

EAST MOUNTAINS HOMEOWNER'S GUIDE (2007)

IN THE EVENT OF WILDLAND FIRE

This guide has been developed in response to community feedback regarding a lack of detailed, site-specific information on wildfire in the East Mountains. In public meetings and written comments, residents expressed a need for better information on reducing wildfire risk and what to do in the event of a wildfire. This document was developed to meet these expressed needs of the community as well as to fulfill requirements for the Community Wildfire Protection Plan. This guide suggests specific measures to reduce structure ignitability and improves overall preparedness in the planning area by consolidating preparedness information from several local agencies and departments.

BEFORE THE FIRE – PROTECTION AND PREVENTION

The East Mountains of New Mexico are a great place to enjoy a rural lifestyle, spectacular scenery, and proximity to outdoor activities. Unfortunately, the same attributes that make the area a desirable place to live, also make it a precarious place to live. The reality is that a wildland environment is a fire environment. Accepting that fire is a member of the neighborhood means taking steps to prepare for a wildfire event and prevent home ignitions.

REDUCING STRUCTURE IGNITABILITY

STRUCTURAL MATERIALS

Roofing – The more fire-resistant the roofing material, the better. The roof is the most vulnerable portion of the house to ignition by falling embers known as firebrands. Metal roofs are common in the East Mountain Area and afford the best protection against ignition from falling embers. Slate or tile roofs are also non-combustible. Class-A asphalt shingles are also recommended. The most dangerous type of roofing material is wood shingles. Removing debris from gutters and downspouts at least twice a year will help to prevent fire and keep them functioning properly.

Siding – Non-combustible materials are ideal for the home exterior. Preferred materials include stucco, cement, block, brick, or masonry.

Windows – Double pane windows are most resistant to heat and flames. Smaller windows tend to hold up better within their frames than larger windows. Tempered glass is better particularly for skylights because it will not melt as plastic will.

Fencing and trellises – Any structure attached to the house should be considered part of the house. A wood fence or trellis can carry fire to your home siding or roof. Consider using non-flammable materials or use a protective barrier such as metal or masonry between the fence and the house.

If you are designing a new home or remodeling your existing one, do it with fire safety as a concern. Use non-flammable or fire resistant materials and have the exterior wood treated with UL approved fire retardant chemicals. More information on fire-resistant construction can be found at www.firewise.org.

SCREEN OFF THE AREA BENEATH DECKS AND PORCHES

The area below an aboveground deck or porch can become a trap for burning embers or debris and that can increase the chances of the fire transferring to your home. Screen off the area with screening having openings no larger than ½ inch. Keep all leaves and debris free from behind the screening. Although convenient, stacking firewood on or below a wooden deck adds fuel that can feed a fire close to your home. Be sure to move all wood away from the home during fire season.

FIREWOOD, KINDLING AND OTHER FLAMMABLES

Stack all firewood uphill, at least 30 and preferably 100 feet from your home. When storing flammable materials such as paint, solvents or gasoline always store them in approved safety containers away from any sources of ignition such as hot water tanks or furnaces. The fumes from highly volatile liquids can travel a great distance after they turn into a gas. If possible store the containers in a safe, separate location away from the main house.

POWER LINES

PNM does not have sufficient crews to inspect all the high voltage powers lines with great frequency. If you have high voltage lines running near your property take a moment to walk underneath them and ensure that no tree branches are in close proximity to the towers or lines. If there is any situation that could be a fire hazard contact PNM.

PNM Customer Service Phone 246 5700

CHIMNEYS AND FIREPLACE FLUES

Inspect your chimney and damper at least twice a year and have it cleaned every year before first use. Have the spark arrestor inspected and confirm that it meets the latest safety code. The fire department will have the latest edition of the National Fire Prevention Code 211 covering spark arrestors. Make sure to have dead limbs cleared from within 15 feet of chimneys and stovepipes

FIREPLACE AND WOODSTOVE ASHES

Never take ashes from the fireplace and put into the garbage or dump them on the land. Even in winter, one hot ember can quickly start a grass fire. Instead, place ashes into a metal container and as an extra precaution, soak them with water. Cover the container with its metal cover and place it in a safe location for a couple of days. Then either dispose of cold ash with other garbage or bury the ash residue in the earth and cover with at least 6 inches of mineral soil.

PROPANE TANKS

Your propane tank has many hundreds of gallons of highly flammable liquid that could become a very explosive incendiary device in the event of a fire. The propane tank should be located at least 30 feet from any structure. Keep all flammables at least 10 feet from your tank. Learn how to turn the tank off and on. In the event of a fire you should turn the gas off at the tank before evacuating, if safety and time allows.

SMOKE ALARMS

A functioning smoke alarm can help warn you of a fire in or around your home. Install smoke alarms on every level of your residence. Test and clean smoke alarms once a month and replace batteries at least once a year. Replace smoke alarms once every 10 years.

FIRE-SAFE BEHAVIOR

If you smoke, always use an ashtray in your car and at home.
Store and use flammable liquids properly.
Keep doors and windows clear as escape routes in each room.

DEFENSIBLE SPACE

The removal of dense, flammable foliage from the area immediately surrounding the house reduces the risk of structure ignition and allows firefighters access to protect the home. A 100-foot safety zone, free of all trees and shrubs is recommended by the fire department, with a minimum distance being 30 feet. Steep slopes require increased defensible space because fire can travel quickly uphill.

Within the minimum 30 foot safety zone, plants should be limited to fire-resistant trees and shrubs. Focus on fuel breaks such as concrete patios, walkways, rock gardens, and irrigated garden or grass areas within this zone. Use mulch sparingly within the safety zone and focus

use in areas that will be watered regularly. In areas like turnarounds and driveways, non-flammable materials such as gravel are much better than wood chips or pine needles.

Pine needles provide important erosion protection for soil but also may carry a ground fire. It is simply not reasonable to remove all the pine needles around your property. However, it is a good idea to remove any accumulations of pine needles or cones within the safety zone and extending out as far as feasible. This is particularly important if pine needles tend to build up alongside your house or outbuildings. Removing needles and leaves and exposing bare mineral soil is recommended in a two foot wide perimeter along the foundation of the house. Also, be sure to regularly remove pine needles and debris from gutters, especially during summer months.

All trees within the safety zone should have lower limbs removed to a height of 6-10 feet. Remove any branches within 15 feet of your chimney or overhanging any part of your roof. Ladder fuels are short shrubs or trees growing under the eaves of the house or under larger trees. Ladder fuels carry fire from the ground level onto the house or into the tree canopy. Be sure to remove all ladder fuels within the safety zone first. The removal of ladder fuels within about 100 feet of the house will help to limit the risk of crown fire around your home. More information about defensible space is provided at www.firewise.org.

FIRE RETARDANTS

For homeowners that would like home protection beyond defensive space and fire-resistant structural materials, fire retardant gels and foams are available. These materials are sold with various types of equipment for applying the material to the home. They are similar to the substances applied by firefighters in advance of the wildfire to prevent ignition of the home. Different products have different timelines for application and effectiveness. The amount of product needed is based on the size of the home and prices may vary based on the application tools. Prices range from a few hundred dollars to a few thousand dollars. A online search for “fire blocking gel” or “home firefighting” will provide a list of product vendors.

ADDRESS POSTING

Locating individual homes in the East Mountains is one of the most difficult tasks facing emergency responders. Every home should have the address clearly posted with numbers at least three inches high. The colors of the address posting should be contrasting or reflective. The address should be posted so that is visible to cars approaching from either direction.

ACCESS

Unfortunately, limited access may prevent firefighters from reaching many homes in the East Mountains. Many of the access problems occur at the property line and can be improved by homeowners. First, make sure that emergency responders can get in your gate. This may be important not only during a fire but also to allow access during any other type of emergency

response. If you will be gone for long periods during fire season, make sure a neighbor has access and ask them to leave your gate open in the event of a wildfire in the area.

Ideally, gates should swing inward. A chain or padlock can be easily cut with large bolt cutters but large automatic gates can prevent entry. Special emergency access red boxes with keys are sold by many gate companies but are actually not recommended by emergency services. The keys are difficult to keep track of and may not be available to the specific personnel that arrive at your home. An alternative offered by some manufacturers is a device that opens the gate in response to sirens. This option is preferred by firefighters but may be difficult or expensive to obtain. Another option is to provide your gate code using the Bernalillo County CARE form. The code remains confidential but is provided through the 911 system to personnel responding to an emergency at your home.

Beyond your gate, make sure your driveway is uncluttered and at least 12 feet wide. The slope should be less than 10 percent. Trim any overhanging branches to allow at least 13.5 feet of overhead clearance. Also make sure that any overhead lines are at least 14 feet high. If any lines are hanging too low, contact the appropriate phone, cable, or power company to find out how to address the situation.

If possible, consider a turnaround within your property at least 45 feet wide. This is especially important if your driveway is more than 300 feet in length. Even small fire engines have a hard time turning around and cannot safely enter areas where the only means of escape are provided by backing out.

NEIGHBORHOOD COMMUNICATION

It is important to talk to your neighbors about the possibility of wildfire in your community. Assume that you will not be able to return home when a fire breaks out and may have to rely on your neighbors for information and assistance. Unfortunately, it sometimes takes tragedy to get people talking to each other. Don't wait for disaster to strike. Strong communication can improve the response and safety of every member of the community.

PHONE TREES

Many neighborhoods use phone trees to keep each other informed of emergencies within and around the community. The primary criticism is that the failure to reach one person, high on the tree can cause a breakdown of the system. However, if you have willing and able neighbors, particularly those that are at home during the day, the creation of well-planned phone tree can often alert residents of the occurrence more quickly than media channels. Talk to your neighborhood association about the possibility of designing an effective phone tree.

NEIGHBORS IN NEED OF ASSISTANCE

Ask mobility-impaired neighbors whether they have filled out a CARE form with Bernalillo County. The form notifies emergency responders to the presence of limited mobility residents. It is also a good idea for willing neighbors to commit to evacuating the mobility-impaired neighbor in the event of an emergency. Make sure that a line of communication is in place to verify the evacuation.

ABSENTEE OWNERS

Absentee owners are often out of the loop and in many cases, do not maintain contact with their neighbors. If a home near you is unoccupied for large portions of the year, try to get contact information for the owners from other neighbors or your neighborhood association. Your neighbors would probably appreciate notification in the event of an emergency. Also, you may want to contact them to suggest that they move their wood pile or make sure that the propane is turned off to the house.

HOUSEHOLD EMERGENCY PLAN

A household emergency plan does not take much time to develop and will be invaluable to help your family deal with an emergency safely and calmly. One of the fundamental issues in the event of any type of emergency is communication. Be sure to keep the phone numbers of neighbors with you rather than at home.

It is a good idea to have a contact for your family that lives out of state. When disaster strikes locally it is often easier to make outgoing calls to a different area code than local calls. Make sure everyone in the family has the contact phone number and understands why they need to check in with that person in the event of an emergency. Also, designate a meeting place for your family. Having an established meeting site helps to ensure that family members know where to go even if they can't communicate by phone.

CHILDREN

Local schools have policies for evacuation of students during school hours. Contact the school to get information on how the process would take place and where the children would likely go.

The time between when the kids arrive home from school and when you return home from work is the most important timeframe that you must address. Fire officials must clear residential areas of occupants to protect lives and to allow access for fire engines and water drops from airplanes or helicopters. If your area is evacuated, blockades may prevent you from returning home to collect your children. It is crucial to have a plan with a neighbor for them to pick up your kids if evacuation is necessary.

PETS AND LIVESTOCK

Some basic questions about pets and livestock involve whether you have the ability to evacuate the animals yourself and where you would take them. Planning for the worst case scenario may save your animals. An estimated 90% of pets left behind in an emergency do not survive. Don't expect emergency service personnel to prioritize your pets in an emergency. Put plans in place to protect your hairy family members.

PETS

Assemble a pet disaster supply kit and keep it handy. The kit should contain a two day supply of food, water, bowls, a litter box, and a manual can opener if necessary. It is also important to have extra medication and medical records for each pet. The kit should contain a leash for each dog and a carrier for each cat. Carriers of some kind should be ready for birds and exotic pets. In case your pet must be left at a kennel or with a friend, also include an information packet that describes medical conditions, feeding instructions, and behavioral problems. A photo of each pet will help to put the right instructions with the right pet.

In the event of a wildfire you may be prevented from returning home for your animals. Talk to your neighbors and develop a buddy system in case you or your neighbor are not home when fire threatens. Make sure your neighbor has a key and understands what to do with your pets should they need to be evacuated.

If you and pets were evacuated, where would you go? Contact friends and family in advance to ask whether they would be willing to care for your pets. Contact hotels and motels in the area to find out which ones accept pets. Boarding kennels may also be an option. Make sure your pets vaccinations are up-to-date if you plan to board your pets.

Once you have evacuated your pets, continue to provide for their safety by keeping them cool and hydrated. Try to get your pets to an indoor location rather than leaving them in the car. Do not leave your pets in your vehicle without providing shade and water. It is not necessary to give your pets water while you are driving but be sure to offer water as soon as you reach your destination.

LIVESTOCK

Getting livestock out of harms way during a wildfire is not easy. You may not be able or allowed to return home to rescue your stock during a wildfire evacuation. Talk to your neighbors about how you intend to deal with an evacuation. If livestock are encountered by emergency responders, they will be released and allowed to escape the fire on their own. Make sure your livestock has some sort of identification. Ideally, your contact information should be included on a halter tag or ear tag so that you could be reached if your animal was encountered.

If you plan to evacuate your livestock have a plan in place for a destination. Talk to other livestock owners in the area to find out whether they would be willing to board your stock in the event of an emergency. For instance, horse owners along the Rio Grande may appreciate a reciprocal agreement to board horses in case of a fire evacuation in either location. Often, in large-scale emergencies, special accommodations can be made at rodeo and fairgrounds but personal arrangements may allow you respond more quickly and efficiently.

If you do not own a trailer for your horses or other livestock, talk to a neighbor who does. Find out whether they would be willing to assist the evacuation of your animals. If you do own a trailer, make sure it is in working condition with good inflated tires and functioning signal lights. Keep in mind that even horses that are accustomed to a trailer may be difficult to load during an

emergency. It may be a good idea to do some practice to make sure your animals are as comfortable as possible when loading into the trailer.

HOUSE AND PROPERTY

Insurance companies suggest that you make a video that scans each room of your house to help document and recall all items within your home. This video can make replacement of your property much easier in the unfortunate event of a large insurance claim. See more information on insurance claims in the After the Fire section below.

PERSONAL ITEMS

During fire season, items you would want to take with you during an evacuation should be kept in one, readily-accessible location. As an extra precaution, it may be a good idea to store irreplaceable mementos or heirlooms away from your home during fire season.

It is important to make copies of all important paperwork such as birth certificates, titles, etc. and store somewhere away from your home such as in a safe deposit box. Important documents can also be protected in a designated fire-safe storage box within your home.

IN THE EVENT OF A FIRE

NOTIFICATION

In the event of a wildfire, announcements from the local Emergency Management office will be broadcast over local radio and television stations. Media notification may be in the form of news reports or the Emergency Alert System (EAS). On the radio, the AM station, 770 KOB generally provides frequent updates. On television, the emergency management message will scroll across the top of the screen on local channels. The notice is not broadcast on non-local satellite and cable channels.

One good way to stay informed about wildfire is to use a NOAA weather alert radio. The radios can be purchased at most stores that carry small appliances such as Target, Sears, or Radio Shack. The radio comes with instructions for the required programming to tune the radio to our local frequency. The programming also determines during what type of event you want to be alerted. The weather alert radio can be used for any type of large incident (weather, wildfire, HAZMAT, etc.) depending on how it is programmed. Local fire personnel can assist with programming if needed.

Bernalillo County uses a reverse 911 system to notify residents in the event of an evacuation. The system calls every land line in the area intermittently. The system cannot leave a message but repeats frequently. The caller ID for the reverse 911 system appears as Bernalillo County 7000. The reverse 911 system does not call cell phones.

Sirens, once used for emergency notification, are no longer employed in this area. Today's homes are better insulated and the thicker walls prevent sirens from being audible inside most homes. Sirens also create panic because the public remains unaware of what danger is occurring.

WHEN FIRE THREATENS

Before an evacuation order is given for your community there are several steps you can take to make your escape easier and to provide for protection of your home.

Back your car into the garage or park it in an open space facing the direction of escape. Shut the car doors and roll up the windows. Leave the keys in the ignition or in another easily accessible location. Open your gate.

Close all windows, doors, and vents including your garage door. Disconnect automatic garage openers. Close all interior doors as well.

Move furniture away from windows and sliding glass doors. If you have lightweight curtains, remove them. Heavy curtains, drapes, and blinds should be pulled closed over the window. Leave a light on in each room.

Turn off the propane tank or shut off gas at the meter. Turn off pilot lights on appliances and furnaces.

Move firewood and flammable patio furniture away from the house or move into the garage.

Connect garden hoses to all available outdoor faucets and make sure they are in a conspicuous place. Turn the water on to “charge” or fill your hoses and then shut off the water. Place a ladder up against the side of the home to allow firefighters easy access to your roof.

EVACUATION

When evacuation is ordered, you need to do so immediately. Evacuation not only protects lives, it also helps to protect property. Many roads in the East Mountains are too narrow for two-way traffic, especially with fire engines. Fire trucks often can’t get into an area until the residents are out. Also, arguably the most important tool in the wildland urban interface toolbox is aerial attack. Airplanes and helicopters can be used to drop water or retardant to help limit the spread of the fire. However, aerial resources cannot be used until the area has been cleared of civilians.

Many East Mountain residents are frustrated by the lack of a detailed evacuation plan for the area. However, the lack of an evacuation map is deliberate on the part of emergency management agencies due to the geography and special situations existing within our wildland urban interface. Because wildfire could occur throughout most of the East Mountain area, it is difficult to determine an established evacuation route. If a wildfire threatens and evacuation is necessary, emergency managers will determine the best evacuation route based on the location and spread of the fire and the optimal combination of getting residents out and firefighters into the area. Rather than relying on static, predefined routes, officials stress that residents must rely on the information and instructions given during the evacuation. Utilize the methods described above in the Notification section to receive information on where and how to evacuate. Despite the lack of a formal evacuation plan, it is a good idea to give evacuation some thought. Think

about your personal evacuation route options in relation to the meeting location established by your family Household Emergency plan.

Expect emergency managers to designate a check-out location for evacuees. This process helps to ensure that everyone is accounted for and informs emergency personnel as to who may be remaining in the community. Every resident should check-out at the designated location before proceeding to any established family meeting spot.

A light colored sheet closed in the front door serves as a signal to emergency responders that your family has safely left. This signal saves firefighters precious time, as it takes 12-15 minutes per house to knock on each door and inform residents of the evacuation.

AFTER THE FIRE

RETURNING HOME

First and foremost, follow the advice and recommendations of emergency management agencies, fire departments, utility companies, and local aid organizations regarding activities following the wildfire. Do not attempt to return to your home until fire personnel have deemed it safe to do so.

Even if your house was not damaged by the fire, do not expect to return to business as usual immediately. Expect that utility infrastructure may have been damaged and repairs may be necessary. When you return to your home, check for hazards such as gas or water leaks and electrical shorts. Turn off damaged utilities if you did not do so previously. Have the fire department or utility companies turn the utilities back on once the area is secured.

INSURANCE CLAIMS

Your insurance agent is your best source of information as to the actions you must take in order to submit a claim. Here are some things to keep in mind. Most if not all your expenses incurred during the time you are forced to live outside your home could be reimbursable. These could include mileage driven, lodging, meals, etc. Keep all records and receipts. Don't start any repairs or rebuilding without the approval of your claims adjuster. Beware of predatory contractors looking to take advantage of anxious homeowner's looking to rebuild as quickly as possible. Consider all contracts very carefully, take your time to decide, and contact your insurance agent with any questions.

POST-FIRE REHABILITATION

Homes that may have been saved in the fire may still be at risk to flooding and debris flows. Burned Area Emergency Rehabilitation or BAER teams are interdisciplinary teams of professionals that work to mitigate the effects of post-fire flooding and erosion. These teams often work with limited budgets and manpower. Homeowners can assist the process by implementing treatments on their own properties as well as volunteering on burned public lands to help reduce the threat to valuable resources. Volunteers were instrumental to

implementing many of the BAER treatments following the Cerro Grande fire. Volunteers can assist BAER team members by planting seeds or trees, hand mulching, or helping to construct straw bale check dams in small drainages.

Volunteers can help protect roads and culverts by conducting storm patrols during storm events. These efforts dramatically reduce the costs of installing trash racks, removing culverts or rerouting roads.

Community volunteers can also help scientists to better understand the dynamics of the burned area by monitoring rain gauges and monitoring the efficacy the installed BAER treatments.

REFERENCES

Bernalillo County Public Safety Department. 2005. Protect Your Pets in Case of Fire.

Bernalillo County Fire and Rescue. 2002. Smart Fire Safety Saves Lives.

Clark, Bett. February 23, 2006. Bernalillo County. Personal Communication. Public Meeting. Los Vecinos Community Center. Tijeras, New Mexico

Ecological Restoration Institute. Northern Arizona University. 2002. Forest Restoration for Homeowners. Flagstaff, Arizona.

Firewise Program. 2000. <http://www.firewise.org/communities>

Scott, Don. April 8, 2006. Bernalillo County Office of Emergency Management. Personal Communication. Public Meeting. Vista Grande Community Center. Sandia Park, New Mexico

Scott, Don. 2006. Protection of the Public from Large Scale Threats. Bernalillo County Office of Emergency Management.

University of Nevada, Reno, Cooperative Extension and Agricultural Research Station. 2002. Living with Fire – A Guide for the Homeowner.

United States Department of Energy Office of Environmental Management. 2000. <http://web.em.doe.gov/tie/fire.html>