



### IS YOUR HOME PROTECTED FROM WILDFIRE?



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#### **ALABAMA FORESTRY COMMISSION**

513 Madison Avenue Montgomery, Al 36130 (334) 240-9300

www.forestry.alabama.gov

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### **FOREWORD**

Each year thousands of homes in the United States are destroyed by wildfire. Current research indicates that 803 communities in Alabama are at high or extreme risk and 6,683 communities are at moderate risk from wildfires. We believe homes damaged or destroyed by wildfire are simply unacceptable, especially if such tragedy can be prevented.

With more and more people moving and living in the rural areas of our State, the Alabama Forestry Commission and the local fire departments are facing new and difficult issues in providing adequate fire protection. The threat from wildfire is very real and there are no guarantees that there is the capability to protect all homes. However, by taking the personal responsibility for reducing hazards around your property, you may substantially reduce the risks from a wildfire. It is critical to make those changes before a fire becomes a threat to you, your family, your home and other structures! The house on the front cover was spared using these prevention measures.

Alabama Forestry Commission professionals will guide you through this process of hazard reduction. This is a free service to you and there are absolutely no requirements that you complete any of our recommendations. We will provide you with important information and programs available to you and your neighborhood. We will provide you with a list of vendors who perform vegetative management services to minimize wildfire risks around your home. And where possible, we also will provide cost-share programs to help with your expenses.

In addition, the Alabama Forestry Commission administers the Firewise Community/USA Program in Alabama. This nationwide program provides valuable information to homeowners and communities. Once a community completes fire prevention measures and submits an application, they will be recognized as Firewise Community/USA. But more importantly, they will be better protected from damaging wildfires.

You can find additional information by going to the Alabama Forestry Commission's website, <u>www.forestry.alabama.gov</u>, and clicking on the link, "Homes & Communities in the Forest".

Sincerely,

Linda S. Casey,

Alabama State Forester



#### HOMEOWNER'S WILDLAND FIRE RISK ASSESSMENT AND RECOMMENDATIONS<sup>1</sup>



Forest fires destroy homes every year causing loss of life and property. You can greatly reduce the risk of wildfire damaging or destroying your home and putting your family at risk by implementing a few "fire prevention" activities to your home and surrounding area. The Alabama Forestry Commission personnel will guide you through this process. Below are checked items you should consider correcting in order to lower your risk from wildfires.

| ***************************************  |                   |                         |  |  |  |
|--|-------------------|-------------------------|--|--|--|
| HOMEOWNER'S NAME(S),   | PREPARER'S NAME & | PROPERTY                |  |  |  |
| ADDRESS, TELEPHONE:  | TELEPHONE:        | LOCATION:               |  |  |  |
|  |                   | County: Subdivision:    |  |  |  |
|  |                   | Subdivision.            |  |  |  |
|  |                   | Section-Township-Range: |  |  |  |
|  |                   | Longitude:              |  |  |  |
|  |                   | Latitude:               |  |  |  |
|  | I                 | l                       |  |  |  |
| <b>ACCESS TO YOUR HOUSE:</b> It is important for fire response units to be able to find and defend your house. Emergency response units require wide roads with good turnaround areas. They need good directions and road signs. |                   |                         |  |  |  |
|  |                   |                         |  |  |  |
| Access for emergency vehicles should be at least 12 ft wide per lane traveled with a 13.5 ft vertical clearance. Clear and maintain overhanging vegetation as appropriate.   |                   |                         |  |  |  |
| Access roads should have a grade less than 10 percent with a hard, all-weather surface.  |                   |                         |  |  |  |
| A driveway should provide emergency vehicle access to within 150 ft of <u>all</u> buildings on your property. Access should be within 50 ft of at least one exterior door of multi-family dwellings.                             |                   |                         |  |  |  |
| ☐ Identify and maintain at least two evacuation routes.  |                   |                         |  |  |  |
| Dead-end roads in excess of 300 ft in length should have a 120 ft outside diameter turnaround at the closed end. The road should clearly be marked with a "Dead End Road" sign.  |                   |                         |  |  |  |
| Any bridge on an access road should accommodate an axle weight of at least tons. (Work with Transportation Department to improve bridges, as appropriate.)   |                   |                         |  |  |  |

Road signs should be identified by a consistent and known identification system. All letters, numbers, and symbols should be at least 4 inches in height, reflectorized, made of noncombustible

House address signs should have numbers at least 4 inches in height, reflectorized, made of

Access gates should be at least 30 ft from the main road and open in the direction of travel.

materials, visible from the road, and mounted at least 7 ft above the surface of the road.

noncombustible materials, and visible from the main access road.

| Fire hydrants should be well-marked, visible from the road, and their location identified on the road surface with reflective marking or signage.  |  |  |  |  |
|--|--|--|--|--|
| ADDITIONAL RECOMMENDATIONS:  |  |  |  |  |
| YOUR HOUSE LOCATION, CONSTRUCTION, AND FIRE HAZARDS: Most house fires start from wildfires after hot embers enter the perimeter of the structure. These can enter through the roof, exterior walls, subflooring, and windows. You can reduce the fire risks to your house by taking a few preventative measures.   |  |  |  |  |
| ▲ ✓ indicates that your property meets the minimum recommendations. An X indicates that this item needs improvements.  New houses should be located at least 30 ft from steep slopes. Remove all vegetation, leaving only short shrubs and grasses between the edge of steep slopes and your house.  |  |  |  |  |
| New houses should be located at least 30 ft from property lines and other buildings.  Construct a noncombustible wall or barrier (driveway or walkway) where sufficient defensible space is unavailable between your house and dense vegetation or steep slopes.   |  |  |  |  |
| Multiple-family dwellings should have an automatic sprinkler system and local fire alarm system.  You should have water spout and garden houses readily available to quickly extinguish wildfires.  The roof is the most vulnerable part of many structures. Untreated wood shakes are easily ignited. Consider using pre-treated fire-resistive wood shakes or non-combustible, certified fire-resistant shingles. Make sure that there are no gaps in the roofing material that might allow hot embers to penetrate and ignite. Clay tile roofing should have "bird stops" to close the convex opening created by the shape of the tile at the eave. |  |  |  |  |
| Plastic skylights can melt from radiant heat and allow hot embers to enter your house. Consider using skylights constructed of multilayered glazed panels or tempered glass.  Remove leaves or other combustible debris that builds up on the roof or in the gutters or downspouts that could be easily ignited by hot embers.   |  |  |  |  |
| Your chimney should have an approved spark arrester constructed of a minimum 12-gauge welded wire mesh with openings not exceeding ½ inch.  Your eaves should be boxed in with ¼ inch sheathing or noncombustible materials. Screen your vents and attic ventilation openings with a corrosion-resistant, non-combustible, wire mesh not to exceed ¼ inch size. Limit or protect the openings on the side of your house facing dense vegetation.   |  |  |  |  |
| ☐ Construct overhanging projections on your house using non-combustible, fire-retardant material. ☐ Vinyl siding will melt, and wood siding will ignite. Replace your house's exterior siding with a minimum 20-minute fire rated material and 2 inch solid blocking between exposed rafters, especially where facing dense vegetation. ☐ Your windows should be constructed of multilayered glazed panels or tempered glass that will   |  |  |  |  |
| resist fracture from intense heat or have a minimum 20-minute fire rated material. Install window screening using noncombustible mesh material that will not allow hot embers to enter your house.   |  |  |  |  |

| Your exterior doors should be constructed with noncombustible material with a minimum 20-minute fire rated material.  |
|---|
| Remove leaves and combustible debris on or under your porch or deck, in carports, within the crawlspace, and around the perimeter of your house to prevent hot embers from igniting.  |
| Porch, deck, and house skirting should be constructed of noncombustible materials 2 inches or more in thickness, such as metal screening, stucco, or masonry.   |
| ADDITIONAL RECOMMENDATIONS:   |
|   |
|   |
|   |
|   |
| <b>VEGETATION SURROUNDING YOUR HOUSE (Defensible Space):</b> All vegetation is flammable, but if it is maintained, especially within the first 30 ft of your house, you can reduce the threat of it igniting your house. This area should extend further (up to 200 ft) as hazard risks increase (i.e. increased slope or vegetation density). Many homes have attractive, well vegetated landscapes that also serve as effective defensible space. |
| A      ✓ indicates that your property meets the minimum recommendations. An X indicates that this item needs improvements.  |
| Maintain grass cover and low-growing shrubs (no more than 18 inches tall next to your house) and only a few trees in the area within 30 ft from your house on all sides.  |
| Establish a well-irrigated area around your house. Water grass during drought periods, as allowed. Consider installing a water irrigation system if you are located in an extremely high-risk wildfire area.  |
| Tall shrubs and trees should be at least 10 ft away from your house. Properly and safely thin and prune tall shrubs or trees near your house. Remove tree limbs hanging over your roof. Remove overhanging branches within 15 ft of your chimney, power lines, and other structures.  |
| Remove pine needles, bark chips, and other flammable materials in shrub beds adjacent to your house. Replace vegetation with some common fire resistant plants, where appropriate.  |
| Grasses and low-growing shrubs dry out and ignite quickly and can easily ignite tree canopies. Remove flammable material from under trees to keep wildfire from spreading upward (known as the ladder effect). Properly and safely prune tall, mature trees so the lowest limbs are at least 15 ft above ground level, while maintaining at least 30 percent of the tree's live crown ratio.  |
| Maintain space at least three times $(3x)$ the height of the low-growing plants between the top of the shorter plant and bottom of the taller plant. (For example, if a 4-ft shrub is growing under a 55-ft tree, prune the vegetation so there is 12 ft of space between the top of the shrub and lower tree limbs.)   |
| Maintain well-spaced trees in the first 30 ft surrounding your house to prevent or slow tree crown fires. Evergreen tree crown spacing (distance between the outer edges of the tree crowns) should be at least 18 ft for trees within the first 30 ft of defensible space. Evergreen tree crown spacing can decrease to 12 ft within the next 30 ft of defensible space.   |
| Relocate combustible materials (woodpiles, propane tanks, RVs, wooden fences, etc.) at least 30 ft from your house. Clear away flammable vegetation within 10 ft of the combustible material.   |

| Propane tanks should be accessible to service trucks and be located on ground level with the primary residence.  |
|--|
| ☐ Where burn barrels are allowed, clear flammable materials from at least 25 ft around the barrel; cover the open top with a non-flammable screen with mesh no larger than ¼-inch. Obey state and local burning laws.        |
| ☐ Install permanent firelanes as recommended by Alabama Forestry Commission personnel.   |
| Prescribe burn to reduce dense vegetation on your property as recommended by Alabama Forestry Commission personnel. Obey state and local burning laws. Consider using trained professionals when conducting prescribe burns. |
| Where prescribe burning is not possible, consider hiring a vendor to mulch and remove the dense vegetation.  |

#### ADDITIONAL RECOMMENDATIONS:

**CONCLUSION.** As a homeowner, you need to understand that in critical wildfire situations, there may not be enough firefighting resources to protect all homes. By taking personal responsibility for reducing hazards around your house, you may substantially reduce the risks to your house. It is important to make those changes before a fire starts! Equally important will be regular maintenance to maintain your protection.

The Alabama Forestry Commission will assist you with important information and programs available to you and your neighborhood. We can provide you with a list of vendors who perform vegetative management services to minimize wildfire risks to your property. Where possible, we also provide cost-share assistance to help with your expenses.

You can find additional information by going to the Alabama Forestry Commission's website, www.forestry.alabama.gov, and clicking on the link, "Homes & Communities in the Forest".

Please call to let us know when you have completed our recommendations. We would like to know when your home is better protected, and also if you found our fire prevention program useful.

<sup>&</sup>lt;sup>1</sup>This form addresses structure risks from wildfires originating from rural lands, such as agriculture and forestland, and does not address fire risks from internal sources. The assessment and recommendations are based on National Fire Protection Association guidelines (NFPA 1141 and 1144), Firewise® guidelines, and local conditions. The Alabama Forestry Commission does not guarantee this information accurately reflects all risks to your structure.

The Alabama Forestry Commission does not discriminate on the basis of race, color, national origin, sex, age, or disability, and is an equal opportunity employer and provider. For further contact information or to report a concern, please visit the following website (<a href="www.forestry.alabama.gov">www.forestry.alabama.gov</a>) or call (334) 240-9330.

### **ACCESS TO YOUR HOUSE**



House address signs should be at least 4 inches in height, reflectorized, made of noncombustible material, and visible from the access road.

Access for emergency vehicles should be at least 12 ft wide per lane traveled with a 13.5 ft vertical clearance. A driveway should provide emergency vehicle access to within 150 ft of <u>all</u> buildings on your property.





Dead-end roads in excess of 300 ft in length should have a 120 ft outside diameter turnaround at the closed end. Post a "Dead-end Road" sign at the entrance.

## YOUR HOUSE LOCATION, CONSTRUCTION, AND FIRE HAZARDS

New houses should be located at least 30 ft from steep slopes, property lines, and other buildings. Remove all vegetation, leaving only short shrubs and grasses between the edge of steep slopes and your house.





The roof is the most vulnerable part of many structures. Untreated wood shakes are easily ignited. Consider using pretreated fire-resistive wood shakes or non-combustible, certified fire-resistant shingles.

Remove leaves or other combustible debris that builds up on the roof or in the gutters or downspouts that could be easily ignited by hot embers. Plastic skylights can melt from radiant heat.



Vinyl siding will melt, and wood siding will ignite. Replace your house's exterior siding with a minimum 20-minute fire rated material and 2 inch solid blocking, especially where facing dense vegetation.





Remove leaves and combustible debris on or under your porch or deck, in carports, within the crawlspace, and around perimeter of your house to prevent hot embers from igniting.

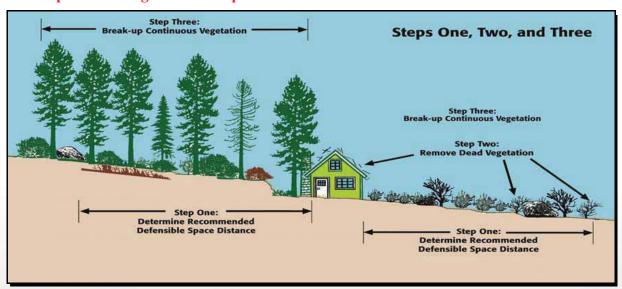
Porch, deck, and house skirting should be constructed of noncombustible materials 2 inches or more in thickness, such as metal skirting, stucco, or masonry.

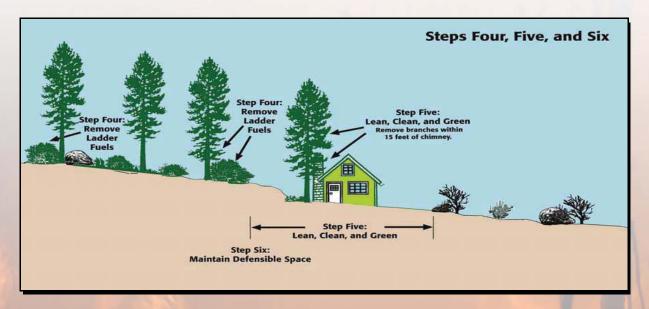
Replace wooden fence next to your home with a noncombustible metal fence.



### **VEGETATION SURROUNDING YOUR HOUSE**

Six Steps to creating defensible space.









Remove tree limbs hanging over your roof and within 15 ft of your chimney, power lines, and other structures.

Tall shrubs and trees should be at least 10 ft away from your house.





Maintain grass cover, low-growing shrubs (no more than 18 inches tall), and only a few trees in the defensible space extending 30 ft surrounding your home.

#### **SOME COMMON FIRE RESISTENT PLANTS:**

Choose plants and trees with high moisture content in the leaves, low oil or resin content, minimal litter and accumulating debris, limited foliage, and few dead branches, low overall height, open branching habit, and easy maintenance and pruning.

Large Trees: oaks, maples, ash, hickory, yellow poplar, gum, hackberry

Medium Trees: dogwood, crepe myrtle, persimmon, fruit trees

Shrubs: holly, juniper, nandina, witch hazel, elderberry, azalea, magnolia, lilac

Ground Cover: periwinkle, pachysandra, jasmine, creeping philox, liriopa

Relocate combustible materials (woodpiles, propane tanks, RVs, wooden fences, etc.) at least 30 ft from your house.

Clear away flammable vegetation within 10 ft of woodpiles and the combustible materials.



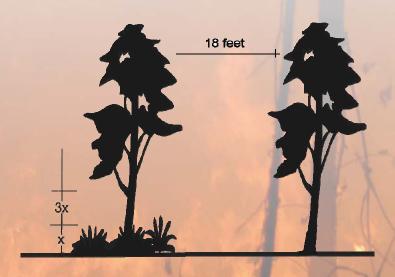


Do not place burn barrels next to the woods or other structures. Where burn barrels are allowed, clear flammable materials from at least 25 ft around the barrel; cover the open top with a non-flammable screen with mesh no larger than ½-inch.

Thin and prune tall shrubs and trees so the lowest limbs are at least 15 ft above ground level.

Maintain space at least three (3x) times the height of the low-growing plants between the top of the shorter plant (x) and bottom of the taller plant.

Evergreen tree crown spacing (distance between the outer edges of the tree crowns) should be at least 18 ft apart.



Install permanent firelanes and prescribe burn as recommended by Alabama Forestry Commission personnel.





Photo Credit: Interface South

Prescribe burn to reduce vegetation fuel buildup near homes and other structures. Always follow state and local burning laws.

Where burning is not possible, mulch the dense vegetation.



### HOW TO BECOME A FIREWISE COMMUNITY/USA

Reduced Fuel . . . Reduced Risk!

Being Firewise begins with **YOU**. The Firewise Community/USA Program provides standards designed and maintained to give you maximum flexibility in creating the best plan for your community (from a subdivision to small towns). The five steps needed to become a Firewise Community/USA are:



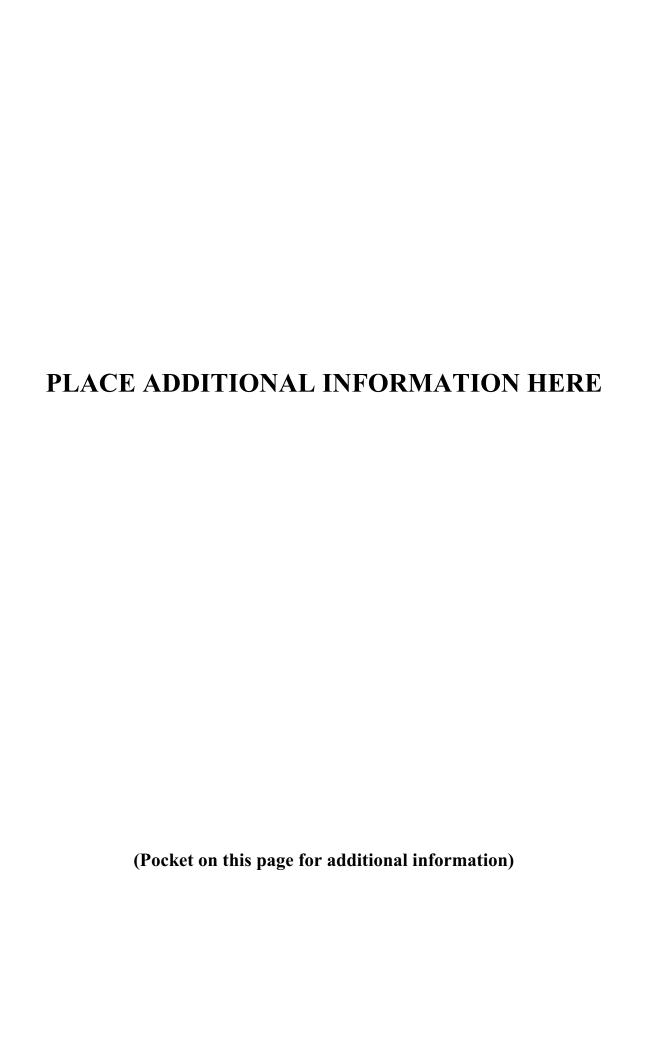
- 1. Enlist the Alabama Forestry Commission and other recognized professionals to complete a community assessment and create a plan that identify agreed-upon achievable Firewise prevention projects to be implemented by the community.
- 2. Sponsor a local Firewise Task Force Committee, Commission or Department which maintains the Firewise Community/USA Program and tracks its progress or status.
- 3. Observe a Firewise Community/USA Day each spring that is dedicated to a local Firewise prevention project.
- 4. Invest a minimum of \$2.00 per capita annually in local Firewise prevention projects. (Work by municipal employees or volunteers using municipal and other equipment can be included, as can state/federal grants dedicated to that purpose.)
- 5. Submit an application to the Alabama Forestry Commission. After certified, submit an annual report to Firewise Community/USA national center that documents continuing compliance with the program. Forms are available on the National Firewise website (<a href="https://www.firewise.org">www.firewise.org</a>).

The Alabama Forestry Commission can provide additional information about the program.

Firewise Community/USA provides you with the knowledge necessary to maintain an acceptable level of fire protection and evacuation planning.

The program draws on your community's spirit, resolve, and willingness to work together and take responsibility for fire prevention.

| Examples of Firewise Activities                   |   |   |  |  |  |
|---|---|---|--|--|--|
| Wide Access<br>Roads for<br>Emergency<br>Vehicles | Multiple<br>Access &<br>Exit Routes       | Identify<br>High Fire<br>Risk Areas             | Remove<br>Overhanging<br>Branches            | Fire Resistant<br>Siding, Doors,<br>&Windows |  |
| Chimney<br>Spark<br>Arrestors                     | Fire<br>Resistance<br>Roofing<br>Material | On-site<br>Water<br>Storage                     | Risk<br>Assessments<br>& Mitigation<br>Plans | Clear Fuel<br>around Propane<br>Tanks        |  |
| Create<br>Defensible<br>Space                     | Fire<br>Resistant<br>Plants               | Fire<br>Department<br>Coordination              | Evacuation<br>Plan                           | Fire Prevention<br>Education                 |  |
| Permanent<br>Firelanes                            | Prescribed<br>Burning                     | Clear Debris<br>from around<br>House &<br>Porch | Clear Fuel<br>from around<br>Burn Barrel     | Firewise<br>Community/USA                    |  |
| Fire Alerts to<br>General<br>Public               | Community<br>Clean Up<br>Day              | Smart<br>Development<br>Planning                | Fire<br>Prevention<br>Plan                   | People Working<br>Together                   |  |







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The State of Alabama sincerely appreciates their support.