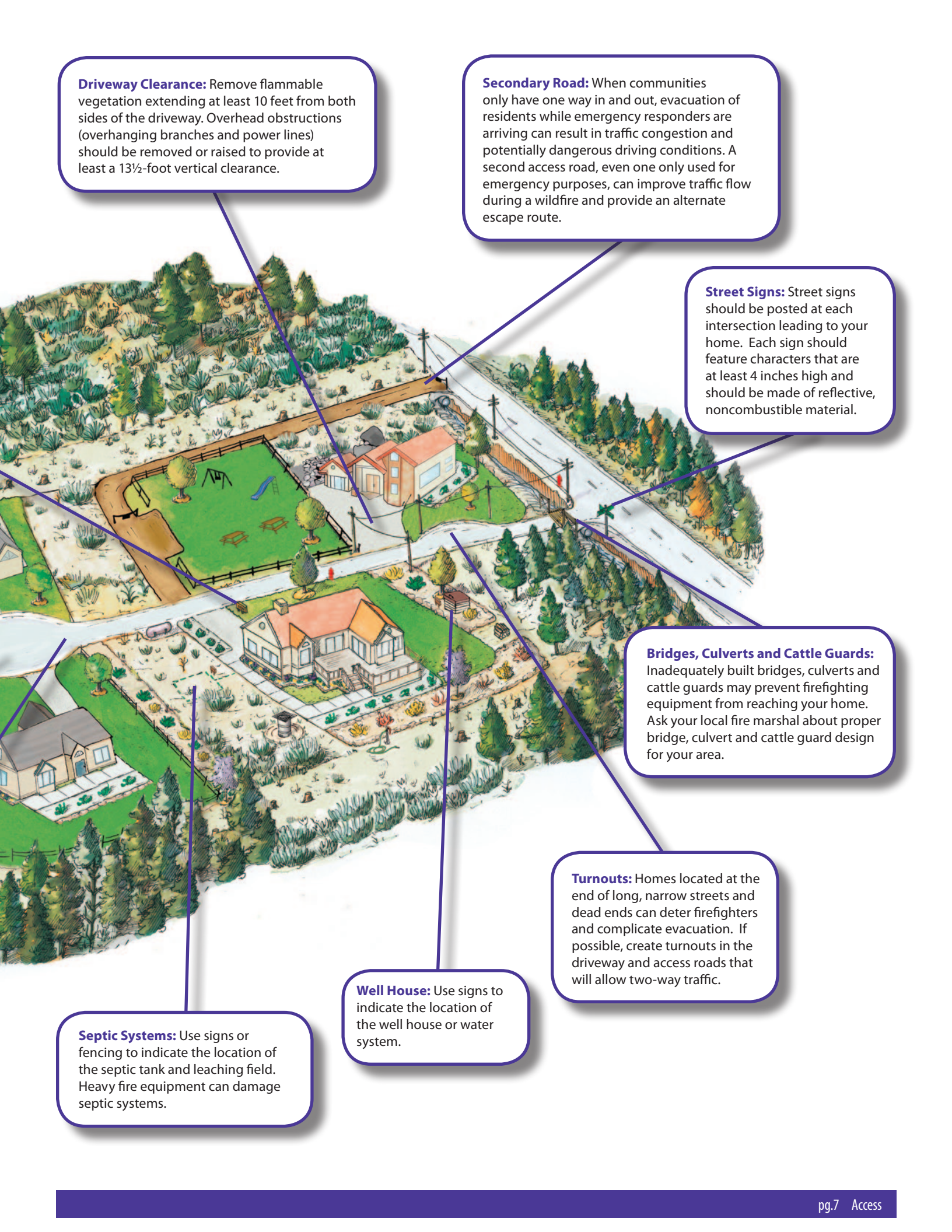
Address: The home address should be readily visible from the street. The address sign should be made of reflective, noncombustible material with characters at least 4 inches high.

Gated Driveways: Electronically operated driveway gates require key access for local fire departments and districts.

Turnarounds: Homes located at the end of long driveways or dead-end roads should have turnaround areas suitable for large fire equipment. Turnarounds can be a cul-de-sac with at least a 45-foot radius or a location suitable for a 3-point turn.

Road Width and Grade: Roads should be at least 20 feet wide, and long driveways should be at least 12 feet wide with a steepness grade of less than 12 percent.



An aerial illustration of a residential neighborhood with several houses, a playground, and a road. Purple lines connect callout boxes to specific features: a driveway, a secondary road, a street intersection, a bridge/culvert, a turnout, a well house, and a septic system.

Driveway Clearance: Remove flammable vegetation extending at least 10 feet from both sides of the driveway. Overhead obstructions (overhanging branches and power lines) should be removed or raised to provide at least a 13½-foot vertical clearance.

Secondary Road: When communities only have one way in and out, evacuation of residents while emergency responders are arriving can result in traffic congestion and potentially dangerous driving conditions. A second access road, even one only used for emergency purposes, can improve traffic flow during a wildfire and provide an alternate escape route.

Street Signs: Street signs should be posted at each intersection leading to your home. Each sign should feature characters that are at least 4 inches high and should be made of reflective, noncombustible material.

Bridges, Culverts and Cattle Guards: Inadequately built bridges, culverts and cattle guards may prevent firefighting equipment from reaching your home. Ask your local fire marshal about proper bridge, culvert and cattle guard design for your area.

Turnouts: Homes located at the end of long, narrow streets and dead ends can deter firefighters and complicate evacuation. If possible, create turnouts in the driveway and access roads that will allow two-way traffic.

Well House: Use signs to indicate the location of the well house or water system.

Septic Systems: Use signs or fencing to indicate the location of the septic tank and leaching field. Heavy fire equipment can damage septic systems.

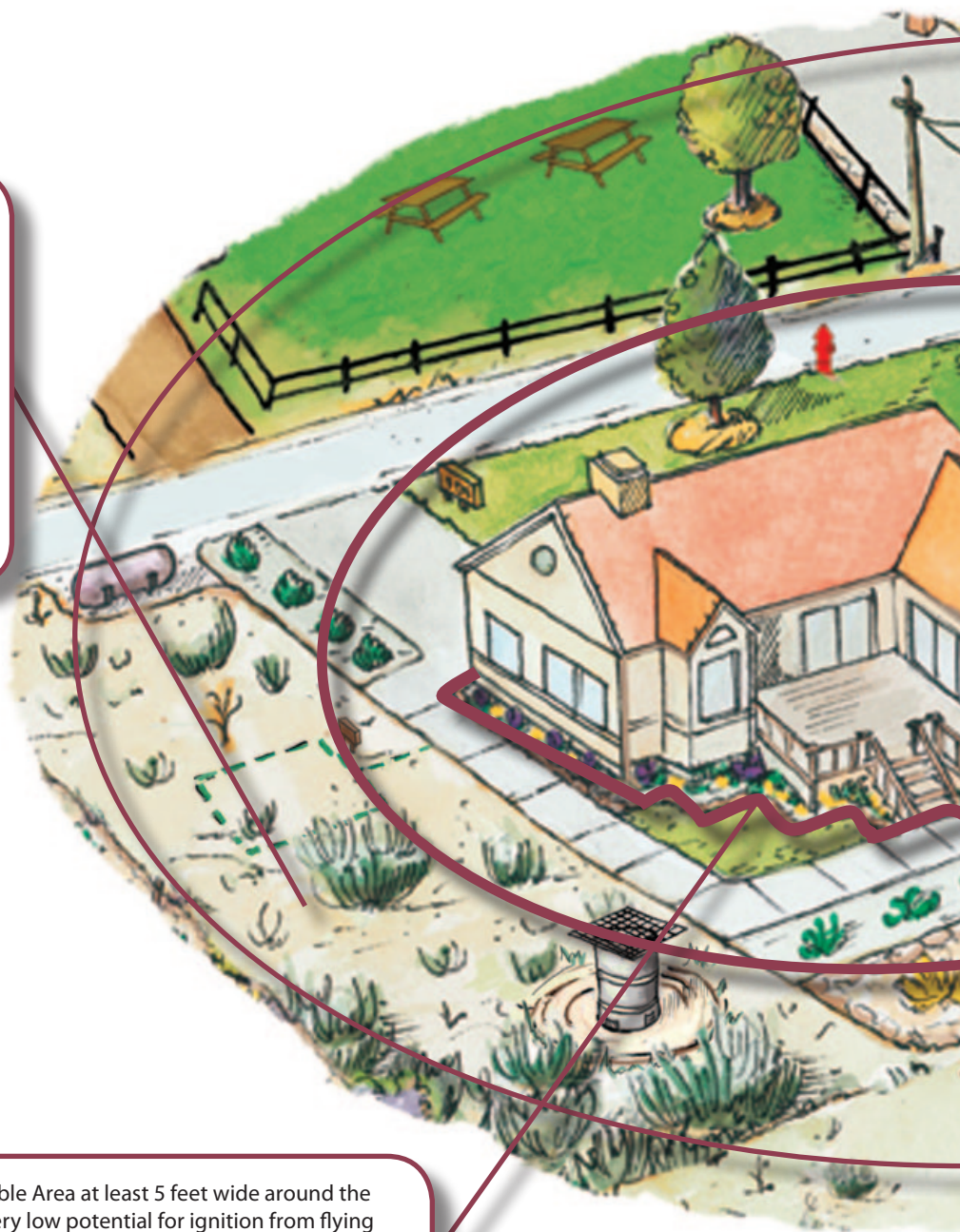
Defensible Space

Wildland Fuel Reduction Area: This area usually lies beyond the residential landscape area and is where sagebrush, cheatgrass, pinyon and other wild plants grow.

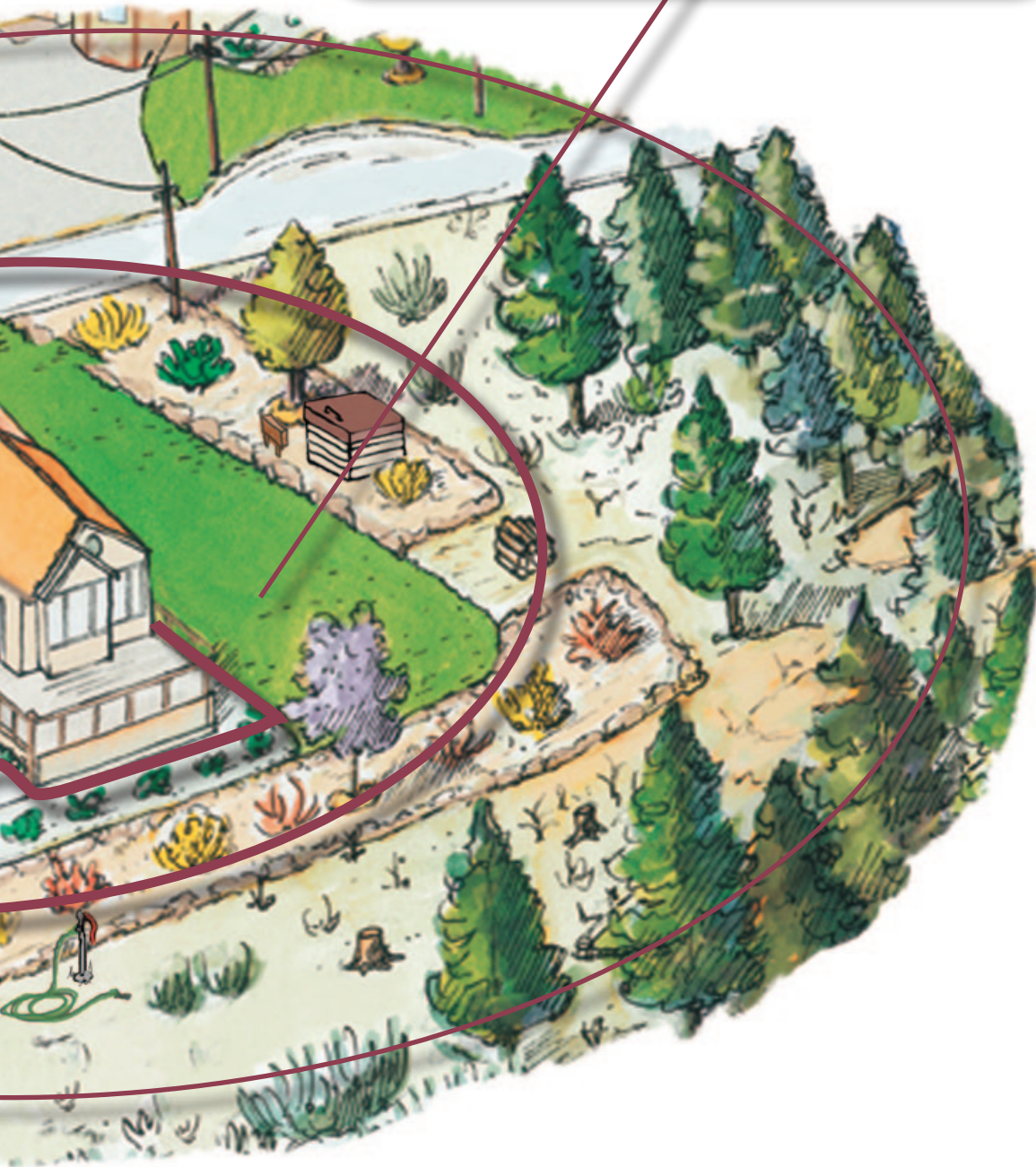
Within this area:

- Remove all dead vegetation (dead shrubs, dried grass and fallen branches).
- Thin out thick shrubs and trees to create a separation between them.
- Prevent ladder fuels by removing low tree branches, and removing or pruning any shrubs under the tree.

Noncombustible Area: Create a Noncombustible Area at least 5 feet wide around the base of your home. This area needs to have a very low potential for ignition from flying embers. Use irrigated herbaceous plants (lawn, ground cover and flowers), rock mulches or hard surfaces (concrete, brick and pavers) in this area. Keep it free of woodpiles, wood mulches, dead plants, dried leaves and needles, flammable shrubs (sagebrush and juniper), and debris.



Lean, Clean and Green Area: For a distance of at least 30 feet from the home, there should be a Lean, Clean and Green Area. Lean indicates that only a small amount of flammable vegetation, if any, is present within 30 feet of the house. Clean means there is no accumulation of dead vegetation or flammable debris within the area. Green denotes that plants located within this area are kept healthy, green and irrigated during fire season. For most homeowners, the Lean, Clean and Green Area is the residential landscape. This area often has irrigation, contains ornamental plants and is routinely maintained.



See Page 12, **Five Steps to Creating an Effective Defensible Space**

Built Environment

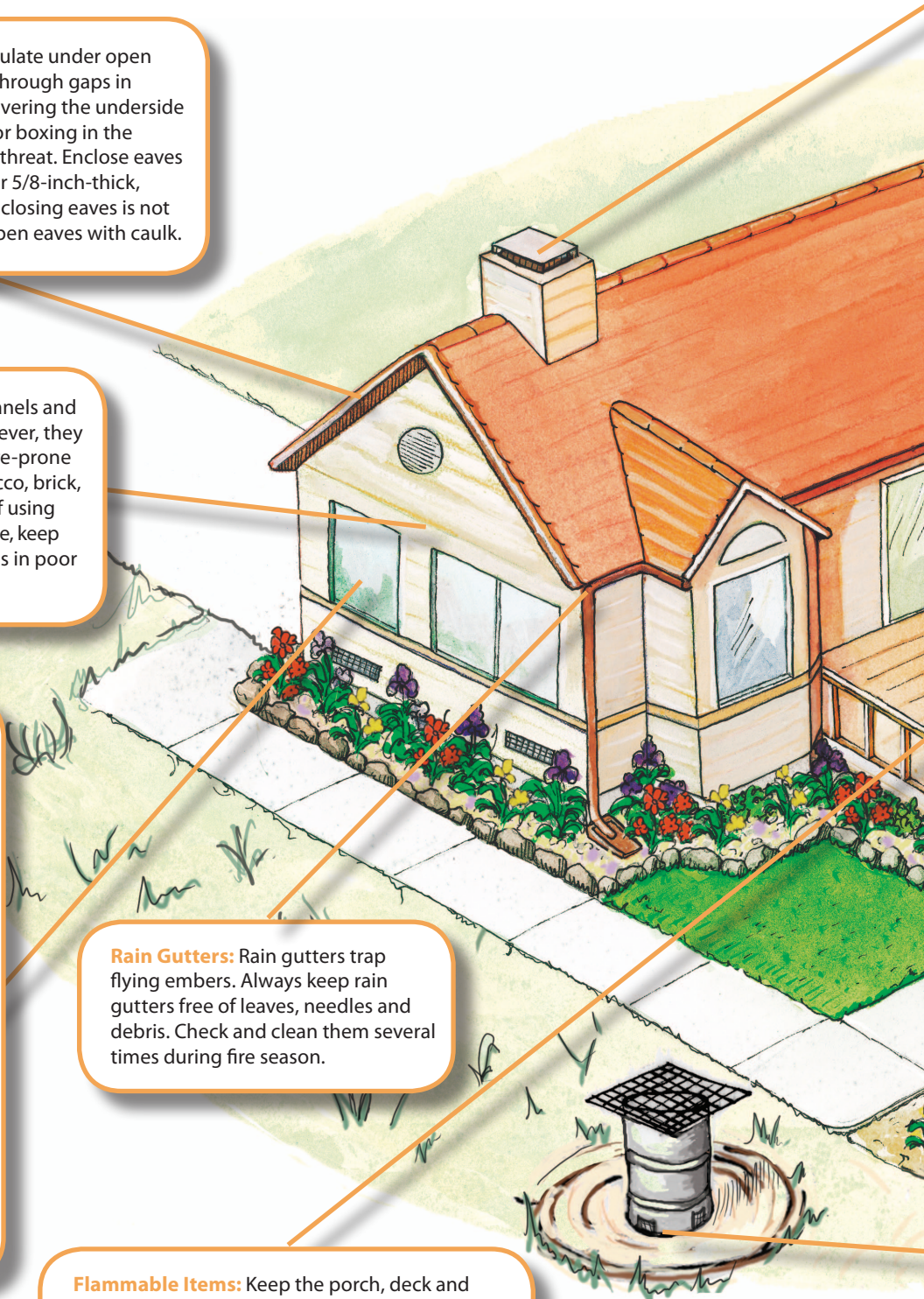
Eaves: Embers can accumulate under open eaves and enter the attic through gaps in construction materials. Covering the underside of the eaves with a soffit, or boxing in the eaves, reduces the ember threat. Enclose eaves with fiber cement board or 5/8-inch-thick, high-grade plywood. If enclosing eaves is not possible, fill gaps under open eaves with caulk.

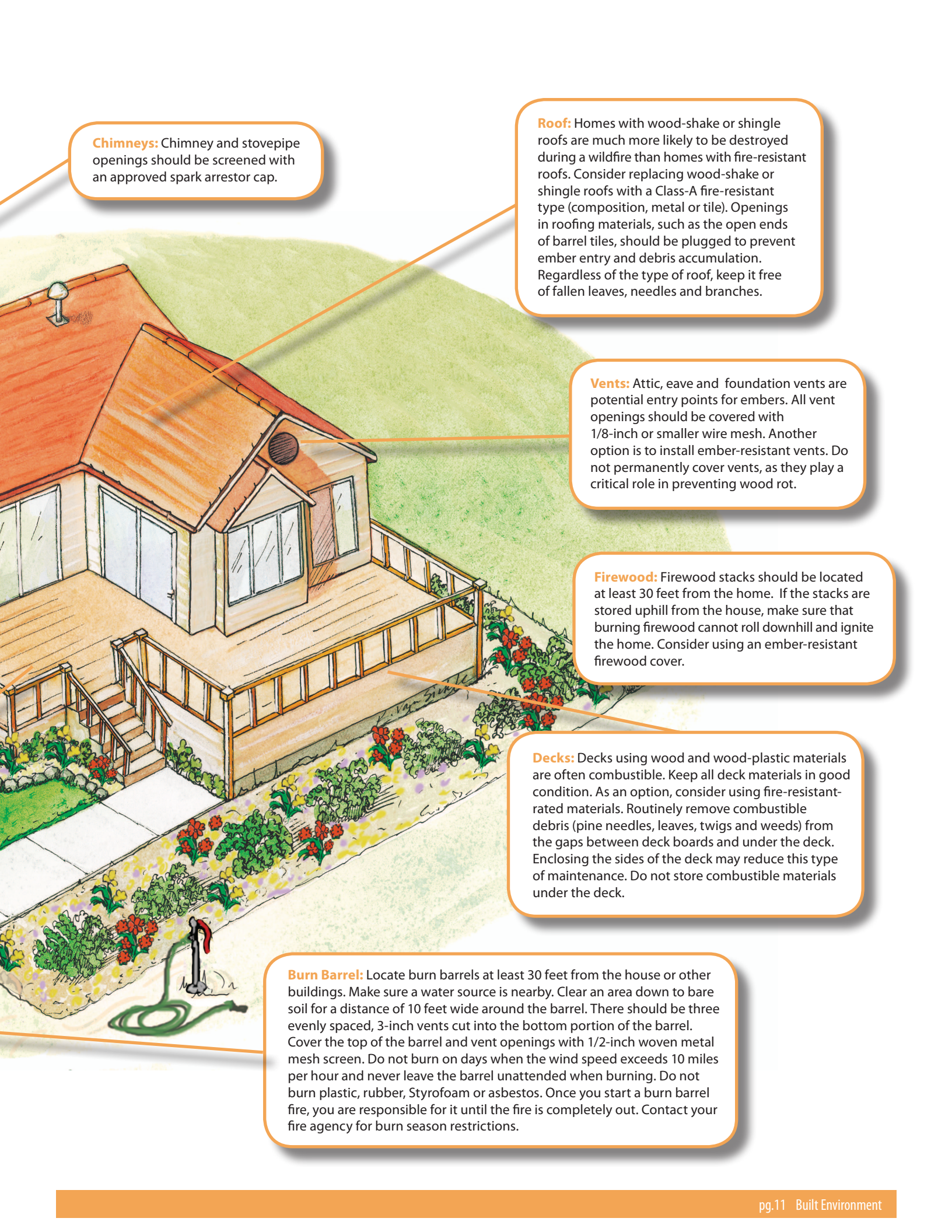
Exterior Siding: Wood products (boards, panels and shingles) are common siding materials. However, they are combustible and not good choices for fire-prone areas. Noncombustible siding materials (stucco, brick, cement board and steel) are better choices. If using noncombustible siding materials is not feasible, keep siding in good condition and replace materials in poor condition.

Windows and Skylights: Windows are one of the weakest parts of a home and usually break before the structure ignites. This allows burning embers and heat to enter the home, which may lead to internal ignition. Single-pane windows and large windows are particularly vulnerable. In high fire-hazard areas, install windows that are at least double-glazed and that utilize tempered glass for the exterior pane. The type of window frame (wood, aluminum or vinyl) is not as critical. However, vinyl frames should have metal reinforcements. Keep skylights free of pine needles, leaves and other debris, and remove overhanging branches. If skylights are to be placed on steep pitched roofs that face large amounts of nearby fuels (a mature pine tree or another house), consider using flat ones constructed of double-pane glass.

Rain Gutters: Rain gutters trap flying embers. Always keep rain gutters free of leaves, needles and debris. Check and clean them several times during fire season.

Flammable Items: Keep the porch, deck and other areas of the home free of easily combustible materials (baskets, dried flower arrangements, newspapers, pine needles and debris).





Chimneys: Chimney and stovepipe openings should be screened with an approved spark arrestor cap.

Roof: Homes with wood-shake or shingle roofs are much more likely to be destroyed during a wildfire than homes with fire-resistant roofs. Consider replacing wood-shake or shingle roofs with a Class-A fire-resistant type (composition, metal or tile). Openings in roofing materials, such as the open ends of barrel tiles, should be plugged to prevent ember entry and debris accumulation. Regardless of the type of roof, keep it free of fallen leaves, needles and branches.

Vents: Attic, eave and foundation vents are potential entry points for embers. All vent openings should be covered with 1/8-inch or smaller wire mesh. Another option is to install ember-resistant vents. Do not permanently cover vents, as they play a critical role in preventing wood rot.

Firewood: Firewood stacks should be located at least 30 feet from the home. If the stacks are stored uphill from the house, make sure that burning firewood cannot roll downhill and ignite the home. Consider using an ember-resistant firewood cover.

Decks: Decks using wood and wood-plastic materials are often combustible. Keep all deck materials in good condition. As an option, consider using fire-resistant-rated materials. Routinely remove combustible debris (pine needles, leaves, twigs and weeds) from the gaps between deck boards and under the deck. Enclosing the sides of the deck may reduce this type of maintenance. Do not store combustible materials under the deck.

Burn Barrel: Locate burn barrels at least 30 feet from the house or other buildings. Make sure a water source is nearby. Clear an area down to bare soil for a distance of 10 feet wide around the barrel. There should be three evenly spaced, 3-inch vents cut into the bottom portion of the barrel. Cover the top of the barrel and vent openings with 1/2-inch woven metal mesh screen. Do not burn on days when the wind speed exceeds 10 miles per hour and never leave the barrel unattended when burning. Do not burn plastic, rubber, Styrofoam or asbestos. Once you start a burn barrel fire, you are responsible for it until the fire is completely out. Contact your fire agency for burn season restrictions.

Five Steps to Creating an Effective Defensible Space

The term defensible space refers to the area between a house and an oncoming wildfire where the vegetation has been managed to reduce the wildfire threat and allow firefighters to safely defend the house. In the event that firefighters are not available, defensible space also improves the likelihood of a home surviving without assistance.

Unfortunately, when some homeowners hear the term defensible space, they envision a large expanse of bare ground surrounding their home. While bare ground is certainly effective at increasing home survivability, it can detract from the home's aesthetics and contribute to soil erosion. It is also unnecessary.



A homeowner can have both an effective defensible space and an attractive landscape. Photo courtesy of Ronnie Torell.



Step One

The size of the defensible space is usually expressed as a distance extending outward from the house in all directions. The recommended distance is not the same for every home. It varies depending on the dominant vegetation surrounding the home and steepness of slope. Use the Recommended Defensible Space Distance table to determine the right space for your home.

Once the recommended distance for defensible space is known, mark it by tying strips of cloth or flagging to shrubs. This becomes the Defensible Space Zone.

If the Defensible Space Zone exceeds your property boundaries, seek permission from adjacent landowners before doing work on their property. It is important to note that the effectiveness of the Defensible Space Zone improves when entire neighborhoods implement defensible space practices.



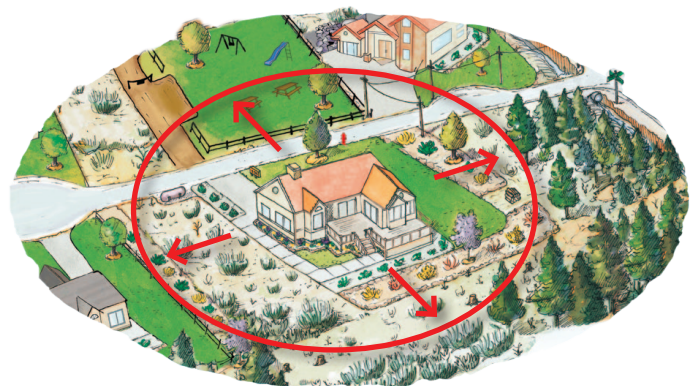
Step Two

Within the recommended Defensible Space Zone, remove:

- Dead and dying trees.
- Dead native and ornamental shrubs.
- Dead branches.
- Dead leaves, needles and twigs that are still attached to plants, draped on live plants or lying on the ground within 30 feet of the house.
- Dried grass, weeds and flowers.

RECOMMENDED DEFENSIBLE SPACE DISTANCE

	<i>Flat To Gently Sloping 0-20%</i>	<i>Moderately Steep 21-40%</i>	<i>Very Steep +40%</i>
<i>Grass Dry grass (cheatgrass and weeds).</i>	30 feet	100 feet	100 feet
<i>Shrubs and Woodland (sagebrush, pinyon and juniper).</i>	100 feet	200 feet	200 feet



Defensible space distance is measured from the base of the house, extending outward.

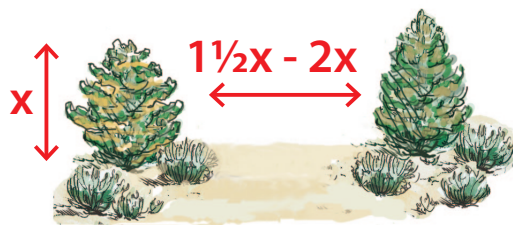


Step Three

Within the Defensible Space Zone, native trees and shrubs, (pinyon, juniper and sagebrush) should not occur in dense stands. Dense stands of trees and shrubs pose a significant wildfire threat. Thin dense tree and shrub stands to create more space between them.

On flat to gently sloping terrain, individual shrubs or small clumps of shrubs within the Defensible Space Zone should be separated from one another by at least twice the height

of the average shrub. For homes located on steeper slopes, the separation distance should be greater. For example, if the typical shrub height is 2 feet, then there should be a separation between shrub branches of at least 4 feet. Remove shrubs or prune to reduce their height and/or diameter. In most instances, removing big sagebrush is the preferred approach. It is a very flammable plant, is easily removed, does not resprout and is typically abundant. Retaining pinyon and Utah juniper trees within 30 feet of the house is not recommended.



Pinyon pine and Utah juniper should be thinned to provide an average spacing between canopies of $1\frac{1}{2}$ to two times the average tree height. In areas where bark beetles are of concern, thinning of pinyon pine should be done during the late fall and winter months and utilize wood and slash management techniques as described at www.unce.unr.edu/publications/files/nr/2003/EB0302.pdf.

Dry Cheatgrass is Kindling!

Dry cheatgrass is one of the most easily ignitable plants on Nevada's rangelands. It is the kindling that fuels many of our wildfires. Once ignited, cheatgrass fires can travel very fast...faster than you can run!

Dry cheatgrass can be readily ignited by discarded lit cigarettes, welding activities, ricocheting bullets, catalytic converters on vehicles, fireworks or lightning. If cheatgrass is present near your home, remove it for a distance of at least 30 feet from your house and other buildings. Use a lawn mower with a mulching blade or cut it with a weed eater while it is still green, rake it up, and remove it. Make sure there's a connected garden hose with a spray nozzle attached in case there is an accidental fire start.



Illustration reprinted from "North American Wildland Plants: A Field Guide" by James Stubbendieck, Stephan L. Hatch, and L.M. Landholt by permission of the University of Nebraska Press. ©2003 by the Board of Regents of University of Nebraska.



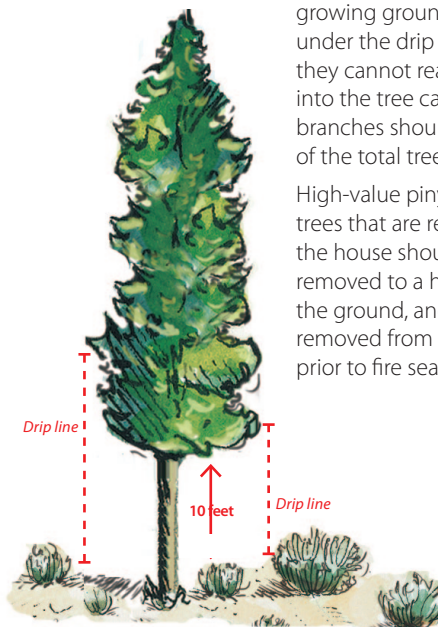
Step Four

Vegetation that can carry a fire from low-growing plants to taller plants is called ladder fuel. For tall ornamental trees in the home landscape, lower tree branches should be removed to a height of at least 10 feet.



Shrubs and trees should be removed from under the tree drip line. Low-growing ground covers can be retained under the drip line of trees as long as they cannot readily convey a surface fire into the tree canopy. Removal of lower branches should not exceed one-third of the total tree height.

High-value pinyon and Utah juniper trees that are retained within 30 feet of the house should have lower branches removed to a height of 2 to 3 feet above the ground, and plant litter should be removed from beneath the tree canopy prior to fire season.



Big sagebrush and dried cheatgrass make a threatening combination for this home. Photo courtesy of University of Nevada Cooperative Extension.



Step Five

There are two goals for the Lean, Clean and Green Area. The first goal is to eliminate easily ignitable fuels, or kindling, near the house. This will help prevent embers from starting a fire in your yard. The second goal is to keep fire intensity low if it does ignite near the house.

By proper management of the fuels near the house, a fire would not be able to generate enough heat to ignite the home.

For most homeowners, the Lean, Clean and Green Area is also the residential landscape. This area often has irrigation, is planted with ornamental vegetation and is regularly maintained.

Lean, Clean and Green Area Tips

- Remove most or all flammable wildland plants, including big sagebrush, bitterbrush, rabbitbrush, cheatgrass, pinyon and juniper. If you wish to retain a few of these as specimen plants, make sure they are free of dead wood and leaves, pruned to reduce the amount of fuel, and separated from adjacent brush fields.
- Select less flammable plants for the home landscape. Some rules of thumb in selecting landscape plants for the Lean, Clean and Green Area are:
 - Shorter plants, less than 2-feet tall, are better choices than taller plants.
 - Green, herbaceous plants (grass and nonwoody flowers) are better choices than shrubs and trees.
 - Deciduous shrubs and trees are better choices than evergreen types. Avoid planting juniper, mugo pine and arbovitae.
- Emphasize the use of hard surfaces (concrete, asphalt and brick). Within 30 feet of the house, do not use wood mulches in a widespread manner, and do not use rubber mulches.
- Clear all flammable vegetation from within 10 feet of the propane tank.
- Remove tree limbs that are within 10 feet of the chimney, touching the house or deck, within 6 feet of the roof, or encroaching on power lines.
- Create a noncombustible area at least 5-feet wide around the base of the house. Emphasize the use of irrigated herbaceous plants, (lawn, ground covers and flowers). Also use rock mulches and hard surfaces.



Miracle House?: This home survived northern California's Forty-niner Fire and has been referred to as the "Miracle House." That title, however, is misleading. The reason this home survived was not due to a miracle. It survived because the homeowner was proactive and created a Lean, Clean and Green Area; had a fire-resistant roof; and provided good access. It was designed to survive. Photo courtesy of the California Department of Forestry and Fire Protection.

Maintenance

Maintaining a defensible space is an ongoing activity. Plants grow back, and flammable vegetation needs to be routinely removed and disposed of properly. Before each fire season, re-evaluate your property using the previous five steps and implement the necessary defensible space recommendations.



Little Green Gas Cans

Firefighters often refer to ornamental junipers as little green gas cans. During a wildfire involving homes, embers can smolder undetected under ornamental junipers. The junipers can then ignite and burn intensely after firefighters have left the area. Planting ornamental junipers next to your house is never a good idea. Keep these little green gas cans at least 30 feet from the house or replace them with low-growing deciduous shrubs, herbaceous flowers, rock mulches and hard surfaces. Photo courtesy of University of Nevada Cooperative Extension.

Evacuation

Preparation

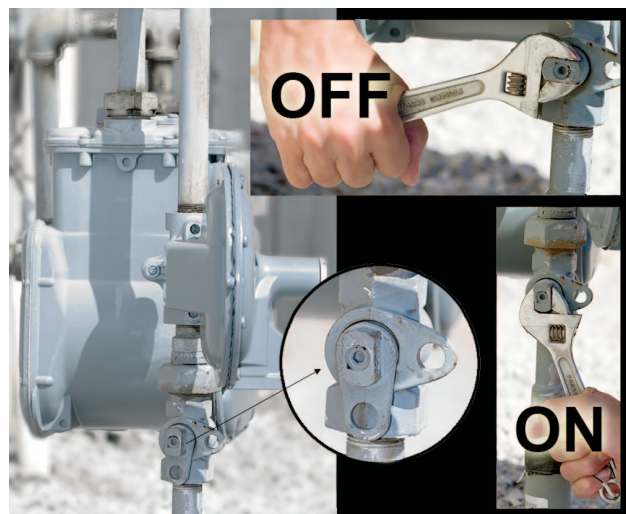
A key component of the Fire Adapted Communities concept is residents who know how to safely and effectively evacuate. Successful community evacuation requires preparation. The following checklists provide recommendations concerning proper evacuation preparation.

Elements of Family Emergency Planning and Preparation

- Meet with household members. Explain dangers to children and work as a team to prepare your family for emergencies.
- Discuss what to do about power outages and personal injuries.
- Post emergency phone numbers near phones.
- Learn how to turn off the water, gas (see inset) and electricity at your home.
- Select a safe meeting point. During an emergency, you may become separated from family members.
- Choose an out-of-town contact because it is often easier to make a long-distance phone call than a local call from a disaster area. Everyone must know the contact's phone number.
- Complete a family communications plan. Your plan should include contact information for family members, work and school.
- Teach children how to make long-distance phone calls.
- Complete an inventory of home contents and photograph/videotape the house and landscape. Place files in your to-go bag (see Page 16). A second copy of these files should be stored in a location away from your community.
- Identify escape routes and safe places. In a fire or other emergency, you may need to evacuate very quickly. Be sure everyone in your family knows the best escape routes out of your home and where safe places are in your home for each type of disaster. Draw an escape plan with your family highlighting two routes out of each room.
- Prepare **EVACUATED** sign and if you have an emergency water source (pool, pond or hot tub), a **WATER SOURCE HERE** sign. Select sites to post the signs where they will be clearly visible from the street.



A family emergency plan is essential in the evacuation process. Photo courtesy of Washoe County.



How to Shut Off the Gas Supply

Attach a wrench to the gas meter with a wire so it is readily accessible in the event of an emergency. Use the wrench to turn the valve until it is perpendicular to the pipe. Be aware that once your gas is turned off, all your pilot lights will need to be relit when turning the gas back on. It is advisable to contact your gas provider at that time. Photo courtesy of Washoe County.

IMPORTANT UTILITY CONTACT INFORMATION

Amerigas	775-778-9444
NV Energy Customer Service	775-834-4444
NV Energy Outage/Emergencies	775-834-4100
Wells Rural Electric Company	800-566-6696
Southwest Gas	877-860-6020
Suburban Propane	775-738-3151
Wells Propane	775-752-6788
Western States Propane	888-984-1384

Content for the Evacuation section adapted with permission from *Ready, Set, Go!*, International Association Of Fire Chiefs; *Incline Village/Crystal Bay Emergency Preparedness Guide*, North Lake Tahoe Fire Protection District; *Preparing Residents In Disaster Evacuations*, Sierra Fire Protection District; *Living With Fire*, University of Nevada Cooperative Extension; *Washoe County Emergency Preparedness Guide*, Washoe County Division Of Emergency Management & Homeland Security; and *They'll Be Counting On You*, Washoe County Regional Animal Services.

To-go Bag and Disaster Supplies Kit

Prepare for at least three days, but preferably seven days. The best time to assemble a to-go bag and disaster supplies kit is well before you need them. Most of these items are already in your home, and stocking up on emergency supplies now can add to your family's safety and comfort during and after a disaster.

Essentials for a Disaster Supplies Kit

If you anticipate an extended evacuation at an emergency shelter or your family is returning to a home without functioning electricity and water, these items will prove helpful:

- ❑ One gallon of water per person, per day, stored in unbreakable containers and labeled with the storage date. Replace every six months.
- ❑ Supply of nonperishable packaged or canned foods with a hand-operated can opener.
- ❑ Antibacterial hand wipes or gel.
- ❑ First-aid kit, including a first-aid book.
- ❑ At least one blanket or sleeping bag per person.
- ❑ ABC-type fire extinguisher.
- ❑ Special items for infants and elderly or disabled family members.
- ❑ Large plastic trash bags, tarps and rain ponchos.
- ❑ A large trash can.
- ❑ Bar soap, liquid detergent and household bleach.
- ❑ Rubber gloves and duct tape.



Homeowners should plan ahead for pet evacuation. Photo courtesy of Nevada Appeal.

Preparing Pets and Livestock for Evacuation

Plan to take your animals with you and never turn them loose. Animals may not be allowed inside human emergency shelters. Contact your county's animal services department for advice on animal evacuation.

- ❑ Make sure dogs and cats wear properly fitted collars with identification, vaccination, microchip and license tags.
- ❑ Your pet evacuation plan should include routes, transportation needs and host sites. Share this plan with trusted neighbors in your absence.
- ❑ Exchange veterinary information with neighbors and file a permission slip with the veterinarian authorizing emergency care for your animals if you cannot be located.
- ❑ Make sure all vehicles, trailers and pet carriers needed for evacuation are serviced and ready to be used.
- ❑ Assemble a pet to-go bag with a supply of food, nonspill food and water bowls, cat litter and box, and a restraint (chain, leash or harness). Additional items to include are newspaper, paper towels, plastic bags, a permanent marker, bleach/disinfectant solution and water buckets.

Essentials for a To-go Bag

The to-go bag should be easily accessible and filled with items needed to help you quickly and safely evacuate your home. When a wildfire is approaching, you may only have enough time to retrieve this bag. Be sure it contains:

- ❑ Clothing and personal toiletries.
- ❑ Inventory of home contents and photographs/videotape of the house and landscape. Contact your insurance agent for an inventory checklist.
- ❑ Flashlight, portable radio tuned to an emergency radio station and extra batteries. Change batteries annually.
- ❑ Extra set of car and house keys.
- ❑ Extra pair of eyeglasses.
- ❑ Contact information for family, friends and physicians.
- ❑ Copy of this publication.



Individuals with special needs are evacuated during Carson City's Waterfall Fire. Photo courtesy of Nevada Appeal.

How to Address the Special Needs of Vulnerable Populations During an Evacuation

During a disaster, it is essential that individuals with special needs, including the elderly, people with medical problems and people with certain disabilities, receive proper care.

- ❑ If the family member is dependent upon medications or equipment, or has special dietary needs, plan to bring those items with you. Documentation about insurance and medical conditions should also accompany the person.
- ❑ Transportation available to the general public during an emergency evacuation may not be suitable for family members with special needs. Plan ahead for their transportation.
- ❑ Many special-needs populations are easily upset and stressed by sudden and frightening changes. Your plans should ensure that a caregiver or trusted family member is able to stay with them at all times during an evacuation.



Elko County wildfires can spread quickly, leaving little time for evacuation. It is important that residents prepare for evacuation ahead of time. Photo courtesy of Jeff Amberger.

You Have Prepared Your Family for an Emergency Evacuation When You Have:

- ❑ Made a Family Emergency Plan.
- ❑ Registered with your local emergency notification system, if this service is available in your area.
- ❑ Registered with your phone-tree captain, if a phone tree has been established in your community.
- ❑ Attended an evacuation drill and practiced two of the recommended evacuation routes out of the community.
- ❑ Arranged for transportation out of the affected area if you do not drive.
- ❑ Familiarized yourself and your family with the location of local evacuation centers.
- ❑ Designated a safe meeting place and contact person for you and your family members.
- ❑ Assembled a family to-go bag, a disaster supplies kit and a pet to-go bag.
- ❑ Inventoried home contents, videotaped/photographed property, and placed photos and videos in the to-go bag.
- ❑ Reviewed the pet/livestock evacuation recommendations and assembled supplies needed for animal care in a to-go bag.
- ❑ Reviewed the supplemental fire-preparedness information available at www.livingwithfire.info.
- ❑ Prepared *EVACUATED* and *WATER SOURCE HERE* signage.

Notification

No single method of communication is fail-safe during an emergency, so regional public safety officials use a combination of five methods to keep the public informed during an emergency.

- ❑ Local government public information officers can prepare and distribute media releases for broadcast by local media outlets and posting on websites.
- ❑ Emergency managers can initiate the Emergency Alert System, which interrupts local radio and television broadcasts with important information.
- ❑ Public safety officials can directly broadcast messages over government cable channels.
- ❑ First responders and credentialed volunteers can go door-to-door to alert citizens.
- ❑ If applicable, the local emergency notification system can be used to automatically call affected residents.

There is no guarantee that every citizen will be contacted, but these five methods allow regional officials to quickly notify large sections of the local population. As another option, consider establishing an emergency phone tree in your neighborhood in conjunction with your local fire department.

In an Emergency, Tune to:

KELK 1240 AM • KNCC 91.5 FM

KLKO 93.7 FM • KRJC 95.3 FM • KHIX 96.7 FM



Residents of Nevada's wildland-urban interface communities should be familiar with the emergency notification method for their area. Photo courtesy of Ben Hammack.

Emergency Notification System

Nixle is a community information service provider built exclusively to provide secure and reliable emergency communications. It is the first authenticated and secure service that connects municipal agencies and community organizations to residents in real time, delivering information to geographically targeted consumers over their cell phones via text messages, through email and via Web access. For more information or to sign up for free emergency notifications, visit <http://www.nixle.com>. You can create an account or text "elkops" to 888777.

For current wildland fire information visit:

<http://gacc.nifc.gov/gbcc/dispatch/nveic/>

or follow on Twitter @eidc2



The 1996 Autumn Hills Fire forced the evacuation of many Carson Valley residents. Photo courtesy of Nevada Appeal.

Evacuation Terms

Exclusion Zone - An area established by the commander in charge of the disaster scene into which entry is temporarily forbidden due to extreme danger. Only official responder vehicles are allowed entry until the situation is deemed safe again.

Evacuation Advisory - An advisory is issued when there is reason to believe the emergency will escalate and require mandatory evacuations. It provides residents time to prepare for evacuation.

Voluntary Evacuation - Voluntary evacuation is used when an area will most likely be impacted and residents are willing and able to leave before the situation worsens. This is helpful for residents with medical issues, pet owners and others who need more time to evacuate.

Mandatory Evacuation - When the situation is severe and lives may be in danger, the governor has the authority to order mandatory evacuations. Should this occur, you must leave the area immediately. Follow any instructions you receive from law enforcement officers or fire officials.

IMPORTANT CONTACT INFORMATION

Dial 911 to report any life threatening emergency

Name	Phone Number	Website
American Red Cross	775-753-9600	www.nevada.redcross.org
Bureau of Land Management	775-753-0200	www.blm.gov/nv/st/en/fo/elko_field_office
City of Elko Fire Department	775-777-7345	www.elkocity.com/departments/index
City of Elko Police Department	775-777-7310	www.elkocity.com/departments/index
Elko Central Dispatch (Nonemergency calls)	775-777-7300	
Elko County Animal Shelter	775-777-7333	www.elkocity.com/departments.index
Elko County Fire Protection District	775-738-9960	www.elkocountynv.net
Elko County Sheriff's Department	775-738-3421	www.elkocountynv.net
Elko Interagency Dispatch Center	775-748-4000	www.gacc.nifc.gov/gbcc/dispatch/nveic/
Nevada Division of Forestry	775-738-3454	www.forestry.nv.gov
Nevada Highway Patrol	775-753-1111	www.dps.nv.gov
The Salvation Army	775-738-8372	www.salvationarmyusa.gov
U.S. Forest Service Humboldt-Toiyabe National Forest	775-738-5171	www.fs.usda.gov/htnf

Time to Leave

During a wildfire, it will likely be dark, smoky, windy, dry and hot. There may be burning embers being blown about, no power, no phone service and poor water pressure. Remember, there is nothing you own worth your life! Please evacuate immediately when asked by fire or law enforcement officials. If you are concerned, don't wait to be asked to leave. Drive slowly, turn on your vehicle headlights and stay as far to the right side of the road as possible.

If You Have to Evacuate and There's Time

Wear and carry:

- Long pants, a long-sleeved shirt or jacket made of cotton or wool, a hat, and boots.
- Gloves, a handkerchief and goggles to cover your face, and water to drink.
- Flashlight and portable radio from your to-go bag (see Page 16) tuned to a local radio station.

Family members should:

- Evacuate early, especially if not essential to preparing the house for wildfire.
- Follow practiced evacuation routes to the designated safe meeting place.
- Relay plans to the designated contact person.

For your animals:

- Evacuate them if possible.
- Contact your county's animal services department for assistance.
- Bring current pet photos (make sure distinguishing markings are visible), health records and paperwork (especially vaccination information stored in waterproof bags), and medications and dosage instructions.
- Secure pets in their own carrier or cage.
- Place your pet to-go bag in the car (see Page 16).

For your vehicle:

- If you can lift your garage door manually, disconnect the electric garage door opener, and place the vehicle in the garage pointing out. Leave the garage door unlocked and closed. If you cannot lift your garage door manually, park the vehicle in the driveway facing out.
- Leave keys in the ignition.
- Roll up the windows.
- Keep the fuel tank full during fire season.

Place in your vehicle:

- To-go bag (see Page 16).
- Disaster supplies kit (see Page 16).
- Important documents (bank, IRS, trust, investment, insurance policies, birth certificates, marriage certificates, death certificates, medical and immunization records, wills, contracts, titles, and deeds).
- Credit and ATM cards and extra cash.
- Medications.
- Driver's licenses, passports and Social Security cards.
- Laptop, charger and backup of desktop computer files.
- Address book.
- Cell phones and chargers.
- Family photo albums and videos.
- Family heirlooms.
- Toys, books and games for entertainment.



Plan to take your animals with you. Never turn them loose. Photo courtesy of Nevada Appeal.

Inside your home and outbuildings:

- Close all interior doors.
- Leave a light on in each room.
- Remove combustible curtains and other materials from around windows.
- Close windows, skylights and exterior doors (house, garage, shop and barn).
- Close fire-resistant drapes, shutters and blinds.
- Turn off all pilot lights.
- Move overstuffed furniture (couches and easy chairs) to the center of the room.
- Close fireplace damper.
- Turn off air-conditioning.
- Place an *EVACUATED* sign in the front window.

Outside your home and outbuildings:

- Place combustible patio furniture and accessories inside or toss them away from the house.
- Remove barbecue propane tanks and place them away from the house where they can safely vent.
- Shut off propane at the tank or natural gas at the meter (see Page 15).
- Close or cover foundation, attic and eave vents with precut plywood covers or several layers of aluminum foil.
- Cover windows with plywood panels at least 1/2-inch thick.
- Prop a noncombustible ladder against the house.
- Connect garden hoses to faucets and attach nozzles set on spray.
- Remove excelsior pads from swamp coolers and toss them away from the house.
- Leave doors and gates unlocked.
- Turn on outside lights.
- Fill trash cans and buckets with water and place where firefighters can find them.
- If you have an emergency water source, post *WATER SOURCE HERE* sign in the predetermined spot clearly visible from the street.

***Always Register With Official Personnel
When You Arrive at a Shelter.***

If You Cannot Leave

- ❑ If you are unable to evacuate, stay in your home during the fire. It will be much hotter and more dangerous on the outside.
- ❑ Call 911 for assistance.
- ❑ Turn on all exterior lights.
- ❑ Stay away from windows and move to an interior room or hallway.
- ❑ Do not attempt to leave until after the fire has passed and you can safely leave.
- ❑ Check for small fires inside the house and extinguish them.
- ❑ Drink plenty of water.
- ❑ Make sure you can exit the house if it catches fire.
- ❑ Fill sinks and tubs with water.
- ❑ Place wet rags under doors and other openings to prevent entry of embers and smoke.
- ❑ Once the fire front has passed, check your flowerbeds, roof, rain gutters, attic and crawl space for fires or burning embers and extinguish them.

If You Cannot Evacuate Your Animals

- ❑ Bring small animals indoors. Do not leave pets tethered outdoors.
- ❑ Leave only dry food in nonspill containers. Do not leave treats or vitamins.
- ❑ Depending on your pet's needs, leave water in bathtubs, sinks or nonspill containers.
- ❑ Do not confine mixed species of pets, such as cats, dogs, hamsters and birds in the same room, even if they normally get along.
- ❑ Move livestock and horses to a safe area, such as a recently grazed or mown pasture, riding arena or irrigated pasture. Never release them onto streets and roads. Provide enough feed and water for at least 48 hours.
- ❑ Notify fire agency personnel of livestock on pasture or rangeland to coordinate evacuation.
- ❑ Notify your county's animal services department about animals you could not evacuate.

For current information on wildfires, fire restrictions and fire prevention safety and tips, visit
www.nevadafireinfo.blogspot.com

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For more information, visit
LivingWithFire.info

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