

University of Nevada Cooperative Extension

# Fire Adapted Communities: The Next Step in Wildfire Preparedness

UPPER COLONY FIRE SAFE CHAPTER SMITH VALLEY

# **Do You Know What It Takes To Survive Wildfire?**

#### Fire Adapted Community (FAC):

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.



Lyon County's Upper Colony community was threatened by the Burbank Fire in 2011. Irrigated fields can serve as a safe area where residents or livestock can wait out the fire.

### **Upper Colony at Risk**

Smith Valley's Upper Colony community is one of many Nevada communities threatened by wildfire. Faced with the growing potential for loss of human life and property because of wildfire, Nevada's local, state and federal firefighting agencies, Nevada Fire Safe Council and University of Nevada Cooperative Extension have come together to promote the FAC concept. They believe this is the best response to the wildfire threat.

There are proven steps that homeowners can take to improve the odds of human life and home survival during wildfire. The purpose of this publication, "Fire Adapted Communities: The Next Step in Wildfire Preparedness - Upper Colony" is to promote and teach these steps. This publication was "tailor-fit" for the Upper Colony community using input from the Upper Colony Chapter of the Nevada Fire Safe Council, Smith Valley Conservation District, Smith Valley Fire Protection District and Lyon County Office of Emergency Management. Once implemented at the neighborhood level, these recommendations will assist Upper Colony in becoming a Fire Adapted Community.



#### 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 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 pre-fire activities. Pre-fire 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 pre-fire activities. When everyone in the neighborhood completes their pre-fire activities, they start becoming a FAC.

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

#### **Before the Fire**



#### **During 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 pre-fire activities helped this house survive the fire.

# 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. 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.



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.



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.

**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.

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

# **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.

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.

> 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.

**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.

> **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-resistantrated 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.

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).

# **5 Steps to Creating an Effective Defensible Space**

to courtesy of the smith valley Conservation Distri

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, contribute to soil erosion and encourage unwanted weeds. It is also unnecessary.



### **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.



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



Thinning dense stands of big sagebrush and pinyon around a home is an important defensible space concept.



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



## **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 shrubs 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.



Pinyon pine and Utah juniper should be thinned to provide an average spacing between canopies of 1½ 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/ publication/files/nr/2003/EB0302.pdf.



Windblown embers produced by a wildfire can ignite pinyon and Utah juniper trees by landing in pine needles and other plant debris that have accumulated on the ground under the tree canopy.



# **Step Four**

Vegetation that can carry a fire from low-growing plants to taller plants is called ladder fuel. Tree canopies (except pinyon pine and Utah junipers) should be raised by removing low branches 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 in this area should have lower branches removed to a height of 2 to 3 feet above ground and plant litter removed from beneath the tree canopy prior to fire season. In areas where bark beetles are of concern, tree branch removal should be done during the late fall and winter months and utilize proper wood and slash management techniques as described in www.forestry.nv.gov/forestry-resources/forest-health/ and www. unce.unr.edu/publication/files/nr/2003/EB0302.pdf.



The ember threat to trees can be reduced by removing plant debris from under the tree canopy and low lying tree limbs.

# Lean, Clean and Green Area Tips

- Remove most or all flammable wildland plants, including big sagebrush, bitterbrush, rabbitbrush and cheatgrass.
   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.
- Retaining pinyon pine and Utah juniper trees within 30 feet of the house is not recommended. If individual specimen trees of pinyon pine and Utah juniper are retained in this area, they should be located where they would not provide a means for transmitting fire from adjacent wildlands to the house, be kept in a healthy condition, have their lower branches removed to a height 2 to 3 feet above ground and have plant litter under the tree canopy removed prior to fire season. Removal and pruning of pinyon pine should be done during the late fall and winter months and utilize wood and slash management techniques as described in www.unce.unr.edu/publication/files/nr/2003/EB0302. pdf.
- 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 non-woody flowers) are better choices than shrubs and trees.
  - Deciduous shrubs and trees are better choices than evergreen types. Avoid planting juniper, mugo pine and arborvitae.
- 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.





Pinyon and Utah juniper trees can burn intensely and should not be retained within the Lean, Clean and Green Area.



# **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.

## 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.

The Smith Valley Fire Protection District has three 10,000 poundcapacity dump trailers to loan to citizens in its district for use on fuel reduction projects. For more program information, please contact the Smith Valley Fire Protection District main office at 775-465-2577, Monday through Wednesday from 9 a.m. to 2 p.m. or leave a voice mail.





#### 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.

# **Evacuation**

# Preparation

A key component of the FAC 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.
- Teach children how to make long-distance phone calls
- Learn how to turn off the water, propane tank (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 informaiton for family members, work and school.
- 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.

#### NV Energy www.nvenergy.com

**Customer Service Outage/Emergencies**  775-834-4444 775-834-4100



A family emergency plan is essential in the evacuation process.

#### How to Shut Off the Propane Tank

The propane service valve is the controlling mechanism allowing propane gas to flow into the house or building by way of the gas piping system. Although other gas valves may be present throughout the gas plumbing, the service valve on the propane tank is the valve that controls 100% of the gas flow into the gas system. Basically, propane service valves function as the "on / off switch" in propane gas systems and is for vapor service only. Operation of a propane tank service valve is similar to that of a water faucet . The operational part of the valve consists of a handwheel that closes and opens gas flow by turning the wheel clockwise and counter-clockwise. Inside the valve is a stem and seat that when opened, allows gas to exit the tank and when closed, stops the flow of gas.



Information and photograph provided by www.propane101.com/propaneandwildfires.htm

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 non-perishable packaged or canned foods with a hand-operated can opener.
- □ Anti-bacterial 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, elderly or disabled family members.
- □ Large plastic trash bags, tarps and rain ponchos.
- □ A large trash can.
- □ Bar soap, liquid detergent and household bleach.
- $\hfill\square$  Rubber gloves and duct tape.

# **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.

- □ 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.
- $\hfill\square$  Copy of this publication.



#### 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.

- □ 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, non-spill food and water bowls, cat litter and box and a restraint (chain, leash or harness). Additional items to include are newspaper and paper towels, plastic bags, permanent marker, bleach/disinfectant solution and water buckets.
- □ Consider a way to brand or mark your livestock so that they can be easily identified if they become mixed with other livestock. A suggestion is to spraypaint your phone number or simply a unique color or shape on each animal as you evacuate.

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

□ Made a Family Emergency Plan.

- □ Registered your cell phone and/or email address for emergency notifications at **www.Nixle.com**
- □ Registered with your phone tree captain, if one has been established in your community.
- □ Practiced two 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 and videotaped/photographed property and placed in to-go bag.
- □ Reviewed the animal/livestock evacuation recommendations and assembled supplies needed for their care in a pet to-go bag.
- □ Reviewed the supplemental fire-preparedness information available at **www.livingwithfire.info**

# **Locate your Fire Station**



# Notification

No single method of communication is failsafe 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 press releases for broadcast by local media outlets.
- Emergency managers can initiate the Emergency Alert System, which interrupts local radio and television broadcasts with important information.
- □ Public safety officials can use the Nixle emergency notification system to contact affected residents via email or text message.
- □ First responders, credentialed volunteers, Lyon County Sherriff's Deputies or members of the Lyon County Search & Rescue Team can go door-to-door to alert citizens.
- □ The City Watch 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 the Smith Valley Fire Protect District.

#### In an emergency tune to: KKOH 780 AM • KSVL 92.3 FM KUNR 88.9 FM or 91.9 FM



## City Watch Notification System

The City Watch Notification System is a computer system that calls telephones, sends emails and text messages to a particular geographic area, and provides a prepared message during an emergency. However, you may not receive the message if the electricity fails, if you are not at home when an emergency occurs, or if your contact information is not included in the notification system database.

As an alternate plan, consider registering with Nixle to receive an email or text message during an emergency. You can enter multiple forms of contact information (cell phone and email address) into the database by registering them on the following website:

#### www.Nixle.com



#### **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 and 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 Call 911 to report any life threatening emergency

American Red Cross	775-856-1000	www.nevada.redcross.org
Lyon County Animal Services	775-577-5005	www.lyon-county.org
Lyon County Emergency Management	775-463-6592	www.lyon-county.org
Lyon County Search and Rescue Unit	775-848-0252	www.lyoncountysearchandrescue.org
Lyon County Sheriff's Office	775-463-6600	www.lyon-county.org
Nevada Highway Patrol	775-688-2500	www.dps.nv.gov
Smith Valley Fire Protection District	775-465-2577	www.svfpd.org

# **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 evacuate. 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, long-sleeved shirt or jacket made of cotton or wool, a hat and boots.
- $\hfill\square$  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.
- $\hfill\square$  Relay plans to the designated contact person.

#### For your animals:

- $\hfill\square$  Evacuate them if possible.
- □ Contact Lyon County Animal Services for assistance if needed.
- □ Bring current pet photos (make sure distinguishing markings are visible), health records and paperwork, especially vaccination information stored in waterproof bags, 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.
- $\hfill\square$  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 license, passport and Social Security cards.
- □ Laptop, charger and backup of desktop computer files.
- □ Address book.
- □ Cell phone and charger.
- □ Family photo albums and videos.
- $\square$  Family heirlooms.
- □ Toys, books and games for entertainment.



#### Inside your home and out buildings:

- □ 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.

#### Outside your home and out buildings:

- □ Place combustible patio furniture and accessories inside or toss them away from the house.
- □ Remove barbeque propane tanks and place away from the house where they can safely vent.
- □ Shut off propane at the tank (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.
- $\hfill$  Fill trash cans and buckets with water and place where firefighters can find them.

#### 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.
- $\hfill\square$  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.
- $\hfill\square$  Check for small fires inside the house and extinguish them.
- □ Drink plenty of water.
- $\hfill\square$  Make sure you can exit the house if it catches fire.
- $\hfill$  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 flower beds, roof, rain gutters, attic and crawl space for fires or burning embers and extinguish them.

## If You Cannot Evacuate Your Animals

- $\hfill\square$  Bring small animals indoors. Do not leave pets tethered outdoors.
- □ Leave only dry food in non-spill containers. Do not leave treats or vitamins.
- □ Depending on your pet's needs, leave water in bathtubs, sinks or non-spill 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.
- □ If livestock are not branded, mark them in a unique way so they can be identified.
- Notify Smith Valley Fire Protection District or Lyon County Sherrif's Office personnel of livestock on pasture or rangeland to coordinate evacuation.
- Notify Lyon County Animal Services about animals you could not evacuate.

#### Acknowledgements

Fire Adapted Communities: The Next Step in Wildfire Preparedness was prepared by Ed Smith, University of Nevada Cooperative Extension, with assistance from Sonya Sistare and Grant Nejedlo. Graphic design and Illustration services provided by Ding Communications and Kirah Van Sickle, Animania, LLC. The original publication was funded by the Nevada Division of Forestry and USDA Forest Service in cooperation with University of Nevada Cooperative Extension.

The Upper Colony version was funded by a State Fire Assistance Grant from the USDA Forest Service through the Nevada Division of Forestry in cooperation with the Smith Valley Conservation District and the Upper Colony Chapter of the Nevada Fire Safe Council. For more information about this publication, contact the *Living With Fire Program* at 775-784-4848.

Cover photograph courtesy of Jerry Snyder.

SP-12-03

Copyright @ 2012, University of Nevada Cooperative Extension. All rights reserved. No part of this publication may be reproduced, modified, published, transmitted, used, displayed, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopy, recording or otherwise without the prior written permission of the publisher and authoring agency.

The University of Nevada, Reno is an Equal Employment Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation in any program or activity it operates. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States.

The Smith Valley Conservation District in cooperation with USDA prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact Michelle Langsdorf, Conservation District Manager at 775–463-2265 x 106." To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720–6382 (TDD). USDA is an equal opportunity provider and employer.

The Fire Adapted Communities Project is part of the Living With Fire Program. For more information, visit **www.livingwithfire.info** 

#### The Upper Colony Fire Adapted Communities Project is Sponsored By:



University of Nevada Cooperative Extension



