DIRECTIONS FOR FILLING OUT FORM:

Please fill out as complete as possible and fax to Cory Secher at 303-823-5768 or mail to 5625 Ute Highway, Longmont CO 80503-9130.

Any Bolded categories will be filled in by the CSFS representative at the time of initial site visit and tree marking for the defensible space. If you have any questions about this form please contact Cory Secher at 303-823-5774 or by email at csecher@lamar.colostate.edu.

Wildfire Mitigation Plan FIELD DATA FORM

Inspection Date:

Landowner name:

Michael Hamela Ling

Mailing address:

City, State. Zip:

Longmont Co 80503

Site address:

Phone number:

85694 x405 / 303 - 678.0657

Road access:

they 72 to Ramonal

(Directions from main access road)

Docket Number:

SPR-04-141

(SPR, LU, Etc.)

Section:

25

Township:

Range:

R 12 W

Legal Description:

Cedar Ridge Estates

FPD:	COAL CRE	EK CANY	onl		
Dominant fuel type:			(Gr	rass/forbs/shrubs/sle	ish/etc)
Dominant overstory	· Condo.				
Co-dominant overst	ory: Day F	in, Ladge	pde,		
Fuel model type:	(9)		V		
Slash disposal:	<u>Chipped</u>	(Cl	hipped/hauled	l/burned/lop-scatter)
Aspect:	NW		(Di	irection of slope)	
Slope:			<u> </u>		
Elevation:	8200		(feet)		
Building site:			(Chimney/	saddle/valley/ridge	mid-slope)
Site moisture:	Dig				
Natural fire barrier	:				
Insect & Disease Dis	ignosis:				
Lot size (acres):	2.28	(Acres)			
Number of Structures	:_2_	(All structur	es to be prese	ent	
Existing Structures:				(House/barn/g	arage/etc.)
New Structure:	house 1.	Shop		(House/Barn/ne	w addition/etc)
Driveway length:	120'		(Actual leng	th in feet from road	to home)
Driveway trees remove	ved: <u>None</u> (fev	v/many/none	e)		
Home buffer material	: Stone		(Stone/crush	ed gravel/decorativ	e stone)
House design:	simple (simple/comp	plex)		
Roof Design:	simple (simple/comp	plex)		
Roof material:	metal		_ (Asphalt sl	ningles/concrete tile	s/metal)

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	Soffits type:	hardboard	(Plywood/hardboard/cement board)		
	Siding material:	log stucco stone	(Cement/hardboard/log/stucco/stone/wood)		
	Windows (#):	25 (approximate	number of windows)		
	Windows Size: M	Ed large (On average:	ge: small/medium/large)		
	Windows Frames:	aluminum clad	(Wood/aluminum/aluminum clad)		
	Windows Aspect:	west	(Dominant viewing direction)		
A-	Window Construction		_ (Tempered glass/e-coating/etc.)		
	Door Material:	wood	(Wood/steel/fiberglass/composite)		
	Deck material:	composite	(Wood/composite materials)		
	Deck Description:	open	(Enclosed/open)		
	Deck support type:	log	(Timber posts/logs/steel/concrete/stone)		
	Deck buffer material:	crushed rock	(Crushed rock/gravel)		
	Deck weed barrier:		(Fiberglass/polyester) w/shap + 94		
00	Structure SQR. FT.:	4943	(Total square feet of structure)		
)9	Utility Location:	EAST 20'	(Pole/buried Direction from structure)		
10	Structure aspect:	WEST	(Dominant facing direction/view)		
July 2	Leach field:	కట ఎక'	(Distance from house, and direction)		
33	Cistern:	donation to	(Distance from house, and direction)		
- Kr	Cistern Type:	Cial Cresk FPD	(Domestic Cistern or Fire Cistern)		
	Cistern size:		_ (gallons)		
	Well (if applicable):	20' SE	(Distance form house, and direction)		
	Propane Tank location	: 100' NE	(Distance from house and direction)		
	0.11				



Knowledge to Go Places

WILDFIRE MITIGATION PLAN

For Michael and Pamela Ling Residence 121 Ramona Lane, Golden CO 80403 Docket: SPR - 04-141

Inspection date: 2/21/2005

Prepared for:

Michael and Pamela Ling 707 Bittersweet Lane Longmont, CO 80503 Phone: 303-678-0657 Roulder Diete

Boulder District 5625 Ute Highway Longmont. Colorado 80503-9130 (303) 823-5774

Prepared by: Cory Secher - Forester

Boulder District Phone: (303) 823-5774

E-mail: csecher@lamar.colostate.edu

SITE LOCATION AND PROPERTY DESCRIPTION

The property is located at Section 25, Township 1S, and Range 72W Lot 1 Cedar Ridge Estates. The fire protection district is the Coal Creek fire protection district (303-642-3121). There will be 2 new structures located on site, including a residence and shop outbuilding. The lot is 2.28 acres in size and has a ~7% percent slope with a notthwest aspect. The residence is at 8,200 feet in elevation, and has total of 4,943 square feet. The proposed building site is mid-slope and it is a relatively dry site. There is nothing in the immediate vicinity that will create a natural/man made barrier that may help stop or slow the spread of a surface/crown fire on the site.

CONSTRUCTION DESIGN AND MATERIALS

The proposed house has a relatively simple design with a simple roofline and is oriented with a western aspect.

The roofing material will consist of metal. The exterior wall material is to be log, stucco, and stone. Soffits are to be 3/4" thick hardboard.

The structure has ~25 medium and large sized windows with the primary viewing direction being toward the west side of the structure. Windows will be double glazed with low e-coated tempered glass and frames made of aluminum clad. Exterior doors are to be 1-3/4", fire-rated, and made of wood.

The one deck will be constructed of composite materials and supported by timber posts. The deck will be open and isolated from the surrounding landscape with crushed rock over a fiberglass weed barrier.

The propane tank is set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 100 feet northeast of the residence. Vegetation within 10 feet of the propane tank will be kept cleared. Utilities for the property will be buried from a pole that is located 20 feet east of the residence off the cul-de-sac. The septic field is located 25 feet southwest of the residence.

DRIVEWAY ACCESS FOR EMERGENCY VEHICLES

Access to the property from Boulder take Highway 93 toward Golden and turn west onto Highway 72 and continue past United Power and turn north onto Ramona Lane and continue unitl it ends.

The existing driveway will not create additional site disturbance or soil compaction and will require the removal of no trees. The driveway will be 12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12%. The driveway is only 120 feet long therefore no turn around will be required (see plan for details). The driveway is less than 400 feet therefore no pull-outs are required.

EMERGENCY WATER SUPPLY FOR FIRE FIGHTING

The water source will be from the community cistern in which Mr. Ling will pay into the community cistern fund. Contact the Coal Creek fire protection district (303-642-3121) for more information and specific details and locations of cisterns. A well will be located 20 feet to the southeast of the residence (see map for location).

FUELS REDUCTION

All trees to be removed are marked with blue spray paint. All trees that are to remain within zones 1 and 2 will be unmarked. Harvested wood that remains on site will be stacked at least 30 feet from the house and at the same elevation when possible. Slash from the harvest will be chipped. Note that if you decide to burn piles, you must obtain a valid Open Burning Permit from the Boulder County Environmental Health Department and notify your local fire protection district (Coal Creek fire protection district (303-642-3121)).

DEFENSIBLE SPACE ZONES AND FOREST MANAGEMENT

The site has a dominant overstory consisting of ponderosa pine (Pinus ponderosa) with a ponderosa pine (Pinus ponderosa), Lodgepole pine (Pinus contorta), Douglas-fir (Pseudotsuga menziesii), and limber pine (Pinus flexilus) understory component. The area is predominantly fuel model 9 with ground fuels consisting of grasses and forbs. Fuel model 9 is represented by closed canopy stands of ponderosa pine and mixed conifer. Understory may consist of small trees and shrubs, grasses, and moderate concentrations of down, dead woody litter. There is no sign of any current insect and disease problems on the property at the time of inspection.

There are three defensible space zones to be created around the structure(s) on the site. Please note that it is possible that one or more of these zones will cross over the subject property onto adjacent properties. Property boundaries must be respected; mitigation work is <u>not</u> required beyond immediate boundaries. However, landowners are encouraged to contact and work with neighbors if property lines limit the ability to mitigate within the prescribed area. Defensible space is a benefit, not only to the individual but also to the community as a whole.

- **Zone 1** Starts at the foundation and extends out 15 feet in all directions from the outside edge of the structure(s). Zone 1 is broken down into three segments:
 - **Zone 1A** Consists of the structure(s) themselves and the area immediately adjacent to and surrounding the structure(s) on all sides. A three-foot wide, non-flammable strip will be created using stone over a fiberglass weed barrier material. This strip will also extend back under, and out to, two feet past the drip line of any decks.
 - Zone 1B Extends out from Zone 1A. In this zone, all highly flammable vegetation is to be removed. Any large dead woody material on the ground will also be removed. Firewise plants will be used for landscaping and revegetation. Grasses will be irrigated when possible and mowed to a maximum height of 6 to 8 inches twice per growing season to a distance of 30 feet from the structure.
 - Zone 1C This zone extends out from Zone 1B to 15 feet from the house. All understory trees (ladder fuels) will be removed as marked. These are small seedling and sapling size trees that can be ladders for fire to get in the crowns of the larger trees. A few of the larger, healthy trees are to be retained for screening. All remaining trees in this zone will be pruned to a height of 10 feet. They must be well spaced so that the crowns are not touching (10 foot minimum crown spacing). No trees will overhang the house or decks, unless approved by Boulder County or CSFS as "part of the structure" with additional fuels reduction around those trees to insure the defensible space integrity. Trees should be at least 15 feet away from the house on all sides, and a minimum of 10 feet from chimneys.
- Zone 2 This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned areas near the house to the existing forest setting. It extends down slope between 100-170 feet depending upon slope steepness. Zone 2 also extends on either side of the structure a minimum of 100 feet and behind the house between 70-100 feet assuming no boundary restrictions. Tree spacing begins as in Zone 1C and gradually decreases as you approach the outer edge of the zone. Thinning and crown spacing becomes greater in areas of steep slopes. Ladder fuels and poor quality, suppressed and/or diseased trees, 6 to 8 inches in diameter, make up the majority of the removals. The remaining mature trees will be pruned to a height of 10 feet at the intersection of Zones 1 and 2 with limbing reduced in height to 6 feet as you approach Zone 3. If there are any questions pertaining to slope and the changes in thinning spacing and distance regulations please refer to www.colostate.edu/Depts/CSFS/ and find the Quick Facts 6.302 Creating Wildfire Defensible Space.
- **Zone 3** This zone extends out from Zone 2 to the edge of the property. It may extend out to areas that are not part of the immediate mitigation efforts. In this zone, a few thicker clumps of trees are acceptable, as well as some unpruned trees near the outer edge. Thinning in this zone adds some protection, but is aimed more at forest health. Trees that are of poor quality or form, or have insect or disease infestations, should be removed. Slash in this zone can be lopped and scattered and/or piled for wildlife use.
- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees.
- Snags should be retained for wildlife.
- Some slash in this zone can be lopped and scattered and/or piled for wildlife enhancement and shelter.
- · Large amounts of slash should be disposed of by chipping, hauling to an approved site, or burning.
- For burning permits, check with your local fire protection district.

MAINTENANCE AND RECCOMMENDATIONS

As detailed in fact sheet 6.302, <u>Creating Wildfire Defensible Zones</u>, an important factor that determines a structure's ability to survive wildfire is defensible space. Defensible space is a maintained area around a structure where fuels (flammable materials) are modified to slow the possible spread of wildfire to the structure, as well as from the structure to the surrounding areas. Defensible space provides a place where structure protection and fire suppression operations may occur. Wildfire hazard mitigation work breaks up fuel continuity, potentially decreasing a wildfire's intensity, and for more effectiveness should be completed beyond a home's defensible space, zone 1 and 2, area into zone 3.

In addition to the above recommendations, several other measures can be taken to make your home more fire safe and add an additional measure of safety for your family. While not required through site plan review, the following measures should be undertaken to maintain the home and defensible space in the future.

- Maintain your defensible space yearly; contact your local forester for a 5-year maintenance inspection
- Keep firewood at least 30 feet away from buildings; clear weeds and grass from around pile
- Do not stack fresh cut wood against live trees this could invite unwanted insects and tree mortality
- When possible, maintain an irrigated green space; mow grasses 6" to 8" high
- · Connect, and have available, a minimum of 50 feet of garden hose with an adjustable nozzle
- Have an emergency evacuation plan in place (included in wildfire mitigation plan)
- Be aware of fire danger; check the Boulder Fire Weather website at www.crh.hoaa.gov/den/fireindx.html
- · Keep driveways and property address marked with reflective easy to see signs
- Maintain screens on foundations, soffit vents, roof vents, and attic openings
- · Get rid of unnecessary accumulations of debris and trash from yards
- Keep tools such as shovels, rakes, ladders, and axes available and ready for use
- Clean debris from the roof and gutters at least two times annually
- · Check screens and maintain spark arresters on chimneys annually
- · Avoid storing combustibles under decks such as wood piles, scrap lumber, and fuels

DEFINITIONS

<u>Wildfire mitigation plan</u> – A plan to reduce wildfire hazards around a home or other structure through fuels reduction. A document to inform urban interface home owners of the dangers and responsibilities of living in the interface. A plan to help outline the initial and ongoing fuels reduction needed to maintain an effective and healthy wildfire defensible space.

<u>Fuel Model</u> – A number system that identifies the types of fuels found on the property that will directly influence fire behavior.

Aspect - Exposure. The direction a slope faces.

Canopy - The cover of branches and foliage formed collectively by crowns of adjacent trees.

Crown - Branches and foliage of a tree.

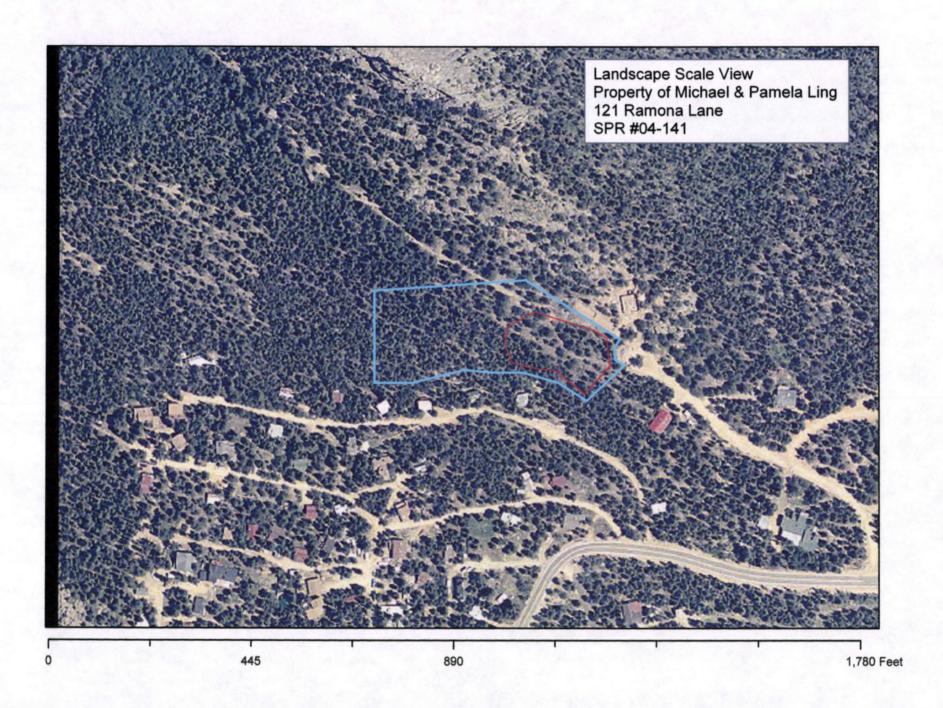
Dominant fuel type - Matter that would carry a fire, found on the ground.

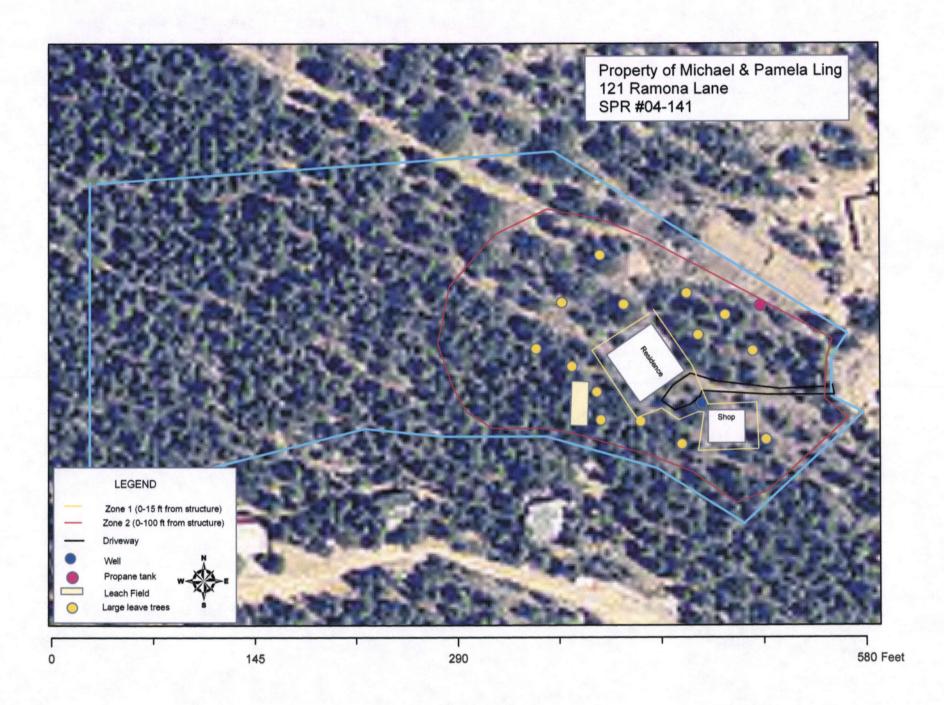
Fuel continuity - The proximity of fuels to each other. Helps determine if a fire can sustain itself.

Limb (verb) -To remove the branches from a tree.

Overstory - The tree species that forms the uppermost forest layer (dominant and co-dominant).

Snag - Standing dead tree, often used by wildlife such as woodpeckers, owls, and other various mammals.







EVACUATION



California Department of Forestry and Fire Protection

Evacuations are done to save lives, and to allow responding personnel to focus on the emergency at hand. PLEASE EVACUATE PROMPTLY WHEN REQUESTED!

Evacuation Orders

You will often hear the terms Voluntary and Mandatory to describe evacuation orders, however, local jurisdictions may use other terminology such as Precautionary and Immediate Threat. These terms are used to alert you to the significance of the danger and ALL evacuation instructions provided by officials should be followed immediately for your safety.

Long Before A Fire Threatens

Create and Maintain:

- A Defensible Space around your home and other structures on your property.
- Be involved in fire safe planning in your community.

Prepare an Evacuation Checklist and Organize:

- · Critical medications.
- · Important personal papers, photos, etc.
- · Essential valuables.
- Pet and livestock transport, limited amount of pet food.
- · Change of clothing, toiletries, etc.
- · Cell phone.
- Critical papers and effects in a fire proof safe.
- An Evacuation Route Map with at least two routes.*
- Drive your planned route of escape before an actual emergency.*
 - *During an evacuation law enforcement/ emergency personnel may determine your route.

The Law

Whenever a menace to the public health or safety is created by a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disaster, officers of the law may close the area where the menace exists. [Penal Code 409.5 (a)]

Any unauthorized person who willfully and knowingly enters an area that has been closed and who willfully remains within the area after receiving notice to evacuate or leave shall be guilty of a misdemeanor. [Penal Code 409.5 (c)]

If Evacuation Is A Possibility

- Locate your Evacuation Checklist and assemble the items on it. PLACE THEM IN YOUR VEHICLE.
- Park your vehicle facing outward and carry your car keys with you.
- · Locate your pets and keep nearby.
- · Prepare farm animals for transport.
- · Place a ladder outside for roof access.
- Place connected garden hoses and buckets full of water around the house.
- Assemble fire fighting tools near an outside door (shovel, rake, hoe, etc.).
- Move propane BBQ appliances away from structures.
- Cover up. Wear long pants, long sleeve shirt, heavy shoes/boots, cap, dry bandanna for face cover, goggles or glasses. 100% cotton clothing preferable.
- · Leave lights on in the house door unlocked.
- · Leave windows closed air conditioning off.

The Evacuation Process

- * Officials will determine the areas to be evacuated and the routes to use depending upon the fire's location, behavior, wind, terrain, etc.
- * Law enforcement agencies are typically responsible for enforcing an evacuation order. Follow their directions promptly!
- * You will be advised of potential evacuations as early as possible. You must take the initiative to stay informed and aware. Listen to your radio/TV and for announcements from law enforcement/emergency personnel.
- * You may be directed to temporary assembly areas to await transfer to a safe location.
- * When heavy smoke reduces visibility, movement may be restricted only to escorted convoys.

Returning Home

Fire officials will determine when it is safe for you to return to your home. This will be done as soon as possible considering safety and accessibility.

When you do return home:

- Be alert for downed power lines and other hazards.
- Check propane tanks, regulators, and lines before turning gas on.
- Check your residence carefully for hidden embers or smoldering fires.

If You Become Trapped

While in your vehicle:

- · Stay Calm.
- Park your vehicle in an area clear of vegetation.
- · Close all vehicle windows and vents.
- Cover yourself with wool blanket or jacket.
- · Lie on vehicle floor.
- Use your cell phone to advise officials – 911.

While on foot:

- · Stay Calm.
- Go to an area clear of vegetation, a ditch or depression if possible.
- · Lie face down, cover up.
- Use your cell phone to advise officials 911.

While in your home:

- Stay calm, keep your family together.
- Call 911 and inform authorities of your location.
- Fill sinks and tubs with cold water.
- Keep doors and windows closed, but UNLOCKED.
- · Stay inside your house.
- Stay away from outside walls and windows.
- Note it will get hot in the house, but it is much hotter, and more dangerous outside.

After the fire passes, and if it is safe, check the following areas for fire:

- · The roof and house exterior.
- Under decks and inside your attic
- Your yard for burning trees, woodpiles, etc.
- · Extinguish embers and sparks.

Your Evacuation Plan

Shelter-in-Place in an Emergency

Local government officials, not the Red Cross, issue evacuation orders when disaster threatens. Listen to local radio and television reports when disaster threatens. If local officials ask you to leave, do so immediately!

If you have only moments before leaving, grab these things and go!

- Medical supplies: prescription medications and dentures.
- · Disaster supplies: flashlight, batteries, radio, first aid kit, bottled water
- Clothing and bedding: a change of clothes and a sleeping bag or bedroll and pillow for each household member
- Car keys and keys to the place you may be going (friend's or relative's home)

If local officials haven't advised an immediate evacuation:

If there's a chance the weather may get worse or flooding may happen, take steps now to protect your home and belongings. Do this only if local officials have not asked you to leave.

Protect your home.

Bring things indoors. Lawn furniture, trash cans, children's toys, garden equipment, clotheslines, hanging plants, and any other objects that may fly around and damage property should be brought indoors.

Leave trees and shrubs alone. If you did not cut away dead or diseased branches or limbs from trees and shrubs, leave them alone. Local rubbish collection services will not have time before the storm to pick anything up.

Look for potential hazards. Look for coconuts, unripened fruit, and other objects in trees around your property that could blow or break off and fly around in high winds. Cut them off and store them indoors until the storm is over.

Turn off electricity and water. Turn off electricity at the main fuse or breaker, and turn off water at the main valve.

Leave natural gas on. Unless local officials advise otherwise, leave natural gas on because you will need it for heating and cooking when you return home. If you turn gas off, a licensed professional is required to turn it back on, and it may take weeks for a professional to respond.

Turn off propane gas service. Propane tanks often become dislodged in disasters.

If high winds are expected, cover the outside of all windows of your home. Use shutters that are rated to provide significant protection from windblown debris, or fit plywood coverings over all windows.

If flooding is expected, consider using sand bags to keep water away from your home. It takes two people about one hour to fill and place 100 sandbags, giving you a wall one foot high and 20 feet long. Make sure you have enough sand, burlap or plastic bags, shovels, strong helpers, and time to place them properly.

Remember. Houses do not explode due to air pressure differences. Damage happens when wind gets inside a home through a broken window, door, or damaged roof.

Cover the outside of windows with shutters or plywood. Tape does not prevent windows

American Red Cross Page 2 of 2

from breaking. All tape does is prevent windows from shattering. Using tape on windows is not recommended.

Protect your valuables.

Move objects that may get damaged by wind or water to safer areas of your home. Move television sets, computers, stereo and electronic equipment, and easily moveable appliances like a microwave oven to higher levels of your home and away from windows. Wrap them in sheets, blankets, or burlap.

Make a visual or written record of all of your household possessions. Record model and serial numbers. This list could help you prove the value of what you owned if those possessions are damaged or destroyed, and can assist you to claim deductions on taxes.

Do this for all items in your home, including expensive items such as sofas, chairs, tables, beds, chests, wall units, and any other furniture too heavy to move. Store a copy of the record somewhere away from home, such as in a safe deposit box.

If it's possible that your home may be significantly damaged by impending disaster, consider storing your household furnishings temporarily elsewhere.

Gather essential supplies and papers.

You will need the following supplies when you leave your home; put them all together in a duffle bag or other large container in advance:

- · Flashlight with plenty of extra batteries
- Battery-powered radio with extra batteries
- · First aid kit
- Prescription medications in their original bottle, plus copies of the prescriptions
- Eyeglasses (with a copy of the prescription)
- Water (at least one gallon per person is recommended; more is better)
- · Foods that do not require refrigeration or cooking
- Items that infants and elderly household members may require
- Medical equipment and devices, such as dentures, crutches, prostheses, etc.
- Change of clothes for each household member
- Sleeping bag or bedroll and pillow for each household member
- · Checkbook, cash, and credit cards
- Map of the area

Important papers to take with you:

- Driver's license or personal identification
- Social Security card
- Proof of residence (deed or lease)
- Insurance policies
- Birth and marriage certificates
- · Stocks, bonds, and other negotiable certificates
- · Wills, deeds, and copies of recent tax returns

All Red Cross assistance is given free of charge. This is made possible by the generous contribution of people's time, money, and skills. One of the best ways to help the Red Cross assist people affected by disasters is to make a financial contribution to the American Red Cross Disaster Relief Fund. Call 1-800-HELP NOW or contact your local Red Cross chapter.