



Dear Volunteer Fire Fighter:

We're very pleased to send you a copy of "Firewise in Five Minutes," a brand new reference guide designed to help you achieve your goal of reducing the threat of wildfires in the wildland/urban interface.

As you look through this manual, you'll find many guidelines, definitions and helpful hints that will aid you in communicating to your community the importance of being knowledgeable and prepared for wildfire.

You'll also learn about the Firewise Communities, the national workshops and recognition program, - community support programs and how you can apply for grants to help offset the costs of implementing Firewise programs.

The information you'll find in this manual is a great start. But it's a working document that's meant to grow. Please add your knowledge and experience to it.

With your copy of "Firewise in Five Minutes" comes our sincere thanks and appreciation, along with the hope that you'll find it valuable in your daily battle to save lives, property and natural resources.

Sincerely,

USDA Forest Service
National Association of State Foresters
National Volunteer Fire Council

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FIREWISE
COMMUNITIES™



1. INTRODUCTION

Firefighters in the wildland/urban interface (any area where wildland fuels threaten to ignite combustible homes and structures) must overcome severe challenges. There just aren't enough resources to protect every home threatened by a wildfire. Everyone in the vicinity of such a fire is at risk, and the risk is greatly increased in areas that aren't prepared.

The goal of this Firewise publication is to help you, the volunteer firefighter, increase the odds of success against the threat of wildfires through public education, community design, land use planning, collaboration, preparedness and prevention programs.

We hope you will use the information in this manual as a reference guide, and add to it as you find other relevant materials that help in your day-to-day efforts to save lives, property and natural resources.



A. OVERVIEW

Wildfire and its devastation is older than human history. All across the U.S. there are reports of entire communities being claimed along with unfortunate loss of life. That's why, in 1986, representatives of the National Fire Protection Association and the USDA Forest Service joined forces to establish what is now the National Wildland/Urban Interface Fire Program.

The Program operates under the following goals:

1. To provide a forum to increase the public awareness of the wildland/urban interface fire problem.
2. To develop local solutions to the issue.
3. To form partnerships among problem solvers and interest groups.
4. To promote safety for firefighters and the public in the wildland/urban interface.

The word "Firewise" was coined in 1992 by a botanist participating on a task group for Firewise landscaping. It has been used ever since to describe the concepts of learning to live compatibly with nature and understanding the natural role of fire in order to make the wildland/urban interface a safer place to live.

Today, the national program oversees workshops, community support programs, video programs, several newsletters, a Web site and CD-ROM library, public service ads and school education projects among its many efforts to educate the public about wildfires. In addition, the program is a key partner with NASF and the USDA Forest Service in the Firewise Communities/USA Recognition Program that provides special awards to communities that meet minimum standards in mitigation planning and activities. For more information, visit the Web site at www.firewise.org/usa



B. WHAT IS FIREWISE?

Firewise Communities is a national, multi-organizational initiative designed to reach beyond the fire service and involve homeowners, community leaders, planners, developers and others in the effort to protect homes and businesses from the dangers of wildland fire. A Firewise approach includes creative landscaping, home construction and design, and sound community planning to prepare structures to withstand a fire, even before it starts.

The goal of this manual is to help you, the volunteer firefighter, increase the odds of success against the threat of wildfires through public education, Firewise community design, land use planning, collaboration and preparedness and prevention programs.



C. THE ROLE OF YOUR VOLUNTEER FIRE DEPARTMENT

As a member of the volunteer fire department you play a vital role in protecting your community. In addition to fighting structure fires and wildfires, your role as a fire prevention advocate provides the information and procedures that citizens need to create emergency plans and, when necessary, to implement those plans during a fire incident or other event.

Life safety is always your highest priority. The safety of citizens, as well as other firefighters, is your paramount concern when fighting any fire. You should not be expected to put yourself (or others) at unnecessary risk to protect homes and other property.

The citizens in your community need to understand that, while volunteer firefighters take great pride in doing their jobs, you are not full-time firefighters. In reality, you are involved members of the community with full-time jobs (teachers, lawyers, construction workers), who are trained to respond in emergency situations. You and other citizens form a team that must share the responsibility for community safety, and successfully protecting homes from wildfires must be a team effort with citizens and volunteer firefighters working together in cooperation with other available resources from local, regional and national agencies.

Introducing the Firewise Communities concepts into your community will take some creative thinking and planning. There is a lot of information in this manual that can help, and even more information available on the Internet and from other sources.

The USDA Forest Service, National Association of State Foresters, National Volunteer Fire Council and Firewise Communities encourage you to use the information in this manual to help communicate what you do and what you and the community can do together. Use the text verbatim, paraphrase it, make copies and hand them out. Whatever methods you use will help others understand the volunteer fire department and how to work together with you to help manage the risk of wildfire.



2. FIREWISE COMMUNITIES

A. FIREWISE COMMUNITIES/USA

Communities that work with local fire professionals to recognize and address the wildfire issue can be designated a "Firewise Communities/USA" location. The Firewise Communities/USA Recognition Program enables communities in all parts of the United States to achieve a high level of protection against wildland/urban interface fire as well as sustainable ecosystem balance. The Firewise Communities/USA Recognition Program provides residents in the wildland/urban interface with the knowledge and skills necessary to make it happen.

Firewise Communities/USA is a unique opportunity available to America's fire-prone communities. Its goal is to encourage and acknowledge action that minimizes home loss to wildfire. Residents are taught to prepare for a fire before it occurs. The program adapts especially well to small communities, developments and residential associations of all types. Firewise Communities/USA is a simple, three-legged template that is easily adapted to different locales. It works in the following way:

- Wildland fire staff from federal, state or local agencies provide a community with information about coexisting with wildfire along with mitigation information tailored to that specific area.
- The community assesses its risk and creates its own network of cooperating homeowners, agencies and organizations.
- The community identifies and implements local solutions.

Becoming recognized as a Firewise Communities/USA begins with the community itself. The standards that must be met are not complex or overly difficult, but meeting them does take a coordinated effort by the community members.

For more information on the standards and the process, visit the Firewise Communities/USA Web site, www.firewise.org/usa. There you can order a free video and brochure explaining the process, or write to: Firewise Communities/USA, 1 Batterymarch Park, Quincy, MA 02169.



B. WORKING TOGETHER AS A COMMUNITY

Communities can work together and become Firewise Communities. One homeowner, following Firewise principles, can set a positive example in his or her neighborhood by lessening the effect that a wildfire may have on his or her property. Likewise, several homeowners maintaining their properties as a block further increase the safety of their neighborhood from wildfire risk.

From a small number of individuals, groups of homeowners and homeowner associations can develop guidelines for homes and vegetation to include in their bylaws that can help protect entire subdivisions. This process, beginning with the very smallest unit of land, builds Firewise Communities.

In some areas, money is available for communities to do community fire planning and mitigation. Volunteer fire departments or state or federal fire fighting agencies may choose to lead or be a part of the planning efforts.

For information on how to communicate with your community, refer to Section 5.



3. LOOKING OUTSIDE THE COMMUNITY

A. WILDLAND/URBAN INTERFACE: A NATIONAL CONCERN

Recent wildfires have shown how they can impact communities within their path. Land management agencies and other landowners are focusing hazardous fuel reduction treatments on lands adjacent to communities. Three major initiatives address, in part, the risk of wildfire within the wildland/urban interface.

The National Fire Plan

This plan addresses the priority to treat forest and grasslands to protect natural resources, lives and property. Developed following the 2000 fire season, the plan has become the guiding principal for fire management for federal and state wildfire fighting agencies. A major component of the National Fire Plan is to work with local governments and agencies, including volunteer fire departments. For more information about the National Fire Plan, visit www.fireplan.gov.

The Comprehensive 10-Year Strategy

The Comprehensive 10-Year Strategy, developed with federal agencies, state foresters, tribes and other concerned groups, outlines the priorities for fuel hazard reduction treatments with an emphasis on local decision making. For more information about the Comprehensive 10-Year Strategy, visit www.fireplan.gov/10-yr-strat_pg_1.html.

Healthy Forests Initiative

Following the fires of 2002, President George W. Bush proposed the Healthy Forests Initiative. This initiative focuses on more quickly treating hazardous fuels in the wildland/urban interface. Local community involvement is a primary goal. For more information about the Healthy Forests Initiative, visit www.whitehouse.gov/infocus/healthyforests/toc.html.



B. WORKING WITH LAND MANAGEMENT AGENCIES

As public and private land management agencies begin treating hazardous fuels along the wildland/urban interface, they will be looking for opportunities to collaborate with landowners and community and local governments. This is an excellent opportunity for your volunteer fire department or district, local organizations, and landowners to be involved in the shaping of fire protection in the wildland/urban interface.

Public and private land management agencies that administer lands around a community will send out or publish scoping notices to inform the community of proposed activities. Contact your local forestry or land management agencies to find out what is planned in your area and to let them know that your department would like to play a role in the fuel hazard reduction planning. Encourage local landowners and the community to become involved.

Among the several considerations that a community can discuss are the widths of the proposed treatment around the community, the potential effectiveness of various treatments in local situations, the probable direction of a wildfire and smoke associated with prescribed fire, and what the finished treatment area will look like. There are some parameters of wildfire behavior that dictate hazardous fuels treatment efficiency, but there is some leeway in selecting the most efficient pattern that can be created on the landscape. For instance, a treatment may not have to be absolutely uniform. Some clumps of thickets, placed strategically, could offer habitat and visual variation.

If your local public and private land managers are not yet planning for hazardous fuels treatment around the community, encourage them to do so. Through Firewise programs, citizens, local organizations, and public and private land managers, working together can best reduce the wildland fire risk in and around the community.



C. ADDITIONAL BENEFITS OF REDUCING HAZARDOUS FUELS

Wildfires can spread at an alarming rate. For example, the Hayman wildfire in Colorado during the summer of 2002 spread 14 miles in one day. By treating adjacent public and private lands, the rate of wildfire spread may decrease rapidly and ultimately save a community.

Residents may recognize the need to reduce hazardous fuels to protect their homes and communities, but there are other valuable resources that enhance a community that can also be protected. These *community values* include:

- **Water quality** - Protection of watersheds can reduce the hazard to drinking water. Wildfires can have a devastating impact on water resources, and the loss of vegetation can cause mudslides after a heavy rainfall following a fire.
- **Forest health** - Catastrophic fires can result in prolific insect infestations. If a nearby or adjacent forest on public or private lands is scorched, the resulting infestation could threaten the trees and shrubs in a community.
- **Soil quality** - Intense wildfires can sterilize the soil, making it difficult for vegetation to re-establish itself after a wildland fire.
- **Air quality** - Extended wildfires can compromise air quality.
- **Viewsheds** - The aesthetic value of the land is compromised after a wildfire. What once was a beautiful forest or grassland becomes charred and unsightly.
- **Plants and animals** - Many threatened and endangered species found on public and private lands lose their habitat as a result of wildfires.
- **Recreation** - Wildfires can impact recreational opportunities and cause hardship for communities.

If federal and state public and private land management and communities remove the excess trees and underbrush through mechanical means or prescribed fire, the likelihood of losing many of the community values listed above decreases significantly. What's important is what is left on the ground and the condition of the land. It's not necessary to treat every single acre; focus instead in areas where the most difference can be made.



4. RESOURCES FOR VOLUNTEER FIRE DEPARTMENTS

A. TOOLS FOR ASSESSMENT

As a member of a volunteer fire department, it is essential that you know the local terrain and its challenges. Are roads and driveways wide enough to accommodate fire engines? Is water available in the area? A good way to learn these things is to assess the community on a regular basis to determine where trouble spots may be. Use the following checklists and information to help make these assessments.

Trained members of volunteer fire departments should also offer wildland fire hazard assessments to homeowners and homeowner associations. Using a hazard assessment system, go over the elements with a single homeowner or homeowner association. Information gained through a hazard assessment will benefit the homeowner in identifying areas that should be addressed personally and benefit the fire department in assessing overall situations in neighborhoods and residential areas.

Most wildland/urban interface fire hazard assessment systems use a numeric rating to describe the severity of risk. The document used in many locales is NFPA 1144 [Standard for the Protection of Life and Property from Wildfire](#), 2002 Edition. Appendix A contains an assessment form, like the one on the following page, that you can use.

If you want to use another assessment form, be sure you understand the rationale behind its creation and how to use it accurately.

If you'd like to create your own community assessment system, go to www.firewise.org/pubs/WHAM/nfpa/wham.pdf for a copy of the publication *Wildland/Urban Interface Fire Hazard Assessment Methodology*. This publication describes the major steps and important factors to include in creating a wildland/urban interface hazard assessment system.



Wildland Fire Risk and Hazard Severity Assessment Form

(Circle the most appropriate element in each category and total the points)

ELEMENT	ASSESSED POINTS
A. Means of Access	
1. Ingress and egress	
a. Two or more roads in/out	0
b. One road in/out	7
2. Road width	
a. ≥ 7.3 m (24 ft.)	0
b. 6.1m to 7.3m (20 to 24 ft)	2
c. < 6.1 m (20 ft.)	4
3. All-season road condition	
a. Surfaced road, grade $< 5\%$	0
b. Surfaced road, grade $> 5\%$	2
c. Non-surfaced road, grade $< 5\%$	2
d. Non-surfaced road, grade $> 5\%$	5
e. Other than all-season	7
4. Fire Service Access	
a. ≤ 91.4 m (300 feet) with turnaround	0
b. > 91.4 m (300 feet) with turnaround	2
c. < 91.4 m (300 feet) with no turnaround	4
d. ≥ 91.4 m (300 feet) with no turnaround	5
5. Street signs	
a. Present; 10.2 cm (4 in.) in size and reflectorized	0
b. Not present	5
B. Vegetation (Fuel Models)	
1. Characteristics of predominate vegetation within 91.4m (300 ft.)	
a. Light (e.g., grasses, forbs, sawgrasses, and tundra) NFDRS Fuel models A, C, L, N, S, and T	5
b. Medium (e.g., light brush and small trees) NFDRS Fuel models D, E, F, H, P, Q, and U	10
c. Heavy (e.g., dense brush, timber, and hardwoods) NFDRS Fuel models B, G, and O	20
d. Slash (e.g., timber harvesting residue) NFDRS Fuel models J, K, and L	25
2. Defensible space	
a. More than 30.48m (100 ft.) of vegetation treatment from the structure(s)	1
b. 21.6 - 30.48m (71-100 ft.) of vegetation treatment from the structure(s)	3
c. 9.1-21.3 m (30-70 ft.) of vegetation treatment from the structure(s)	10
d. < 9.1 m (30 ft.) of vegetation treatment from the structure(s)	25
C. Topography within 91.4m (300 ft.) of structure(s)	
1. Slope $< 9\%$	1
2. Slope 10% to 20%	4
3. Slope 21% to 30%	7
4. Slope 31% to 40%	8
5. Slope $> 41\%$	10

Hazard Rating	Total points
1. Low hazard:	< 40
2. Moderate hazard:	40-69
3. High hazard:	70-112
4. Extreme hazard:	> 112

ELEMENT	ASSESSED POINTS
D. Additional Rating Factors (rate all that apply)	
1. Topographical features that adversely affect wildland fire behavior	0 1 2 3 4 5
2. Areas with a history of higher fire occurrence than surrounding areas due to special situations (e.g., heavy lightning, railroads, escaped debris burning, arson, malicious burning)	0 1 2 3 4 5
3. Areas that are periodically exposed to unusually severe fire weather and strong dry winds	0 1 2 3 4 5
4. Separation of adjacent structures that may contribute to fire spread	0 1 2 3 4 5
E. Roofing Assembly	
1. Class A roof	0
2. Class B roof	3
3. Class C roof	15
4. Nonrated	25
F. Building Construction	
1. Materials (predominate)	
a. Noncombustible/fire resistive siding, eaves & deck	0
b. Noncombustible/fire resistive siding, combustible deck	5
c. Combustible siding and deck	10
2. Building setback relative to slopes $> 30\%$	
a. ≥ 9.1 m (30 ft.) to slope	1
b. < 9.1 m (30 ft.) to slope	5
G. Available Fire Protection	
1. Water Source Availability	
a. Pressurized water source availability	
1892.7 lpm (500 gpm) hydrants ≤ 304.8 m (1000 ft.) apart	0
946.4 lpm (250 gpm) hydrants ≤ 304.8 m (1000 ft.) apart	1
b. Non-pressurized water source availability (off site)	
≥ 946.4 lpm (250 gpm) continuous for 2 hours	3
< 946.4 lpm (250 gpm) continuous for 2 hours	5
c. Water unavailable	10
2. Organized Response Resources	
a. Station ≤ 8 km (5 mi.) from structure	1
b. Station > 8 km (5 mi.) from structure	3
3. Fixed Fire Protection	
a. NFPA 13, 13R, 13D sprinkler system	0
b. None	5
H. Placement of Gas and Electric Utilities	
1. Both utilities underground	0
2. One underground, one aboveground	3
3. Both aboveground	5

Totals for Home or Subdivision:
(Total of circled points) _____

HAZARD RATING: _____

B. KEY CONTACTS

National Association of State Foresters

Hall Of The States

444 N. Capitol Street NW, Suite 540

Washington, DC 20001

www.stateforesters.org

Firewise Communities

1 Batterymarch Park

Quincy, MA 02169

www.firewise.org

National Fire Protection Association

1 Batterymarch Park

Quincy, MA 02169

617-770-3000

www.nfpa.org

National Volunteer Fire Council

1050 17th St., NW, Suite 490

Washington, DC 20036

<http://nvfc.org>

USDA Forest Service

www.fs.fed.us/contactus/regions.shtml

This Web site presents the Regional Offices of the USDA Forest Service.

C. GRANT INFORMATION

Grant Resources for Communities Pursuing Firewise Activities

National Fire Plan - Community Assistance Programs

www.fireplan.gov/community_assist.cfm

Stewardship and Landowner Assistance - Financial Assistance Programs

www.na.fs.fed.us/spfo/stewardship/financial.htm

The following offer information on federal and state tax incentives:

National Timber Tax Website

www.fnr.purdue.edu/ttax/

Tax Tips for Forest Landowners for the 2000 Tax Year (PDF Format)

www.srs.fs.usda.gov/pubs/misc/r8_mb087.pdf

The following are federal programs that offer financial assistance to private landowners:

Conservation Reserve Program

www.fs.fed.us/spf/coop/crp.htm

Environmental Quality Incentives Program

www.fs.fed.us/spf/coop/eqip.htm

Forestry Incentives Program

www.fs.fed.us/spf/coop/fip.htm

Wetlands Reserve Program

www.fs.fed.us/spf/coop/wrp.htm

Wildlife Habitat Incentive Program

www.fs.fed.us/spf/coop/whip.htm

Getting Forest Stewardship Assistance in Your State


www.na.fs.fed.us/spfo/stewardship/stewstates.htm

National Association of State Foresters Listing of Grant Sources and Appropriations

www.stateforesters.org/S&PF/FY_2002.html

U.S. Fire Administration - Assistance to Firefighters Grant Program

www.usfa.fema.gov/dhtml/inside-usfa/grants.cfm



The following sites include information about the Assistance to Firefighters Grant.

Federal Emergency Management Agency

Hazard Mitigation Grant Program

www.fema.gov/fima/mitgrant.shtm

Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Hazard Mitigation Grant Program funding is only available in States following a Presidential disaster declaration. Eligible applicants are:

- State and local governments
- Indian tribes or other tribal organizations
- Certain private non-profit organizations

Individual homeowners and businesses may not apply directly to the program; however a community may apply on their behalf. HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damages as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage.



Pre-Disaster Mitigation Program

www.fema.gov/fima/pdm.shtm

FEMA has long been promoting disaster-resistant construction and retrofit of facilities that are vulnerable to hazards in order to reduce potential damages due to a hazard event. The goal is to reduce loss of life, human suffering, economic disruption, and disaster costs to the Federal taxpayer. This has been, and continues to be, accomplished through a variety of programs and grant funds.

Although the overall intent is to reduce vulnerability **before** the next disaster threatens, the bulk of the funding for such projects actually has been delivered through a "post-disaster" funding mechanism, the Hazard Mitigation Grant Program [HMGP]. This program has successfully addressed the many hazard mitigation opportunities uniquely available following a disaster. However, funding of projects "pre-disaster" has been more difficult, particularly in states that have not experienced major disasters in the past decade.

Through the Disaster Mitigation Act of 2000, Congress approved creation of a national Pre-disaster Hazard Mitigation program to provide a funding mechanism that is not dependent on a Presidential disaster declaration. For FY 2002, \$25 million has been appropriated for the new grant program entitled the **Pre-Disaster Mitigation [PDM] Program**. This new program builds on the experience gained from previous community-based disaster mitigation grants, the HMGP, and other mitigation initiatives.

This program is administered state-by-state. See this link at the Catalog of Federal Domestic Assistance for more information: www.cfda.gov/public/viewprog.asp?progid=1606

For all FEMA grant programs, funding comes through the state, typically the state emergency management agency. For a list of the State Hazard Mitigation Officers (who coordinate mitigation planning and grants in each state), check www.fema.gov/fima/hmgp/statedir.shtm

For a sample grant, please see Section 7.



5. COMMUNITY OUTREACH

A. BUILDING COMMUNITY AWARENESS

There's no substitute for communication. You have vital information that the homeowners in your area need to know. The following section suggests some ways you can interact with community members to make them more aware of Firewise practices.

There are many ways that volunteer fire departments can promote Firewise practices. Those with a small budget, or volunteer resources, might create a mailer.

Other ways to deliver the Firewise message to residents include open houses at the local fire station, awareness programs in schools, or visits to places where members of the community live, work, and play. These might include picnics, car washes, band concerts, pancake breakfasts, fairs – virtually any place that people gather is an opportunity to get the word out.

Another good idea is to tie-in with a local do-it-yourself or hardware store to conduct a seminar on Firewise preparations that the homeowner can accomplish using the store's merchandise (fire extinguishers, shovels, smoke detectors, landscaping products, etc.).

You should also get the message out in newspapers and through local newsletters. (See Section 6 for sample letter.)

To learn about some successful methods other communities in the wildland/urban interface have used to build awareness, go to www.firewise.org



B. OVERVIEW OF INFORMATION FOR HOMEOWNERS

As more and more people choose to live in the wildland/urban interface, it is important to make sure they understand the nature of their surroundings and the dangers and patterns of wildfire. Please use the following information to help residents realize the importance of being Firewise.

Wildfire has always been a natural part of many of the areas where we live. In fact, many forests and rangelands were burned as a result of lightning and indigenous wildfires long before they were occupied by European settlers.


Today, the situation only grows worse. There are many homes and communities being built without regard to the wildfire and fuel conditions in and around the forest and rangelands. And dense population in these areas increases the chance of wildfire.

There is great potential for loss of life, property, and other ecological values due to fuel conditions located in and around the wildland/urban interface.

Among all these factors, residents need to understand that they must be willing to accept personal responsibility for learning to live compatibly with the natural elements found in the interface – including fire. Your fire department can help them understand how to exercise that responsibility.

The average person has no idea how dangerous fire can be. Sharing some of the following facts (along with others you may know) can serve as a wake-up call. Anything you can do to educate your community members to become more Firewise benefits everyone.

- A free-growing fire can reach over 1200 degrees Fahrenheit in 90 seconds. A fire in a compartment, like a house or room within a house, is affected by the confinement of the gases generated by the fire which reduces the amount of oxygen available to sustain combustion. In a structure fire, it is these gases of combustion that most often cause death to occupants, even though the heat in non-fire rooms can reach several hundred degrees. The gases formed by combustion make occupants sleepy, weak and confused. They can't smell these fumes, so if asleep, people die without ever seeing the flames. But a smoke alarm and a carbon dioxide detector will alert the occupants to the presence of dangerous gases in time to leave the house. (Source: *Fire Protection Handbook*, 18th Edition, NFPA, 1997.)



- In an open area, the heat release rate of a fire (and therefore, its growth) is controlled by the availability and configuration of fuel. These outside fuels include grasses, shrubs, trees and, of course, houses constructed of combustible materials like wood. This is why homes in the interface are often susceptible to wildland fires – they are often more combustible than the natural fuels that surround them.

- Make sure smoke alarms are installed outside all sleeping areas. And, make sure batteries are replaced each year on a memorable day, like a birthday, anniversary, during National Fire Prevention Week, or when clocks are changed for daylight saving time (spring or fall).



C. KEY MESSAGES AND Q&A

Following are general messages to use when communicating with the community:

- Wildland fires are an absolute reality. They are going to occur. It is not a matter of *if* – it is a matter of *when*.
- Wildland fires can have serious effects on natural resources, property, and safety in almost any area of the country.
- Wildland fires may even make it impossible for members of fire protection agencies to get to your property when fire is approaching.
- Firewise offers a series of practical steps that individuals and communities can take to protect themselves and their property from risk of wildland fire. Utilizing only one element of a Firewise program is not enough to protect against the many dangers of wildland fire.



D. MATERIALS FOR HOMEOWNERS

I. FACT SHEET: A CAMPFIRE STORY TO REMEMBER

Many people who recreate in the wildland/urban interface appreciate nature and its many enjoyments. But the fun and warmth of a roaring campfire must be tempered with safety concerns. Always build the campfire in a designated area, when possible, and follow these guidelines:

- Check local fire restrictions
- Note the local weather, never build a fire in a heavy wind
- Circle the pit with rocks or be sure it already has a metal fire ring
- Clear a 10-foot area around the pit down to the soil, where permissible
- Keep plenty of water handy and have a shovel for throwing dirt on the fire if it gets out of control
- Stack extra firewood away from the fire
- Keep the campfire small
- After lighting the fire, make sure your match is out cold
- Never leave a campfire unattended. Even a small breeze could quickly cause the fire to spread
- Extinguish the fire by drowning it with water. Make sure all embers, coals and sticks are wet. Move rocks to make sure there are no burning embers underneath. Stir the remains, add more water and stir again
- Do not bury your coals – they can smolder and re-ignite



II. FACT SHEET: TEN SIMPLE STEPS

Ten steps that homeowners can take to increase their level of protection and minimize their vulnerability to wildfire. They are:

1. Clearing vegetation
2. Watering vegetation in the vicinity of the home
3. Keeping water-storing plants as a wildfire deterrent
4. Using fire-resistant building materials and roof types
5. Placing a swimming pool in a fire-protective location
6. Ensuring the safe storage of firewood, propane tanks and other fuels
7. Keeping trees and medium-height vegetation away from dwellings and other structures such as garages and barns
8. Creating a buffer zone between forest-type vegetation and the home
9. Keeping lawns trimmed and leaves raked
10. Keeping roof and rain-gutters free of debris such as leaves, needles and dead limbs

For more information, please visit the Firewise Web site at www.firewise.org.

III. FACT SHEET: FIREWISE LANDSCAPING/CONSTRUCTION TIPS

FIREWISE CONSTRUCTION TIPS

CREATING DEFENSIBLE STRUCTURES

The building materials, design and location, and the fuels within the area will all contribute to the ability or inability of the structure to survive a wildland fire situation. By considering the following structural hazards, new developments can be built with an increased chance of surviving a wildland/urban fire. Existing structures can be retrofitted to reduce fire risk. Some improvements may carry financial incentives like insurance premium reduction, energy savings, as well as improved property values and resale potential.

An excellent reference is *FIREWISE Construction: Design and Materials*, as noted in the bibliography.

DEMONSTRATION SITES

- Encourage a local building supply company to offer discounts for home improvement materials that offer improved fire safety.
- Encourage them to conduct homeowner classes in FIREWISE materials and installation.
- Arrange for donations of enough materials to assemble a display for fairs and presentations.
- Develop plans for a small demonstration house that incorporates these materials.

Location

- Build in a location that will minimize exposure of vulnerable design features (like decks and overhangs) and maximize survivability.
- Structures should be set back at least 30 feet from property lines to help ensure control of the adjacent areas.
- Build away from dangerous features like the top of slopes or next to steep canyons.

Roof

- Inappropriate roofing causes the most damage to houses. Firebrands or embers light on roofs or enter at vulnerable points near the roof (e.g., gables, soffits, vents).
- Cover with non-flammable materials (asphalt, concrete, tile, metal, etc.)
- Inspect for gaps, which can expose ignit-able sub-roofing or roof supports.

Walls

- Walls are most susceptible to ignition by radiation and convection, particularly trim materials.
- Sidings that resist heat and flames, include cement, plaster, stucco and concrete masonry such as stone, brick or block.
- Some materials, such as vinyl, will not burn, but when exposed to high temperatures will fall away or melt. This may not present another fire problem as long as the sub-material is sealed and no hidden spaces exist.

Eaves and Overhangs

- Eaves and overhangs - room pushouts, bay windows, extensions over slopes - are very vulnerable to heat.
- Eliminate contact with fuels.
- Box or enclose with metal screens or other non-flammable materials to reduce surface area and eliminate edges that can trap firebrands.

Windows

- Exposure to heat can cause windows to fracture and collapse leaving an opening for flames to enter a structure.
- Use glass products that withstand radiant and convective heat to reduce this risk like thermal windows.
- Tempered glass will withstand much higher temperatures than plate glass and should be used for larger windows and those overlooking

Materials and Design

- Should a building come in contact with heat, flames, or firebrands, the building materials and design should prevent or retard the penetration of the fire beyond the exterior of the structure.

Vents

- Openings should be screened to prevent firebrands from entering structures.
- Screens should prevent passage of objects larger than 1/4 inch.
- Vents and screens should be constructed of materials that will not burn or melt when exposed to heat or firebrands.
- Install spark arrestors over chimneys.
- Install metal screening over sub-floor and attic vents.

Attachments

- Attachments include any structures connected to a structure such as decks, porches, and fences. To make attachments more defensible, enclose.
- Construct decks out of fire resistant materials like heavy timber, plastic wood, stone, or cement fiber panels.
- If the ignition potential of the attachment is high, the ignition potential of the entire structure is considered high.



FIREWISE LANDSCAPING TIPS

COMMUNITY CLEAN UP DAY

- When many people make a similar effort at the same time, the cost of removal goes way down – whether for hauling, chipping, planting, etc.
- This is an excellent way to document progress on a community scale and derive positive publicity for continuing efforts in your action plan.
- Volunteer Fire Departments can use door-to-door fund-raising campaigns to advertise a clean up day.

CREATING SURVIVABLE SPACE

When creating survivable space, it is often necessary to remove trees and other vegetation from the area. Benefits include removing potentially hazardous slash, providing usable wood waste (like firewood, mulch, etc.), decreasing crime potential, and potential wind damage.

WAYS TO CLEAR DEBRIS

Chipping/Grinding

- Look through local phone book for commercial chippers for rent or sale.
- Arrange for loaners from local/county government highway departments, electric or other utility company, local nurseries.
- Hire a contractor to chip the materials in exchange for the chips. Residents in one community hired a contractor to clear way trees that presented a hazardous fire situation. The trees that had commercial value were sold and the contractor and resident split the proceeds 50/50. The resident then turned over their 50% back to the contractor clear who would then clear the non-commercial trees and slash from the commercial harvest.
- Local nurseries and landscaping companies may loan a chipper in exchange for the chips/mulch.
- Government grants exist for chipper rentals, provided hazard mitigation is the ultimate goal.
- One resident purchased a chipper to his property then sold it to the next neighbor for \$50 less than the original cost. The neighbor then used it and sold it to the next neighbor for \$50 less than what he paid – and so on. By sharing the cost of the chipper this way, people cleared their property at the cost of \$50 each. In the end, the chipper was paid for and became the property of the neighborhood association.



Hauling

- Move materials to a land/solid waste disposal site, similar to Christmas Tree removal.

Burning

- Check with local fire, health, and/or extension agencies for instruction, required permits and other considerations.
- Tile and pile techniques are particularly useful in clearing and disposal arrangements. (see glossary)

DEMONSTRATION SITE

Use donated plants and other materials to show your community FIREWISE landscaping. This can be a permanent exhibit at a local park or fire station or a portable display for fairs and other community events.

IV. FACT SHEET: HELPING THE FIRE DEPARTMENT

In a wildfire, there are no guarantees.

In a wildfire, local fire departments have two priorities – FIRST to protect human life and property and SECOND to stop the progression of the fire. Homes in the path of a wildfire may or may not be able to be protected. Often firefighters must decide which homes can be protected and which ones can't. So the more homeowners do to create Firewise living spaces, the more likely their homes can be saved.

Homeowners in interface areas can play an active role in protecting their homes from wildland fire AND greatly assist you (the fire department) in protecting the homes and the neighborhood.

Work with homeowners in your area to compile a list of potential emergency access problems such as those on the list in this section. This list will provide the fire department with information that can help determine steps necessary to protect the house in the event of wildfire.

- Street signs and addresses must be visible and readable (at least 4 inches in height and reflectorized).
- All access gates must be able to be unlocked by emergency responders and kept in good working order. The gate should swing inward and allow a clear opening of no less than 2 feet wider than the gated road or driveway.
- Driveways must be wide enough to allow fire engine access (12 feet wide with a vertical clearance of 13.5 feet and a slope less than 10 percent).
- All driveways and access roads must be well maintained and clearly marked. Any driveway greater than 300 feet in length should include ample turnaround space at locations approved by the fire department.
- Bridges must have the weight capacity to hold the weight of a fire truck.

UNDERSTANDING HOW TO UNDERSTAND YOUR COMMUNITY



*Brought to you by the National Wildland/
Urban Interface Fire Program*

UNDERSTANDING HOW TO UNDERSTAND YOUR COMMUNITY

What is a Firewise Community and what does it look like?

Community is more than a place - more than buildings, roads, homes, trees, and more than property owners. It is also the relationships, partnerships, attitudes and values that bind individuals, corporations, organizations, and agencies together, and motivate them to achieve common purposes.

By first understanding the definition of a community, it becomes easier to grasp the concept of communities that are Firewise. Firewise is a combination of attitudes and behaviors which grow out of an understanding of "the place", together with a shared vision of a community that is integrated into its natural setting and, at the same time, is a safer place for people to live. It maximizes fire protection with minimum impact on community and property owner values. It benefits the landscape and wildlife as well as people. Collaborative partnerships between business, government, fire protection, local associations and residents are essential to creating Firewise Communities.

The vision of a Firewise community or neighborhood is one in which Firewise activities become a part of daily life. Wildfire safety is a daily habit. Everyday activities always include fire safety measures. People and organizations understand the importance of these measures, and work together for their mutual benefit and protection, and the protection of their environment.

What are these Firewise activities?

Fire resistant roofing materials	Fire risk zones	Development restrictions	New subdivisions requirements	Fuel breaks
On-site water storage	Roads wide enough for fire engines emergency response vehicles	Multiple access	Risk Assessments	Spark arrestors
Maintenance programs to clear dead and down vegetation	Fire resistant landscaping	Insurance rate incentives	Development prohibited in high risk areas	Smokey Bear
Prescribed Fire	Prevention	Clearance around propane tanks	Community clean up days	
Fire season publicity	Green Space	Recreation access roads	Air Quality	People actually working together

What Makes Information Work for People?

A Learning Model

We have adapted and modified a simple and effective model of how adults learn to help clarify social processes and partnerships, involved in developing Firewise Communities. Using this model as a guide allows information to be presented to potential partners when, and in a way, that they are most ready to accept and use it.

The model is called **Stages of Learning**. The model progresses sequentially through four stages: **Ignorance**, **Confusion**, **Confidence**, and **Mastery**. The study of any unfamiliar subject begins with ignorance and may proceed to mastery. At each stage, potential partners need different kinds of information and levels of information to move to the next stage.

This approach centers on questions that are important to learners at each stage. It helps speed the rate of adoption of new ideas and practices by enhancing their comprehension and control. And it assists change agents to present exactly the information potential partners need to move to the next learning stage.

Why use this model?

Many folks don't even know that they don't know what is involved in the process of creating Firewise Communities. Furthermore, it will likely be up to you to generate that awareness before they will get involved in a solution. It's sad but true.

People who don't know they don't know something aren't aware of the benefits of action, or the pitfalls of non-action. They simply are not cognizant of the implications or the potential benefits. Using the concepts in the model helps to spread ideas and practices quickly.

	What People Feel	Ways to Overcome Obstacles	Questions People Ask
STAGE 1: Ignorance	I don't know that I don't know	Replace ignorance of issues, problems, implications and solutions with awareness and desire to learn more	Why should I care about this? How could this affect me?
STAGE 2: Confusion	I know that I don't know	Reduce confusion and uncertainty, and encourage people to take action with help from others	Why should I be doing? How will doing it benefit me?
STAGE 3: Confidence	I know that I know	Build confidence in their ability to take action to solve problems	What steps are involved in this practice? What resources and skills are required for each step?
STAGE 4: Mastery	I can just do it	Create more leaders, teachers, and knowledgeable resources at the local level	How can I maintain my competence? How can I assist others to gain competence?

The four stages of learning


(Adapted from Voegelé and Crocker, 1998) can easily explain the method of adopting community actions – even creating Firewise Communities.

Each learning stage addresses a different set of potential partner questions. Potential partners find it easier to accept and adopt ideas that address their questions. If their questions are not addressed, they find it difficult to integrate the information.

What If Your Community Doesn't Know it Doesn't Know?

Achieving awareness is not simple. Rather it's an ongoing community-wide process of marketing that attracts attention to your ideas or "campaign". We firmly believe presentations that address the audience's level of understanding and commitment (or lack thereof as **ignorance**), that can overcome doubt and confusion, and that can provide a sense of confidence and control, can substantially affect awareness of issues and how they affect people's lives. The pace of learning new concepts and practices. The rate at which ideas spread and are adopted. People's willingness to act together to implement beneficial practices.

Now They Know They Don't Know--SO WHAT?

A grayscale photograph showing a hand pointing to a map or document on a table. The map has various lines and markings, possibly representing a city or a project area. The hand is in the foreground, and the map is in the background.

By now they still only know that they don't know anything about Firewise Communities. At least there is interest in finding out about it. And that's good. The goal at this second stage is to educate to reduce **confusion**, persuade individuals to adopt a desired viewpoint, and motivates them to take action. This is where specific problems and practices are defined and illustrated. This is the **WHAT** stage. "What should I be doing? What are the benefits? What's it going to cost? What needs to be done to address the issues raised earlier" (not the specific details of how to accomplish each step). When your audience starts to ask these questions, they are now aware that there is a problem and something must be done to solve it.

When They Know, Why Don't They DO SOMETHING?

Many attempts to involve communities fail. Why? A number of reasons, but many, believe it or not, rest with a lack of confidence in people's own ability to take action to solve problems. They need the knowledge of **HOW** to go about doing it, and the **confidence** to begin.

At this stage, the goal is to describe the process in enough detail to build confidence in their ability to take action to solve problems without overwhelming them. This is the **HOW** stage - the specific steps to take to resolve the issues. Now is the time to incorporate what skills and materials are needed. Items like how-to, step-by-step "cookbook" approaches, what resources and skills are required for each step, how to accomplish the technical details, etc. The challenge is to be clear and procedural, while also presenting as many alternative courses of action as possible.

How Do I Keep Proficient?

The last stage of adult learning is **mastery**. The goal is to create more leaders, teachers, and knowledgeable resources at the local level. This is a SHARING stage; teaching by example. Once a core group is working together, it becomes much easier to attract additional recruits, teach new concepts, and provide new information to stimulate continued motivation and maintain confidence.

Why Is How People Learn So Important?

Most people won't adopt a new practice or strategy, unless they are convinced it offers a significant benefit. But that's next to impossible until they are first aware that this practice or strategy exists and then that it has some relevance. Many of us may realize the benefits of protecting against wildfire and still resist doing the required work.

Research shows many landowners have no idea there is a correlation between protecting their home from wildfire and putting "Class A" roofing on their house. Or that a driveway needs to be at least 14 feet wide to accommodate a fire engine. And that each neighborhood needs two ways to get in and out, just in case one way is blocked by fire, smoke, or abandoned cars. Research also shows wildfire as a scare tactic is not usually an incentive for adults. The general thought is that it "won't happen here in my backyard."

Motivating adults to learn is far different than it is for children. It is tied more directly to the perception that knowledge will help them perform better or lead more satisfying lives. Adults have a deep need for self-direction. Thus, effective adult learning takes place when topics are important in their experience, rather than imposed by external authority.

What Triggers Motivation?

Ideas spread because people find them attractive. This begins with the way they are presented. Traditionally, fire agencies have tried to use the image of fire and burned houses to scare people into action to protect them. But research shows often when people are "scared into action", little if anything is done to rectify the situation on a permanent basis. Then professionals ask, "Why aren't they doing something about the problem particularly when I told them exactly what to do?" The answer may be fire is a threat but not an incentive to change, particularly for people in Stage 1 and 2. An understanding of what triggers motivation, and how to activate those triggers, can lead to more effective communication. The important thing is not what they plan to do, but why they are motivated to do it.



Is It Influence or Persuasion?

The importance of understanding motivation traits lies *not* in being able to manipulate people into doing things they would not ordinarily want to do. Rather, it lies in being able to present ideas in such a way that minimum energy is required on the part of the listener to effectively hear the message. It lies in being able to overcome barriers created by how the ideas are presented, rather than barriers created by the ideas themselves. Thus, the listener's energy can then be used to understand and evaluate the ideas being presented instead of being used to overcome barriers created by language that does not match theirs.

Influence With Language

So how do we influence people to be Firewise without focusing on fire?

- Focus on something meaningful to them, something they see as beneficial.
- Research what is important to your community. For example, peace of mind is an action most people will try to attain rather than running from the threat of destruction.
- Show a broader perspective. Include fire protection among the things that preserve their values and lifestyle.
- Listen for how people describe their values and use those terms to describe the benefits of the actions you propose.

What Will It Take to Get My Community Involved?

- 1) It will take committed community partners - people, businesses, organizations and agencies who have a stake in developing and maintaining a Firewise Community.
- 2) Partner's interests will have to be clarified so that everyone understands what goals, values, and expected outcomes are important to them. (Is consensus possible?)
- 3) It will be important to share a common vision of a desirable future state. This can become the standard for prioritizing and evaluating specific task steps.
- 4) Community partners will need to define objectives that move the community toward the shared vision.
- 5) A description of the task steps required to move the process forward, with enough detail to avoid unpleasant surprises at implementation, will need to be developed.
- 6) Ways to monitor and evaluate progress will need to be established and resources will need to be allocated to implement them.
- 7) Community support will have to be developed.
- 8) To get the process going, opinion leaders, champions, and 'spark plugs' will be needed.



VI. FACT SHEET: BEFORE A WILDFIRE STRIKES

Use every opportunity to help prepare homeowners for the inevitability of wildfires and teach them what they can do to help protect their families and homes. The key is education . . . getting the word out . . . because there is no such thing as being too Firewise.

Wildfires are inevitable, but those living in the wildland/urban interface will have a better chance of escaping harm by taking the following precautions:

- Know where gas, electric and water main shutoffs are and how to use them
- Have a fire extinguisher and know how to use it
- Know if you have fire protection and its proximity to your home
- Know where the closest police and emergency medical facilities are located
- Study the community's disaster-preparedness plans
- Plan several different escape routes out of the area and designate a meeting place for family members to reunite
- Prepare an emergency kit that includes at least:
 - a 3-day supply of drinking water and food that needs no refrigeration
 - a portable NOAA weather radio
 - first aid supplies
 - basic tools
 - a flashlight and batteries
 - a portable lantern
 - credit cards and cash
 - important documents such as insurance policies
- Talk with neighbors about working together, before, during and after a wildfire
- Make contingency plans for children and those who need special care in an emergency
- Make contingency plans for pets to ensure that they are safely evacuated and cared for periodically
- Review and update homeowner's insurance policies



VII. FACT SHEET: DURING A WILDFIRE

Panic, disorganization, and inefficiency result when community members are unprepared for a wildfire. You need to make sure that the following information is distributed to homeowners. A good idea would be to hold yearly meetings to review proper procedures during a wildfire. This will serve to refresh the memories of long-term residents and bring new ones up to speed.

When you learn that a wildfire is approaching, it's time to put Firewise planning into action.

- Monitor local agencies and media for reports and evacuation information
- Back car out of garage and park in an open space facing the direction of escape
- Shut car doors and roll up windows. Leave the key in the ignition and the car doors unlocked
- Garage doors and windows should be closed. Disconnect automatic garage door openers
- Pets should be confined to one room. Make plans to care for pets in case of evacuation
- Arrange temporary housing outside the threatened area
- When advised to evacuate, leave immediately
- Wear protective clothing – sturdy shoes, long pants, long-sleeved shirt, gloves and a dry handkerchief to protect the face. Wear cotton or wool clothing, avoid synthetic material
- Take emergency kit when evacuating
- Follow evacuation route outlined by local officials. If no official route exists, choose a route away from the fire hazards, constantly watching for changes in the speed and direction of the fire and smoke



VIII. FACT SHEET: AFTER A WILDFIRE

After the wildfire passes, there is still much that can be done and many precautions that need to be taken.

- Listen to recommendations of your local fire department, police and utility companies
- Check for hazards, such as gas or water leaks and electrical shorts; turn off damaged utilities. Have the utility company reconnect service when the area is secured
- Check for injuries and administer first aid as needed
- Check food and water supplies. Do not eat anything from open containers near shattered glass



6. MEDIA OUTREACH

A. OVERVIEW OF WORKING WITH MEDIA

Communication Overview

The following communications and media relations materials are designed to support outreach and general communications efforts.

Persuasive Communication

Most presentations are not purely about information delivery but about persuasion: You have a viewpoint that you're working to get across. Following are some techniques and preparation points that will make you a more effective persuader, whether you're presenting to a potential new client, the media, an internal audience or any other venue.

Prepare. Know the people you'll be talking with, their interests and concerns. Think of five to 10 questions that a crowd, or individual, would be likely to ask you, then think through how you'd answer them. Incorporate localized examples in your answers whenever possible – always try to find a way to connect the argument to that person or audience. Be sure your imaginary questions fall on a range from "if you dread it, you will get it" to very easy. Sometimes the easiest questions give us the best springboard for speaking about the big issues involved rather than some nettlesome specific issue. By doing this exercise, when you're actually fielding questions, you'll be remembering your answers, not creating them.

Set an agenda. Have a set of "key message points" that you wish to communicate. While your messages may vary depending on who you're talking to and what will strike a responsive chord with them, agendas always have three things in common:

- ⇒ Agendas are brief. Time is always limited, so you can't have a mile-long list (besides, no listener would remember it all). Try to have no more than three or four points.
- ⇒ Agendas are true and provable. Don't just make statements without proof. Back them up with facts, personal anecdotes, and localized examples.
- ⇒ Agenda points are repeated. This is very much like the adage, "Tell 'em what you're going to say, tell 'em, tell 'em what you just told 'em." Don't repeat yourself verbatim, but get your points in more than once to ensure the listener hears you.

Speak in headlines. If you look at any newspaper headline, you'll realize something rather odd: it's the story's conclusion, but it's at the top of a story. That's the opposite of a normal conversation. Get in the habit, when trying to persuade others, of viewing your messages as headlines and leading off your answers or statements with them. As the media has long known, it's much more powerful and attention-grabbing, and ensures that your major points are heard.



Preparing for an Interview

- ⇒ Do your homework...prepare your message.
- ⇒ Prepare a "talking paper" on primary points you want to make.
- ⇒ Anticipate questions – don't wait for a surprise. Expect the unexpected (especially with radio call-in shows).
- ⇒ Practice answering questions.
- ⇒ A reporter may repeat a question in different ways to get a response; don't let him/her wear you down...stick to your points.
- ⇒ Begin the interview with your major points – don't use notes (unless you're on the phone).
- ⇒ Be prepared for the reporter to interrupt you with questions.
- ⇒ Maintain control of the interview – or at least your part of it.
- ⇒ Cover controversial areas with the reporter before the interview (before the camera starts rolling).
- ⇒ Find out who will be interviewing you; if possible, introduce yourself to him/her.
- ⇒ Remember, for print, emphasis is on content:
 - More detailed questions
 - More follow-up questions
 - Interview will typically take longer...set a time limit
- ⇒ For TV and radio, emphasis is on "sound bites" (concise 5- to 10-second comments).



Making Your Point, Making It Stick

Use a rifle, not a shotgun.

Pick the three or four "most important" points that you want to make.

Keep it simple.

State your message in a simple, straightforward manner. Make it easy on your audience to listen, understand, and remember.

Keep it positive.

When asked about a problem, talk about the solution. Don't say what you don't do...say what you do do!

Say it again, Sam.

Drive home key messages. Don't be afraid to repeat yourself.

You're always on stage.

Your key messages are applicable to all public comments you make. Media interview skills apply to any and all speaking opportunities.

Sing the same song.

Your credibility depends on consistency. Make the same major points to all audiences in all circumstances.

Be a reporter.

Speak in headlines...then support with paragraphs.

Be a lawyer.

Make a (quotable) assertion...then prove your case.

Bridging

Going from where you are to where you want to be

- ⇒ When faced with a question you're not sure how to answer...listen, take a breath...and then use a "connector" to get you "over" to the answer you want to give (i.e., one of the key points you want to make). Here are some sample "connectors" to help build your bridge:
 - "Let's look at that another way..."
 - "The real issue here is..."
 - "No, I don't know anything about that, but what I can tell you is this..."
- ⇒ Don't become fixated by the question, *and don't evade it*...restructure it.



Interview Do's

- ⇒ Tell the truth.
- ⇒ Be correct...if you don't know, don't guess.
- ⇒ Know your subject.
- ⇒ Use specifics.
- ⇒ Use anecdotes (tell stories).
- ⇒ Use appropriate (non-controversial) contrasts and comparisons.
- ⇒ Use analogies.
- ⇒ Answer with clear, short, hard-hitting phrases.
- ⇒ Give your conclusion first...brief and direct.
- ⇒ Be cool...keep your voice steady.
- ⇒ Be enthusiastic, animated.
- ⇒ Be likable...reporters, audiences respond to and remember that.
- ⇒ Be a listener.
- ⇒ Be casual.
- ⇒ Be yourself.
- ⇒ Build bridges...from the question asked, to the answer you wanted to give.

Interview Don'ts

- ⇒ Don't use jargon (talk in plain English).
- ⇒ Don't go "off the record." (Don't say anything you aren't willing to hear, see, or read.)
- ⇒ Don't repeat a negative.
- ⇒ Don't accept the premise of the question.
- ⇒ Don't accept "what if" questions...don't speculate.
- ⇒ Don't fall for the "A or B" dilemma. (If a reporter gives you two unacceptable options or choices, in the context of asking a question, don't accept either..."Actually, the reason is 'C.'")
- ⇒ Don't step into the absent-party trap. (Don't comment on the comments of someone else..."I don't know about them or what they said, but I do know that for me...")



Television – Special Considerations

Logistics

- ⇒ Be on time or early for an interview...this is essential for TV.
- ⇒ Know in advance how long the interview will last.
- ⇒ Talk in regular voice for audio check.
- ⇒ Look at the reporter, not the camera or microphone.
- ⇒ Once the interview begins, ignore movements of technicians.
- ⇒ Talk "over" (not into) a lavalier microphone.
- ⇒ Resist the urge to "project" at a microphone...keep the conversation at a conversational level.
- ⇒ Always assume the camera is rolling, particularly after an interview.

Niceties

- ⇒ Introduce yourself to the host/interviewer...technicians, too, if circumstances permit.
- ⇒ Use microphone check to prompt and remind the host/interviewer...say your name, organization, and reason for being there.
- ⇒ Remember...help them make your story interesting:
 - State your conclusion first.
 - Be brief.
- ⇒ Maintain eye contact with the host/interviewer...this lets him/her know you are interested and unafraid.

Body Language

- ⇒ TV will frame your face, move back to show your presence.
- ⇒ Watch what your body and face say – don't look bored, smug, or defensive.
- ⇒ Don't cross your arms over your chest.
- ⇒ Don't look at the ceiling.
- ⇒ Stand or sit with erect back...show confidence...but not stiffness.
- ⇒ Wear an interested, friendly, likeable look on your face.
- ⇒ Lean slightly toward the host/interviewer.
- ⇒ Rest hands comfortably, crossed on your lap.
- ⇒ Avoid nervous movements – jiggling legs, fidgeting fingers, picking cuticles.
- ⇒ Hand gestures are OK, but keep them limited/under control.
- ⇒ Remain calm at all times.
- ⇒ Smile, be friendly.

Appearance

- ⇒ Don't let your appearance distract people from hearing what you have to say.
- ⇒ Dress appropriate for the occasion...a uniform or golf shirt and khakis work well for volunteer firefighters.
- ⇒ Wear grays, blues, dark beige, or soft pinks.
- ⇒ Solids are best; avoid small, busy prints, plaids, stripes, or herringbones.
- ⇒ If professional make up assistance is offered, accept it.
- ⇒ Remove photo-gray glasses for the interview.

B. MATERIALS FOR USE WITH MEDIA

I. TEMPLATE PRESS RELEASE

TEMPLATE NEWS RELEASE

INSERT LOCAL VFD LETTERHEAD OR FIREWISE LETTERHEAD

For Immediate Release ([DATE])

Contact: [VFD CONTACT NAME, PHONE]

[CITY OR DEPARTMENT NAME] Volunteer Fire Department Helps Make Community Firewise

([CITY], [State]). – While firefighters were able to protect 98 percent of structures that were threatened by wildland fires last year, Americans still lost more than 3,000 structures to wildfire.* The [CITY OR DEPARTMENT NAME] Volunteer Fire Department is helping local residents who live in high-risk areas take action now to protect their homes and neighborhoods from wildland fires – before a fire starts.

[IF AVAILABLE, INSERT LOCAL RISK INFORMATION.] To address these risks, [INSERT BRIEF, GENERAL DESCRIPTION OF VFD FIREWISE ACTIVITY]

"As volunteer firefighters, we see firsthand the dangers that wildfires can pose to our neighbors and our communities," said [NAME], [TITLE] for [CITY OR DEPARTMENT NAME] Volunteer Fire Department. "Because of that, we are very committed to helping area residents understand what they can do and what our community can do to prepare for those fires."

[INSERT DETAILED DESCRIPTION OF LOCAL ACTIVITY]

"During a wildfire event, firefighters are limited in time and resources; we may not be able to get to every house," said [LAST NAME]. "These preventive measures can help homes and neighborhoods withstand a fire and help to reduce the spread of the fire."



Volunteer Fire Department Helps Make Community Firewise / ADD ONE

The [CITY OR DEPARTMENT NAME] Volunteer Fire Department's efforts are a local installation of a national program. Firewise Communities is a national, multi-organizational initiative designed to reach beyond the fire service and involve homeowners, community leaders, planners, developers, and others in the effort protect homes and businesses from the dangers of wildland fire. A Firewise approach includes creative landscaping, home construction and design, and sound community planning to prepare structures to withstand a fire, even before it starts.

Firewise Communities is a national initiative designed to reach beyond the fire service and involve homeowners, community leaders, planners, developers, and others in the effort to protect people and property from the dangers of wildland fire. Firewise Communities programs include the Firewise Communities Workshop Series, Firewise Communities/USA Recognition Program, and support for fire organizations and community groups. The Firewise Communities program is part of the Wildland/Urban Interface Working Team of the National Wildfire Coordinating Group, a consortium of wildland fire agencies that includes the USDA Forest Service, U.S. Department of the Interior, National Association of State Foresters, U.S. Fire Administration, National Fire Protection Association, International Association of Fire Chiefs, Federal Emergency Management Agency, National Emergency Management Association, and the National Association of State Fire Marshals. For more information, visit www.firewise.org.

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**SOURCE: National Interagency Fire Center*

II. FIREWISE FACT SHEET

FIREWISE

Where You Live. How You Live.

Overview

Wildfires are an absolute reality. They are going to occur – it is just a matter of when. Unfortunately, once a wildfire ignites, there is only so much the fire service can do to protect the property in its path. Since 1970, more than 10,000 homes and 20,000 other structures and facilities have been lost to severe wildland fire. Firewise is a national initiative designed to reach beyond the fire service by involving homeowners, community leaders, planners, developers, and others to protect people and property from the dangers of wildland fire – *before* a fire starts.

Firewise incorporates the efforts of federal and state agencies, local communities, and individual homeowners in a proactive approach to design, build, and maintain an environment that works with the natural landscape to help homes and structures withstand wildfire events.

Wildfires can happen in just about any area of the country. Firewise speaks to those who live in the wildland/urban interface: areas where homes are located in traditionally natural settings such as forests, grasslands, farms, and heavily wooded neighborhoods.

Firewise Approach

Firewise offers a series of practical steps (landscaping, home construction and design, community planning, etc.) that individuals and communities can take to protect themselves from the risks of wildfire. The approach involves utilizing a range of Firewise steps. Relying only on any one element of a Firewise program is not enough to protect against the many dangers of wildfire.

Sample Firewise techniques include creating a defensible space around residential structures by clearing trees and brush; adopting targeted landscaping techniques for trees, shrubs, and soil; choosing drought-resistant plants; selecting ignition-resistant building materials; positioning structures away from slopes; and working with firefighters to develop emergency access to properties.

Sponsors

Firewise is directed and sponsored by the National Wildfire Coordinating Group's Wildland/Urban Interface Working Team, a consortium of wildland fire organizations and federal agencies that are responsible for wildland fire management in the United States, including:

- International Association of Fire Chiefs
- National Association of Emergency Managers
- National Association of State Fire Marshals
- National Association of State Foresters
- National Fire Protection Association
- US Fire Administration/FEMA
- USDA Forest Service
- USDI Bureau of Indian Affairs
- USDI Bureau of Land Management
- USDI Fish & Wildlife Service
- USDI National Park Service

Programs

Firewise offers a vast array of resources for individuals and organizations. For more information on the following programs, visit www.firewise.org.



- ***Firewise Web Site: www.firewise.org***

Firewise's interactive Web site features fire safety information; streaming video; downloadable documents; an extensive list of helpful links; and a searchable library of national, state, and local documents on a wide range of wildfire safety issues.

- ***Firewise Communities Workshop Series***

Firewise Communities national workshops prepare community leaders and fire service professionals to recognize wildland/urban interface fire hazards, make homes and landscapes Firewise, deliver fire education to residents, and incorporate Firewise planning into existing and developing areas of communities. These dynamic workshops feature interactive discussions, mapping, and wildfire simulations. Firewise workshops are most successful when they are attended by representatives from diverse disciplines, such as planners, business leaders, homeowner associations, fire service professionals, and others. Eleven national workshops are scheduled in 2003 in cities throughout the U.S.

- ***Firewise Communities/USA Recognition Program***

In cooperation with the National Association of State Foresters (NASF), Firewise Communities/USA is a nationwide initiative that will recognize individual communities for implementing strategies to protect people and properties from the dangers of wildfire. Working with state foresters and fire professionals, as well as homeowners and local organizations, interested communities will assess wildland/urban interface hazards and develop and implement a community mitigation plan. Upon completion, communities can apply for Firewise Communities/USA recognition.

- ***Firewise Information Resources***

In addition to its Web site, Firewise is continuously developing informational materials to help community organizations understand and address wildland/urban interface issues, including the *Wildfire News & Notes* newsletter, landscaping and home construction checklists, mini-documentaries, CD-ROMs, school education projects, and more.

History of Firewise

After the catastrophic fire season of 1985, representatives of NFPA and the USDA Forest Service met to discuss the increasing trend of wind-driven fire in populated areas, and formed the National Wildland/Urban Interface Fire Protection Initiative. In 1992, the task force adopted the term "Firewise" to describe the state of being knowledgeable and prepared for wildfire in residential or urban settings. The group joined with the National Wildfire Coordinating Group in 1993 and became the Wildland/Urban Interface (WUI) Working Team, which operates the Firewise Communities initiative. The Firewise Web site launched in 1996, and the national workshop series began in 1999. Today, the Firewise team continues to promote safety in the wildland/urban interface through its Web site, workshop series, community recognition program, and information resources.



WORKSHOP FIGHTS WILDFIRES.

Because the best defense against a wildfire is to be prepared, your (city or department name) volunteer fire department is holding a free, one-day workshop designed to teach you how to protect your family and property before a fire strikes.

You'll learn how to identify and reduce the risks of losing your property and how to create a defensible space around your home.

The workshop will be (date and time) at (location). It's free to all area residents, but space is limited. Those who wish to attend are asked to call (telephone number) for reservations.



III. SAMPLE "FIREWISE AWARENESS DAY" LETTER, BANNER, POSTER AND FLYER

1. The sample letter can be reproduced on individual letterhead
2. Banner: to reproduce please use enclosed CD or visit www.firewise.org or www.stateforesters.org.
3. Poster: to reproduce please use enclosed CD or visit www.firewise.org or www.stateforesters.org.
4. Flyer: to reproduce please use enclosed CD or visit www.firewise.org or www.stateforesters.org.

FLORIDA
DEFENSE
FIRE
STATION
151

FIRE STATION 151

Sunday, March 16, 2003
11:00 AM - 3:00 PM

Learn how to defend
your home against wildfire.

Food and drinks.

FIRE PREVENTION HOUSE



Sunday, March 16, 2003 11:00 AM - 3:00 PM

Food and drinks.

Learn how to defend your home against wildfire.



Workshop

Date:

Time:

Location:



7. APPENDIX

A. FIREWISE GLOSSARY

Firewise Glossary

Arson Fire	A wildfire willfully ignited by anyone to burn, or spread to, vegetation or property without consent of the owner or his/her agent.
Attack a Fire	Limit the spread of fire by any appropriate means.
Brush	A collective term that refers to stands of vegetation dominated by shrubby, woody plants, or low-growing trees, usually of a type undesirable for livestock or timber management.
Brush fire	A fire burning in vegetation that is predominantly shrubs, brush, and scrub growth.
Burning ban	A declared ban on open air burning within a specified area, usually due to sustained high fire danger.
Burning conditions	The state of the combined factors of the environment that affect fire behavior in a specified fuel type.
Canopy	The stratum containing the crowns of the tallest vegetation present (living or dead), usually above 20 feet.
Class A Foam	Foam intended for use on Class A or woody fuels; made from hydrocarbon-based surfactant, therefore lacking the strong filming properties of Class B foam, but possessing excellent wetting properties.
Closure	Legal restriction, but not necessarily elimination, of specified activities such as smoking, camping or entry that might cause fires in a given area.
Combustible	Any material that, in the form in which it is used and under the conditions anticipated, will ignite and burn.
Condition of Vegetation	Stage of growth or degree of flammability of vegetation that forms part of a fuel complex.
Conflagration	A raging, destructive fire. Often used to describe a fire burning under extreme fire weather. The term is also used when a wildland fire burns into a wildland/urban interface, destroying many structures.
Control a fire	To complete control line around a fire, any spot fire therefrom, and any interior island to be saved.
Crown fire	A fire that advances from top to top of trees or shrubs more or less independent of a surface fire.
Debris burning fire	In fire suppression, a fire spreading from any fire originally ignited to clear land or burn rubbish, garbage, crop stubble, or meadows (excluding incendiary fires).
Defensible space	An area, typically a width of 30 feet or more, between an improved property and a potential wildfire where the combustibles have been removed or modified.

Dry Hydrant	An arrangement of pipe permanently connected to a water source other than a piped, pressurized water supply system that provides a ready means of water supply for firefighting purposes and that utilizes the suction capability of fire department pumpers.
Duff	The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles and leaves and immediately above the mineral soil.
Escape Route	Route away from dangerous areas on a fire; should be preplanned.
Evacuation	The temporary movement of people and their possessions from locations threatened by wildfire.
Exposure	(1) Property that may be endangered by a fire burning in another structure or by a wildfire. (2) Direction in which a slope faces, usually with respect to cardinal directions. (3) The general surroundings of a site with special reference to its openness to winds.
Extreme fire behavior	A level of fire behavior characteristics that ordinarily precludes methods of direct control. One or more of the following is usually involved: high rates of speed, prolific crowning and/or spotting, presence of fire whirls, a strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environments and behave erratically, sometimes dangerously.
Fine Fuels	Fast-drying dead fuels, generally characterized by a comparatively high surface area-to-volume ratio, which are less than 1/4-inch in diameter. These fuels (grass, leaves, needles, etc.) ignite readily and are consumed rapidly by fire when dry.
Fire behavior	The manner in which a fire reacts to the influences of fuel, weather, and topography.
Fire danger index	A relative number indicating the severity of wildland fire danger as determined from burning conditions and other variable factors of fire danger.
Fire department	Any regularly organized fire department, fire protection district or fire company regularly charged with the responsibility of providing fire protection to the jurisdiction.
Fire front	That part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified it is assumed to be the leading edge of the fire perimeter.
Fire hazard	A fuel complex, defined by volume, type condition, arrangement, and location, that determines the degree of ease of ignition and of resistance to control.
Fire hydrant	A valved connection on a piped water supply system having one or more outlets that is used to supply hose and fire department pumpers with water.
Fire prevention	Activities, including education, engineering, enforcement and administration, that are directed at reducing the number of wildfires, the costs of suppression, and fire-caused damage to resources and property.
Fire proofing	Removing or treating fuel with fire retardant to reduce the danger of fires igniting or spreading (e.g., fire-proofing roadsides, campsites, structural timber). Protection is relative, not absolute.

Fire protection	The actions taken to limit the adverse environmental, social, political and economical effects of fire.
Fire regime	Periodicity and pattern of naturally-occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity, and area extent. For example, frequent, low-intensity surface fires with one to 25-year return intervals occur in the southern pine forests of the Southeastern United States, the sawgrass everglades of Florida, the mixed conifer forests of the western Sierras of California, and so forth.
Fire resistant roofing	The classification of roofing assemblies A, B or C as defined in the Uniform Building Code (UPC) Standard 32.7.
Fire resistant tree	A species with compact, resin-free, thick corky bark and less flammable foliage that has a relatively lower probability of being killed or scarred by a fire than a fire sensitive tree.
Fire retardant	Any substance except plain water that by chemical or physical action reduces flammability of fuels or slows their rate of combustion.
Fire season	(1) Period(s) of the year during which wildland fires are likely to occur, spread, and affect resources values sufficient to warrant organized fire management activities. (2) A legally enacted time during which burning activities are regulated by State or local authority.
Fire storm	Violent convection caused by a large continuous area of intense fire. Often characterized by destructively violent surface indrafts, near and beyond the perimeter, and sometimes by tornado-like whirls.
Fire suppressant	Any agent used to extinguish the flaming and glowing phases of combustion by direct application to the burning fuel.
Fire triangle	Instructional aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease.
Fire weather	Weather conditions which influence fire starts, fire behavior or fire suppression.
Fire whirl	Spinning vortex column of ascending hot air and gases rising from a fire and carrying aloft smoke, debris, and flame. Fire whirls range in size from less than one foot to over 500 feet in diameter. Large fire whirls have the intensity of a small tornado.
Firebrand	Any source of heat, natural or human made, capable of igniting wildland fuels. Flaming or glowing fuel particles that can be carried naturally by wind, convection currents, or by gravity into unburned fuels. Examples include leaves, pine cones, glowing charcoal, and sparks.
Firebreak	A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work.
Firefighter	A person who is trained and proficient in the components of structural or wildland fire.
Fire-resistive rating	The time that the material or construction will withstand fire exposure as determined by a fire test made in conformity with the standard methods of fire tests of building, construction and materials.

Firewise construction	The use of materials and systems in the design and construction of a building or structure to safeguard against the spread of fire within a building or structure and the spread of fire to or from buildings or structures to the wildland/urban interface area.
Firewise landscaping	Vegetative management that removes flammable fuels from around a structure to reduce exposure to radiant heat. The flammable fuels may be replaced with green lawn, gardens, certain individually spaced green, ornamental shrubs, individually spaced and pruned trees, decorative stone or other non-flammable or flame-resistant materials.
Flame	A mass of gas undergoing rapid combustion, generally accompanied by evolution of sensible heat and incandescence.
Flammability	The relative ease with which fuels ignite and burn regardless of the quantity of the fuels.
Foam	The aerated solution created by forcing air into, or entraining air in water containing a foam concentrate by means of suitably designed equipment or by cascading it through the air at a high velocity. Foam reduces combustion by cooling, moistening and excluding oxygen.
Fuel condition	Relative flammability of fuel as determined by fuel type and environmental conditions.
Fuel loading	The volume of fuel in a given area generally expressed in tons per acre.
Fuel modification	Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.
Fuels	All combustible material within the wildland/urban interface or intermix, including vegetation and structures.
Fuelbreak	An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for firefighting.
Greenbelt	A fuel break designated for use other than fire protection.
Ground fuels	All combustible materials such as grass, duff, loose surface litter, tree or shrub roots, rotting wood, leaves, peat or sawdust that typically support combustion.
Hazard	The degree of flammability of the fuels once a fire starts. This includes the fuel (type, arrangement, volume and condition), topography and weather.
Hazardous areas	Those wildland areas where the combination of vegetation, topography, weather, and the threat of fire to life and property create difficult and dangerous problems.
Hazard reduction	Any treatment of living and dead fuels that reduces the threat of ignition and spread of fire.
Human-caused fire	Any fire caused directly or indirectly by person(s).
Human-caused risk	The probability of a fire ignition as a result of human activities.

Hydrant	A discharge pipe with three valve and fittings at which water can be drawn from a water main or other source for the purpose of fighting fires.
Ignition probability	Chance that a firebrand will cause an ignition when it lands on receptive fuels.
Ignition time	Time between application of an ignition source and self-sustained combustion of a fuel.
Initial attack	The actions taken by the first resources to arrive at a wildfire to protect lives and property, and prevent further extension of the fire.
I-Zone	The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.
Ladder fuels	Fuels that provide vertical continuity allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease.
Mitigation	Action that moderates the severity of a fire hazard or risk.
National Fire Danger Rating System	A uniform fire danger rating system that focuses on the environmental factors that control the moisture content of fuels.
Natural barrier	Any area where lack of flammable material obstructs the spread of wildfires.
Noncombustible	A material that, in the form in which it is used and under the conditions anticipated, will not aid combustion or add appreciable heat to an ambient fire.
Open burning	Uncontrolled burning of wastes in the open or in an open dump.
Overstory	That portion of the trees in a forest which forms the upper or uppermost layer.
Peak fire season	That period of the fire season during which fires are expected to ignite most readily, to burn with greater than average intensity, and to create damages at an unacceptable level.
Preparedness	(1) Condition or degree of being ready to cope with a potential fire situation. (2) Mental readiness to recognize changes in fire danger and act promptly when action is appropriate.
Prescribed burning	Controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions, which allows the fire to be confined to a predetermined area, and to produce the fire behavior and fire characteristics required to attain planned fire treatment and resource management objectives.
Prescribed fire	A fire burning within prescription. This fire may result from either planned or unplanned ignitions.
Property protection	To protect structures from damage by fire, whether the fire is inside the structure, or is threatening the structure from an exterior source. The municipal firefighter is trained and equipped for this mission and not usually trained and equipped to suppress wildland fires. Wildland fire protection agencies are not normally trained nor charged with the responsibility to provide structural fire protection but will act within their training and capabilities to safety prevent a wildland fire from igniting structures.

Protection area	That area for which a particular fire protection organization has the primary responsibility for attacking an uncontrolled fire and for directing the suppression action. Such responsibility may develop through law, contract, or personal interest of the fire protection agent. Several agencies or entities may have some basic responsibilities without being known as the fire organization having direct protection responsibility.
Response	Movement of an individual firefighting resource from its assigned standby location to another location or to an incident in reaction to dispatch orders or to a reported alarm.
Retardant	A substance or chemical agent which reduces the flammability of combustibles.
Risk	The chance of a fire starting from any cause.
Rural fire district (RFD)	An organization established to provide fire protection to a designated geographic area outside of areas under municipal fire protection. Usually has some taxing authority and officials may be appointed or elected.
Rural fire protection	Fire protection and firefighting problems that are outside of areas under municipal fire prevention and building regulations and that are usually remote from public water supplies.
Slope	The variation of terrain from the horizontal; the number of feet rise or fall per 100 feet measured horizontally, expressed as a percentage.
Smoke	(1) The visible products of combustion rising above a fire. (2) Term used when reporting a fire or probable fire in its initial stages.
Structure fire	Fire originating in and burning any part of all of any building, shelter, or other structure.
Structural fire protection	The protection of a structure from interior and exterior fire ignition sources. This fire protection service is normally provided by municipal fire departments, with trained and equipped personnel. After life safety, the agency's priority is to keep the fire from leaving the structure of origin and to protect the structure from an advancing wildland fire. (The equipment and training required to conduct structural fire protection is not normally provided to the wildland firefighter.) Various taxing authorities fund this service.
Suppression	The most aggressive fire protection strategy, it leads to the total extinguishment of a fire.
Surface fuel	Fuels lying on or near the surface of the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low stature living plants.
Tree crown	The primary and secondary branches growing out from the main stem, together with twigs and foliage.
Uncontrolled fire	Any fire which threatens to destroy life, property, or natural resources, and (a) is not burning within the confines of firebreaks, or (b) is burning with such intensity that it could not be readily extinguished with ordinary, commonly available tools.
Understory	Low-growing vegetation (herbaceous, brush or reproduction) growing under a stand of trees. Also, that portion of trees in a forest stand below the overstory.
Urban interface	Any area where wildland fuels threaten to ignite combustible homes and structures.

Volunteer fire department (VFD)	A fire department of which some or all members are unpaid.
Volunteer firefighter	Legally enrolled firefighter under the fire department organization laws who devotes time and energy to community fire service without compensation other than Worker's Compensation or other similar death and injury benefits.
Water supply	A source of water for firefighting activities.
Wildfire	An unplanned and uncontrolled fire spreading through vegetative fuels, at times involving structures.
Wildfire Causes	The general causes of wildland fires are (1) natural (such as lightning), (2) accidental (debris burning, children with matches, and so forth), and (3) intentional (arson).
Wildland	An area in which development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.
Wildland fire	Any fire occurring on the wildlands, regardless of ignition source, damages or benefits.
Wildland fire protection	The protection of natural resources and watersheds from damage by wildland fires. State and Federal forestry or land management agencies normally provide wildland fire protection with trained and equipped personnel. (The equipment and training required to conduct wildland fire protection is not normally provided to the structural fire protection firefighter.) Various taxing authorities and fees fund this service.
Wildland/Urban Interface	Any area where wildland fuels threaten to ignite combustible homes and structures.

References:

Development Strategies in the Wildland/Urban Interface, Western Fire Chiefs Association, July 1991.

Glossary of Wildland Fire Terminology, National Wildfire Coordinating Group, Publication PMS 205, NFES 1832, November 1996

Glossary of Wildland Fire Management Terms Used in the United States, Society of American Foresters, SAF 90-05, July 1990.

NFPA Standard 299: Standard for Protection of Life and Property from Wildfire, National Fire Protection Association, 1997 edition.

1997 Urban-Wildland Interface Code, International Fire Code Institute, 1997.



Firewise Landscaping Checklist

When designing and installing a firewise landscape, consider the following:

- Local area fire history.
- Site location and overall terrain.
- Prevailing winds and seasonal weather.
- Property contours and boundaries.
- Native vegetation.
- Plant characteristics and placement (duffage, water and salt retention ability, aromatic oils, fuel load per area, and size).
- Irrigation requirements.

To create a firewise landscape, remember that the primary goal is fuel reduction. To this end, initiate the zone concept. Zone 1 is closest to the structure; Zones 2-4 move progressively further away.

- Zone 1.** This well-irrigated area encircles the structure for at least 30' on all sides, providing space for fire suppression equipment in the event of an emergency. Plantings should be limited to carefully spaced low flammability species.
- Zone 2.** Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- Zone 3.** Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.
- Zone 4.** This furthest zone from the structure is a natural area. Selectively prune and thin all plants and remove highly flammable vegetation.

Also remember to:

- Be sure to leave a minimum of 30' around the house to accommodate fire equipment, if necessary.
- Widely space and carefully situate the trees you plant.
- Take out the "ladder fuels" — vegetation that serves as a link between grass and tree tops. This arrangement can carry fire to a structure or from a structure to vegetation.
- Give yourself added protection with "fuel breaks" like driveways, gravel walkways, and lawns.

When maintaining a landscape:

- Keep trees and shrubs properly pruned. Prune all trees so the lowest limbs are 6' to 10' from the ground.
- Remove leaf clutter and dead and overhanging branches.
- Mow the lawn regularly.
- Dispose of cuttings and debris promptly, according to local regulations.
- Store firewood away from the house.
- Be sure the irrigation system is well maintained.
- Use care when refueling garden equipment and maintain it regularly.
- Store and use flammable liquids properly.
- Dispose of smoking materials carefully.
- Become familiar with local regulations regarding vegetation clearances, disposal of debris, and fire safety requirements for equipment.
- Follow manufacturers' instructions when using fertilizers and pesticides.

Access additional information on the Firewise home page: www.firewise.org

Please see the other side of this sheet for the *Firewise Construction Checklist*.



Firewise Construction Checklist

When constructing, renovating, or adding to a firewise home, consider the following:

- Choose a firewise location.
- Design and build a firewise structure.
- Employ firewise landscaping and maintenance.

To select a firewise location, observe the following:

- Slope of terrain; be sure to build on the most level portion of the land, since fire spreads more rapidly on even minor slopes.
- Set your single-story structure at least 30 feet back from any ridge or cliff; increase distance if your home will be higher than one story.

In designing and building your firewise structure, remember that the primary goals are fuel and exposure reduction. To this end:

- Use construction materials that are fire-resistant or non-combustible whenever possible.
- For roof construction, consider using materials such as Class-A asphalt shingles, slate or clay tile, metal, cement and concrete products, or terra-cotta tiles.
- Constructing a fire-resistant sub-roof can add protection as well.
- On exterior wall facing, fire resistive materials such as stucco or masonry are much better choices than vinyl which can soften and melt.
- Window materials and size are important. Smaller panes hold up better in their frames than larger ones. Double pane glass and tempered glass are more reliable and effective heat barriers than single pane glass. Plastic skylights can melt.
- Install non-flammable shutters on windows and skylights.
- To prevent sparks from entering your home through vents, cover exterior attic and underfloor vents with wire screening no larger than 1/8 of an inch mesh. Make sure under-eave and soffit vents are as close as possible to the roof line. Box in eaves, but be sure to provide adequate ventilation to prevent condensation.
- Include a driveway that is wide enough to provide easy access for fire engines (12 feet wide with a vertical clearance of 15 feet and a slope that is less than 5 percent) . The driveway and access roads should be well-maintained, clearly marked, and include ample turnaround space near the house. Also provide easy access to fire service water supplies, whenever possible.
- Provide at least two ground level doors for easy and safe exit and at least two means of escape (i.e., doors or windows) in each room so that everyone has a way out.
- Keep gutters, eaves, and roofs clear of leaves and other debris.
- Make periodic inspections of your home, looking for deterioration such as breaks and spaces between roof tiles, warping wood, or cracks and crevices in the structure.
- Periodically inspect your property, clearing dead wood and dense vegetation at distance of at least 30 feet from your house. Move firewood away from the house or attachments like fences or decks.

Any structures attached to the house, such as decks, porches, fences, and outbuildings should be considered part of the house. These structures can act as fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:

- If you wish to attach an all-wood fence to your house, use masonry or metal as a protective barriers between the fence and house.
- Use metal when constructing a trellis and cover it with high-moisture, low flammability vegetation.
- Prevent combustible materials and debris from accumulating beneath patio decks or elevated porches. Screen or box-in areas below patios and decks with wire screen no larger than 1/8 inch mesh.
- Make sure an elevated wooden deck is not located at the top of a hill where it will be in direct line of a fire moving up slope. Consider a terrace instead.

Access additional information on the Firewise home page: www.firewise.org

Please see the other side of this sheet for the *Firewise Landscaping Checklist*.



Rural Fire Prevention Checklist

A Factsheet on Rural Fire Safety and Prevention

Self-reliance is the rule for fire safety for many people. If you live in an area where the local fire department is more than a few minutes away because of travel time or distance, or if you are outside the limits of the nearest town, be sure you know how to be self-reliant in a fire emergency.

The United States Fire Administration (USFA) encourages you to use this fire safety checklist to help you protect yourself, your home and its surroundings from fire. Remember, fire safety is your personal responsibility... *Fire Stops With You!*

MAINTAIN HOME HEATING SYSTEMS

- Have your chimney inspected and cleaned annually by a certified specialist.
- Insulate chimneys and place spark arresters on top.
- Extend the chimney at least three feet above the roof.
- Remove branches hanging above and around the chimney.

HAVE A FIRE SAFETY AND EVACUATION PLAN

- Install smoke alarms on every level of your home. Test them monthly and change the batteries at least once a year.
- Practice fire escape and evacuation plans.
- Mark the entrance to your property with signs that are clearly visible.
- Know which local emergency services are available and have those numbers posted.
- Provide emergency vehicle access through roads and driveways at least 12 feet wide with adequate turnaround space.

MAKE YOUR HOME FIRE-RESISTANT

- Use fire-resistant and protective roofing and materials like stone, brick and metal to protect your home. Avoid using wood materials that offer the least fire protection.
- Keep roofs and eaves clear of debris.
- Cover all exterior vents, attics and eaves with metal mesh screens no larger than 6 millimeters.
- Install multipane windows, tempered safety glass or fireproof shutters to protect large windows from radiant heat.
- Use fire-resistant draperies for added window protection.
- Keep tools for fire protection nearby: 100 foot garden hose, shovel, rake, ladder and buckets.
- Make sure water sources, such as hydrants and ponds, are accessible to the fire department.

LET YOUR LANDSCAPE DEFEND YOUR PROPERTY

- Trim grass on a regular basis up to 100 feet surrounding your home.
- Create defensible space by thinning trees and brush within 30 feet around your home.
- Beyond 30 feet, remove dead wood, debris and low tree branches.

- Landscape your property with fire resistant plants and vegetation to prevent fire from spreading quickly.
- Stack firewood at least 30 feet away from your home and other structures.
- Store flammable materials, liquids and solvents in metal containers outside the home, at least 30 feet away from structures and wooden fences.

FOLLOW LOCAL BURNING LAWS

- Do not burn trash or other debris without proper knowledge of local burning laws, techniques and the safest times of day and year to burn.
- Before burning debris in a wooded area, make sure you notify local authorities and obtain a burning permit.
- Use an approved incinerator with a safety lid or covering with holes no larger than 3/4 inches.
- Create at least a 10 foot clearing around the incinerator before burning debris.

For More Information Contact:
The United States Fire Administration
Office of Fire Management Programs
16825 South Seton Avenue
Emmitsburg, MD 21727

Or visit the USFA website:
www.usfa.fema.gov