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SAN BERNARDINO MOUNTAIN SAFETY RESOURCE GUIDE



**SAN BERNARDINO COUNTY FIRE DEPARTMENT
620 SOUTH E STREET
SAN BERNARDINO, CA 92415-0179**

This RESOURCE Guide is available in Spanish. To obtain a copy, please call 909.386.8400

DEAR CITIZEN,

Thank you for reading this guide. The County of San Bernardino hopes you find this publication helpful as we work together to face and overcome the crisis in our forests.

Our mountain communities are in the midst of historic change. The bark beetle has already destroyed millions of our majestic evergreens. This may have changed the landscape but it will not change the lifestyle and spirit of our beautiful mountain communities.

More immediately, we face various public safety threats created by the presence of more than a million dead and dying trees. The County of San Bernardino, working closely with various agencies known collectively as the Mountain Area Safety Task Force (MAST) have been removing dead trees, and working with residents and property owners to make our communities safe and prepared for disasters.

The county has been successful in securing millions of dollars in federal and local funding to address tree mortality and public safety issues. We owe a tremendous debt of gratitude to Congressman Jerry Lewis, who has worked tirelessly to make sure that federal resources are available to help, including Hazard Mitigation Grants from the Federal Emergency Management Agency (FEMA) and participation from the National Resource Conservation Service (NRCS).

Additionally, the San Bernardino County Board of Supervisors created a \$1 million revolving fund to assist with the removal of dead trees from private property. The board has also provided millions of dollars in loans to help develop local businesses that will market the wood as commercially valuable products. We are now developing plans with NRCS to not only remove more trees, but to provide for proper erosion control and long-range reforestation. These efforts and those of other MAST agencies will result in a healthier forest for generations to come.

In this guide you will find a description of the crisis, action you can take to protect your trees, resources that are available to help you, disaster preparedness information, as well as phone numbers and web sites.

We hope you find this guide useful and keep it in an accessible location.

SINCERELY,
THE SAN BERNARDINO COUNTY BOARD OF SUPERVISORS

CHAIRMAN DENNIS HANSBERGER, THIRD DISTRICT

VICE CHAIRMAN BILL POSTMUS, FIRST DISTRICT

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DISASTER PREPAREDNESS

The public outreach that took place last summer regarding the possibility of having to evacuate our local mountains due to the high fire danger proved extremely beneficial during the wildfires when thousands of people were successfully evacuated off the mountaintop.

Had it not been for pre-planning on the part of the communities, the evacuations of unprecedented proportions clearly would not have run as smoothly as it did. As the Grand Prix and Old Fire progressed, evacuation orders were given by law enforcement officials and politely obeyed – community after community. Roads cleared in a matter of hours for firefighters from more than 300 fire departments to save lives, protect property and battle the blaze.

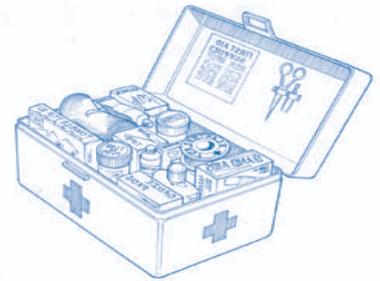
Unfortunately we are not out of danger – our local mountains remain a high fire danger. Preparedness is the key.

WHERE will your family be when disaster strikes?

How will you find each other? Will you know if your children are safe? Disasters can strike quickly and without warning. It can force you to evacuate your neighborhood or confine you to your home. Families can and do cope with disasters by preparing in advance and working together as a team.

CREATE AN EMERGENCY PLAN:

- Meet with family members to discuss the dangers of fire and other emergencies
- Learn alternate ways out of your neighborhood in case the usual way out becomes blocked. It is very important to be familiar with all the main arteries up and down the mountain.
- Be aware of emergency plans for your child's school or day care center
- Discuss how to respond to each disaster that may occur



BE PREPARED TO EVACUATE if NECESSARY – MAKE A LIST OF ITEMS YOU WANT TO TAKE:

Medications; eyeglasses; credit cards and cash; important documents; jewelry; leash and pet carrier; pet; pet food

EMERGENCY supply list:

A three-day supply of water; a three-day food supply that won't spoil – and a way to open it; blankets and sleeping bags; First-Aid kit; protective clothing and sturdy shoes; battery powered radio; flashlight and extra batteries; toilet supplies; work gloves; goggles for high winds or blowing embers; special items for infants, elderly or disabled persons

MOTORIST Safety Tips DURING AN EVACUATION:

Drive with your headlights on for visibility; drive calmly with special attention to public safety vehicles; don't use off-road shortcuts; never attempt to bypass closure barricades; stay in your vehicle during fire evacuations even if traffic is stopped; do not attempt to re-enter the area until officials declare it safe for re-entry



EVACUATION PLAN FOR YOUR PETS



If you must evacuate, the most important thing you can do to protect your pets is to take them with you. Leaving pets behind, even if you try to create a safe place for them, is likely to result in them being injured, lost or worse – killed. So prepare now for the day when you and your pet may have to leave your home. Keep in mind animals react differently under stress. Outside your home and in the car, keep dogs securely leashed. Even the most trusted pets may panic, hide, or try to escape.

If there is time, check all windows and doors. Make sure they are closed and locked. Move lawn furniture and other things that might snag firefighter hose lines. Leave exterior lights on. This helps firefighters locate the house in the smoke. Don't leave garden sprinklers on – they can waste critical water pressure.

EMERGENCY ALERT SYSTEM

The Emergency Alert System is a warning system to provide the public with immediate messages that affect life and property. EAS is a way to provide emergency information quickly by radio and television to the public. During an emergency, tune to your local EAS radio broadcast stations listed below or a station in your area.

93.3	FM	KBHR	Big Bear Valley
95.1	FM	KFRG	High Desert/Valley
98.9	FM	KHWY	High Desert
99.1	FM	KGGI	Valley
102.3	FM	KZXY	Victor Valley
107.7	FM	KCDC	Yucca Valley/Joshua Tree
640	AM	KFI	All Areas

For a Family Evacuation Plan Brochure, please refer to www.sbcfire.org.

BARK BEETLE CRISIS

The San Bernardino National Forest is experiencing significant drought-related, vegetation mortality. The severe drought has caused an infestation of an insect called the Bark Beetle. As of January 2004, over 9 million trees, of which over 1 million are on private land, in the mountains are dead. These destructive bark beetles damage or kill trees by tunneling under the bark to reproduce. Much of the damage is caused by the developing offspring. Most of the trees bark beetles attack includes conifers, oak, elm, or trees in the Pinus species. The bark beetles attack all parts of the trees. Once suitable trees are found, the bark beetles produce a powerful volatile attractant (pheromone) – which in turn attracts more beetles to the surrounding area. Once attacked by the bark beetles, the tree's needles turn yellow, red and ultimately rusty brown, making it obvious to anyone driving through the mountain communities the severity of the problem. Globes of sap as well as sap running down the tree are also indicators of attacks. The number of dead trees will continue as the bark beetle infestation spreads.

Over one hundred years of fire suppression has resulted in overly dense stands of trees. This, followed by a 5-year drought, has resulted in too many trees competing for too little moisture. As a result, the trees have been weakened and are highly susceptible to bark beetle attack. Beetles are now at epidemic proportions.

A long-term Forest restoration program is needed to restore our forest to a healthy condition. It is the responsibility of each homeowner to eradicate the dying or dead trees on their property. Homeowners will need to thin the trees on their property and clear out other vegetation to make mountain communities more fire safe. These management actions will also make the trees more drought resistant and likely to survive similar catastrophes in the future.

WHAT ARE THE SOLUTIONS?

The old adage about an ounce of prevention being worth a pound of cure is extremely appropriate. Once a tree becomes infested with bark beetles it usually dies rapidly. Bark beetles attack weakened, stressed or dying trees. Preventative measures include maintaining healthy, vigorous trees; eliminating beetle breeding sites, such as recently dead or cut trees, limbs, slash, and firewood with bark; and applying residual insecticides to susceptible but as yet uninfested trees, especially those under stress and therefore attractive to bark beetles.

HOW CAN I TELL if MY TREES ARE INFESTED AND DYING?

At the Upper Crown, a color change, however faint, is the first sign likely to be noticed. After that, the progress to light green, straw yellow and then brown may occur rapidly. At the Mid-Section, again a color change means trouble. At the Lower Trunk is where a close inspection can often find early signs of a beetle problem, even before needles change color. On pines, look for pitch tubes, small masses of pitch and boring dust made by some species of beetles as they invade the tree. A single pitch tube, or holes if the tree is highly stressed by drought, may be the only sign.



Fire Hazard Reduction Guide

PROTECTING YOUR HOME AGAINST WILDFIRE

Fire Protection Tips

- Install and maintain working smoke detectors on each level of your home
- Create and maintain a "defensible space" by removing flammable vegetation and replace with fire resistive plants
- Plant and maintain trees at least 10 feet apart, not in close groups and keep ornamental plants in a green, healthy condition
- Replace an existing wood shake roof with a Class A non-combustible roof
- Provide plywood coverings for windows, vents and glass doors. Have them ready to nail in place when fire threatens your home
- Ensure garden hoses function and can extend to all areas of your property
- Have an evacuation plan prepared and practice with family members

Reduce flammable vegetation for a 30 foot* perimeter around structures and beneath decks
*up to 100' in some cases

Clean all needles and leaves off roof

Provide spark arrester with 1/2" mesh screen on chimney outlet, visible from ground

Cut dead limbs overhanging building and remove limbs within 10' of chimney opening



Clear vegetation for 10' on each side of private roadways and provide 13'6" vertical clearance

Post street address on your home with 3" high numbers in plain view from the street. Structures set back more than 150' from the street, or not visible from the street, shall have 3" high numbers on a sign next to every access road entrance

Stack all wood neatly away from any structure and cover with a tarp

The primary responsibility for protecting your home is YOURS. Compliance with fire prevention tips and regulations will assist you in developing a fire safe property and to prepare for survival.

ARE YOU PREPARED?

Do you have sufficient defensible space around your home? Have you cleared your yard of debris? It could be a matter of life or death if a fire hits your area. Mountain Area Safety Task Force agencies urge all residents to follow these simple steps to help protect your property:

- ✓ Create a defensible area, firebreaks that divert flames around property, by clearing weeds and dry grass at least 30 feet around your home. Property on sloped areas should be cleared up to at least 100 feet, as wind-fed flames can race up hills and mountainsides quickly.
- ✓ Store flammable liquids in approved safety cans away from occupied buildings.
- ✓ Keep propane tanks clear of vegetation.
- ✓ Keep all combustibles, such as firewood, lawn furniture, picnic tables, etc., away from structures.
- ✓ Clean rain gutters regularly to avoid leaf and needle accumulation.
- ✓ Clear vegetation and other flammable materials from beneath decks or other wooden structures.
- ✓ Remove tree limbs and vegetation that overhang the roof.
- ✓ Remove all branches lower than 6 feet.
- ✓ Dispose of stove or fireplace ashes and charcoal briquettes after soaking them in a metal pail of water for 24 hours.
- ✓ Keep garden hose connected to faucet.
- ✓ Review your home escape plan with your family & have a fire drill exercise.
- ✓ Ensure address is clearly visible from the street.

Contact your local fire department for further information and free property inspections.

DON'T LET THIS HAPPEN TO YOU BE PREPARED DEFENSIBLE SPACE SAVES LIVES

FIRE PREVENTION GUIDELINE



WHAT CAN THE HOMEOWNER DO?

If the tree is completely brown and has been for six months, and if the bark peels away easily, then the beetles have come and gone and the tree should be removed. Contact a licensed tree operator to have the trees felled; remove slash; cut branches that are greater than three inches in diameter into three foot or less segments. Spread them in the sun to dry. These segments can later be used as firewood. Another option is to stack the wood in an open, sunny area and cover it with 5 to 10 mil clear plastic sheeting. The plastic must completely seal the stack so that there are no openings or holes to the outside. The wood should remain like this until it is no longer suitable for beetles (about 4-6 months).

WHAT ABOUT CHEMICAL REMEDIES?

There are only two products that have been proven through research to be effective and that are registered for use in California. While some products may claim to and may actually kill bark beetles on contact they may or may not be effective in preventing attacks of the beetle on a living tree. Additionally, some products claim to kill beetles and the fungus once an attack is under way. Research shows that two products have shown effective in preventing bark beetle attacks, though even these cannot guarantee protection. The two products are Carbaryl (Sevin) and Permethrin (Dragnet or Astro), which should always be applied according to manufacturer directions or by a professional Pest Control Applicator. For product information, contact your local nursery or hardware store.



REFORESTATION – Should I replant?

After the tree or trees are cut down, treated, and removed, what should you do with the open area? Almost automatically the thought is to replant the same number of trees that were removed. Foresters remind the homeowner that replanting the same number of trees that were removed is not necessarily the best thing to do.

Even with the death of trees on your land, it is very possible that you still have enough or even too many trees on your property. Trees, like all plants, need space to grow. Competing for water, nutrients, and light, trees that are too close together are less able to resist harmful insects and disease. Fewer trees will also open up the area and reduce the overcrowding of trees that has assisted in this drought/bark beetle disaster.



Trees should be allowed to grow throughout their lives with their limbs just touching the limbs of adjacent trees. This generally means that mature trees need to be 25-30 feet from adjacent mature trees. Small trees and seedlings must be planted with room to grow to maturity. If the trees on your property are closer than 25-30 feet apart, you will need to thin some trees out before planting new ones.

When replanting, keep in mind that trees native to the area will be best suited for its climate and soils. Here are some of the trees that could be planted in the San Bernardino Mountains: Ponderosa Pine, Jeffrey Pine, Coulter Pine, Western Heritage or Pinyon Pine (native to the Big Bear area), Giant Sequoia (caution, do not plant Coast redwoods, they will not survive), Black Oak, or Canyon Oak. For more information contact the U.S. Forest Service or the California Department of Forestry and Fire Protection.

WHERE CAN I GO FOR HELP?

OFFICE OF THE FIRE MARSHAL HAZARDOUS TREE REDUCTION PROGRAM

909. 337.1225

The Hazardous Tree Reduction Program creates and implements a variety of cost saving programs to assist the homeowner in removing dead/dying trees. The Block Program and Tree Removal Assistance Programs have proven effective. Call today for a list of licensed tree contractors in your area or to learn more about these programs.

Block TREE REMOVAL PROGRAM

- San Bernardino County Fire Block Coordinators identify a specific group of properties with dead/dying trees and mark them
- Block Coordinators meet with homeowners to discuss the program
- On behalf of the property owners, the Block Coordinators obtain the lowest bid for the removal of remaining dead trees
- The property owner then accepts the lowest bid, signs a contract, and the work is scheduled
- County Fire Slash Crews remove slash once the trees are felled and timber removed
- Goal is to remove all dead/dying trees within 60 days of project start date

TREE REMOVAL ASSISTANCE PROGRAM

Homeowners can receive up to \$5,000 in assistance to have dead/dying trees removed. This program is available to qualifying owner occupants with low-moderate income. Call for further criteria.

SOUTHERN CALIFORNIA EDISON (SCE)

800.655.4555

SCE is removing dead and dying trees that threaten its power lines, as determined by utility inspectors. Regulators have authorized SCE to reimburse eligible property owners who since April 3, 2003, have removed infected trees that could have fallen on utility electrical facilities. Visit www.sce.com for further information.

SCE's current schedule for tree removal in your community is now available on the M.A.S.T. website at www.calmast.org/mast.

BEAR VALLEY ELECTRIC (BEAR VALLEY CUSTOMERS ONLY)

909.866.4678

For information on this program, please contact Ken Markling.

Fire Safe Councils

There are over 90 Fire Safe Councils active in minimizing and preparing for wildfires before they happen to reduce the risk to their communities, their homes and property, as well as maximizing the health of California's natural resources. The Councils are comprised of concerned citizens who actively reach out to community members to keep them informed and enlightened on a wide range of fire topics. They also plan and implement many community type programs and events throughout the year. Fire agency representatives attend many of the Fire Safe Council meetings and act as liaisons between the councils and the agencies.

To find out what your local Fire Council is doing or to get involved, go to www.firesafecouncil.org or call our local council

Angelus Oaks

909.379.6252

Email: rbradford@arrowheadcu.org

Arrowhead Communities

909.336.6903

Email: gnewcombe1@hotmail.com

Big Bear

909.584.1066

Email: ksawyer@sisp2net

Forest Falls (Mill Creek)

909.793.2853 ext/1570

Email: nlsmaz@aol.com



Inland Empire Regional

909.887.1400

Email: ellenpollema@earthlink.net

Lytle Creek

909.887.1400

Email: ellenpollema@earthlink.net

Mountain Rim

909.337.6844

Email: info@mtnrifsc.org

Wrightwood

800.585.3245

Email: jbauer@wrightwoodfsc.com





FIRE INFORMATION Line – 909.355.8800
 Recorded Message containing fire information.
 In the event of a large fire, an information center may be activated.

MOUNTAIN AREA SAFETY TASK FORCE (MAST)

www.calmast.org

COUNTY RESOURCES

SAN BERNARDINO COUNTY BOARD of SUPERVISORS

909.387.4811
www.sbcounty.gov/bos

**SAN BERNARDINO COUNTY FIRE DEPARTMENT
 Office of the FIRE MARSHAL**

909.386.8400
www.sbcfire.org

**SAN BERNARDINO COUNTY FIRE DEPARTMENT
 HAZARDOUS TREE ABATEMENT PROGRAM**

For information pertaining to hazardous tree abatement notices, Block Program information, and questions relating to the bark beetle crisis

909.337.1225

**SAN BERNARDINO COUNTY FIRE DEPARTMENT
 Office of EMERGENCY SERVICES (OES)**

909.356.3998
www.sbcfire.org

**SAN BERNARDINO COUNTY DEPARTMENT of
 ECONOMIC & COMMUNITY DEVELOPMENT**

909.388.0808
www.sbcounty.gov/ecd

SAN BERNARDINO COUNTY Roads

For information pertaining to tree removal on major travel routes

909.387.8104
www.sbcounty.gov/trans

SAN BERNARDINO COUNTY Solid WASTE DEPARTMENT

For questions regarding the air curtain destructors and wood waste disposal

909.386.8701
www.sbcounty.gov/wsd

STATE RESOURCES

California DEPARTMENT of FORESTRY and FIRE PROTECTION

909.881.6900
www.fire.ca.gov

California DEPARTMENT of TRANSPORTATION (CalTRANS)

For information pertaining to tree removal on major travel routes and state road closures

909.383.4561
www.dot.ca.gov

FEDERAL RESOURCES

SAN BERNARDINO NATIONAL FOREST

For information regarding recreation & fire management

909.382.2600
www.fs.fed.us/R5/SANBERNARDINO

Big BEAR DISCOVERY CENTER

For information specifically for the Big Bear area

909.866.3437

LAW ENFORCEMENT

**California Highway PATROL
 (LAKE ARROWHEAD Office)**

For information pertaining to highway closures and evacuation guidelines

909.867.2791
www.chp.ca.gov

SAN BERNARDINO COUNTY Sheriff's DEPARTMENT

For information pertaining to evacuation procedures and guidelines

909.387.3700
www.sbcounty.gov/sheriff

OTHER RESOURCES

Southern California Edison

For information pertaining to Tree Removal Program

800.655.4555
www.sce.com

BEAR Valley Electric (BEAR Valley CUSTOMERS Only)

For information on this program, please contact Ken Markling

909.866.4678

LINKS OF INTEREST

NATIONAL WEATHER SERVICE

www.nws.noaa.gov

AMERICAN Red Cross

www.redcross.org

Federal EMERGENCY MANAGEMENT AGENCY

www.fema.gov

Smokey BEAR HOMEPAGE

www.smokeybear.com

SPARKY THE FIRE DOG

www.nfpa.org/sparky