

Prescriptions

The size of the **Intensive Zone** is 30 feet, measured from the edges of the structure. Within this zone, several specific treatments are recommended.

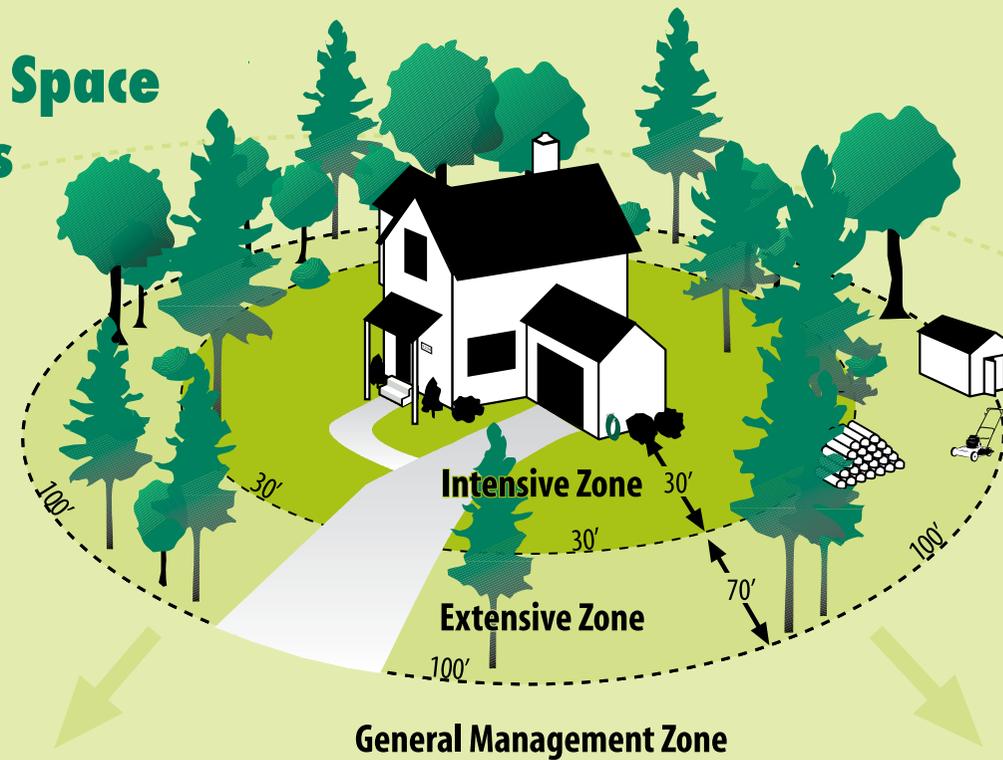
- Plant nothing within 3 to 5 feet of the structure, particularly if the building is sided with wood, logs or other flammable materials. Decorative rock creates an attractive, easily maintained, nonflammable ground cover.
- If the house has noncombustible siding, widely spaced foundation plantings of low growing shrubs or other "fire resistant" plants are acceptable. Do not plant directly beneath windows or next to foundation vents. Be sure there are no areas of continuous grass adjacent to plantings in this area.
- Do not store firewood or other combustible materials in this area. Extend the gravel coverage under the decks. Decks within 5 feet of the ground should be enclosed with metal screening or sheeting. Do not use areas under decks for storage unless completely enclosed with metal screening.
- Frequently prune and maintain plants in this zone to ensure vigorous growth and a low growth habit. Remove dead branches, stems and leaves. Keep grass mowed short (1-2").
- Ideally, remove all conifer trees from the Intensive Zone to reduce fire hazards. If you do keep a few conifer trees, be sure they are well spaced with at least 10 feet between their crowns and that they are pruned up at least 8 feet. Remove any branches that are within 10 feet of the roof or chimney. Remove all "ladder fuels" from beneath the tree. (Ladder fuels are tall grass, small shrubs, trees, tree limbs and other materials that allow fire to climb into the tree crown.)

- Propane tanks pose a special hazard near homes. Tanks up to 1200 gallons are best located inside the defensible space but **MUST BE** at least 10 feet from the structure itself. In addition, grass and bushes **MUST** be cleared around the tank for 10 feet. Contact your local fire marshal before moving an existing tank.

The next area, referred to as the **Extensive Zone**, is the next 70 to 100 feet (or more) around your structures. It is an area of fuel reduction designed to reduce the intensity of any fire approaching your home. Follow these recommended management steps.

- Thin trees and large shrubs so there is at least 10 feet between crowns. Crown separation is measured from the outer most branch of one tree to the closest branch on the next tree. On steep slopes, allow more space between tree crowns. Remove all ladder fuels from under these remaining trees.

Defensible Space Zones



Carefully prune trees to a height of 10 feet, but not more than one-third the live crown.

- Because the Extensive Zone forms an aesthetic buffer and provides a transition between zones, it is necessary to blend the requirements from the other two zones. Thin the inner portions of the Extensive Zone more heavily than the outer portions. Gradually increase tree density as you approach the General Management Zone.
- Isolated shrubs may remain, provided they are not under tree crowns. Prune and maintain these plants periodically to maintain vigorous growth. Remove dead stems from trees and shrubs annually.
- Limit the number of dead trees, or snags retained in this area. Wildlife need only one or two snags per acre. Be sure any snags left for wildlife cannot fall onto the house or block access roads or driveways.
- Mow grasses as needed through the growing season to keep them low, a maximum of 6 to 8 inches. This is extremely critical in the fall when grasses dry out and cure or in the spring after the snow is gone but before the plants green up.

- Stack firewood and woodpiles uphill or on the same elevation as the structure but at least 25 feet away. Remove flammable vegetation within 10 feet of these woodpiles. Do not stack wood against your house or on or under your deck, even in winter. Many homes have burned from an easily ignited woodpile next to the home!

- Dispose of slash, (limbs, branches, etc.) from your trees and shrubs by chipping or composting. Some communities have brush disposal sites. Avoid burning this material. Another alternative is to lop and scatter slash by cutting it into very small pieces and distributing it over the ground to speed decomposition. Avoid heavy accumulations of slash. Make it lay close to the ground to speed decomposition. If desired, no more than two or three small, widely spaced brush piles may be left for wildlife purposes. Locate these towards the outer portions of your defensible space away from trees, especially evergreens, where they would create a fuel ladder.

The **General Management Zone (GMZ)** is of no specified size. It extends from the edge of your defensible space to your property lines. In this area, you are encouraged to manage your forests in a more traditional manner. Typical management objectives for areas surrounding homesites or subdivisions are: provide for recreational opportunities, aesthetics, tree health, and wind, noise, dust and visual barriers. Some sites may support limited production of firewood, fence posts, Christmas trees, and other forest commodities.

- Specific management requirements will be dictated by your objectives for your land. However, most thinning will be done "from below" and leave the biggest and best trees. Contact a professional forester and make a management plan.
- Thinnings sanitize and improve the forest stand by removing trees that are damaged, attacked by insects, infected by disease, or are of poor form or low vigor.
- Tree spacing usually depends on the species being managed and factors such as susceptibility to wind throw or damage from heavy snow loading. For pine, a good rule of thumb for stem spacing is diameter +7. Measure diameter in inches at about 4½ feet above the ground. For example, if the average tree to be left following your thinning was an 8-inch red pine, then use the formula $8 + 7 = 15$, for a spacing of 15 feet between trees.
- A greater number of dead trees can remain in the GMZ. Make sure that they pose no threat to power lines or fire access roads.
- While pruning generally is not necessary in the GMZ, it may be a good idea from the standpoint of personal safety to prune trees along trails and fire access roads. If you prefer the aesthetics of a well-manicured forest, you might prune the entire area. In any case, pruning helps reduce ladder fuels within the tree stand, and enhances wildfire safety. Mowing is not necessary in the GMZ.
- Any method of slash treatment is acceptable for this zone, including piling and burning, chipping or lop-and-scatter. Burning is discouraged since it is a major cause of wildfires. Contact local authorities for approved methods.

Driveway Standards

During a wildfire, firefighters will not drive their engine into your driveway if they feel it is unsafe for them to do so. What makes a safe driveway? Basically it is the same as defensible space around your home: Clearing and thinning vegetation from the roadway both horizontally and vertically, as well as providing a turnaround big enough for the engine, and turnouts to provide room for other vehicles to pass by safely.



Width of driveway: The all weather surface should be at least 12 ft. wide, 20 feet if longer than 150 feet.

Vertical clearance: Engines and their equipment are tall. Prune tree branches to provide at least 14 ft. of clearance.

Turnaround: A turnaround near your house should be provided with at least a 30 ft. radius. A "Hammerhead - T" with a minimum of 60 ft. across the top, is a good alternative.

Turnouts: A turnout is a wide place in your driveway that will allow another vehicle to pass. It should be at least 10 ft. wide and 30 ft. long. If your driveway is over 800 ft. long, a turnout should be provided at least every 400 ft.

Making your home Firewise does not mean damaging the beauty of your property. The photos on the front of this publication show the difference between being unsafe and Firewise. Can you spot the changes?

**For more information on
Firewise, visit:
<http://www.dnr.state.mn.us/firewise>**



©2004, State of Minnesota, Department of Natural Resources

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, age, sexual orientation, membership or activity in a local commission, or disability. Discrimination inquiries should be sent to MN-DNR, 500 Lafayette Road, St. Paul, MN 55155-4031; or the Equal Opportunity Office, Department of the Interior, Washington, DC 20240.

This document is available in alternative formats to individuals with disabilities by calling (651) 296-6157 (Metro Area) or 1-888-MINNDNR (MN Toll Free) or Telecommunication Device for the Deaf/TTY: (651) 296-5484 (Metro Area) or 1-800-657-3929 (Toll Free TTY).

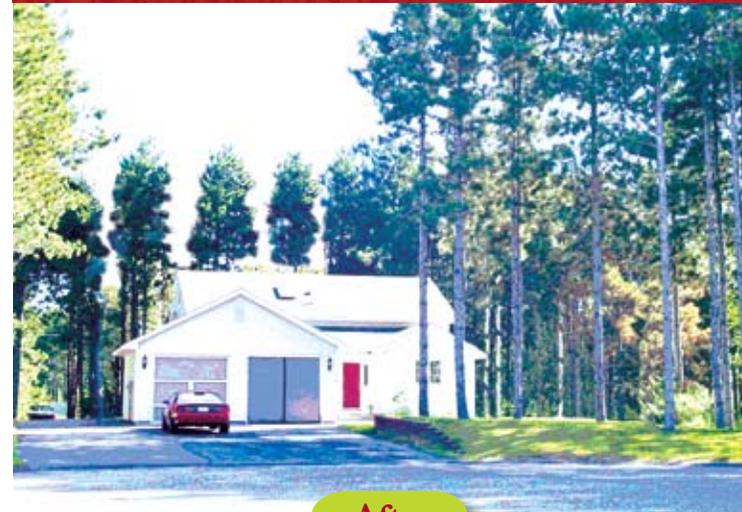
Printed on recycled paper containing a minimum of 10% post-consumer waste and vegetable based ink.

Firewise programs are cooperative efforts. This publication contains materials from Colorado, Wyoming, and Wisconsin publications.

Creating a Firewise Property



Before



After

Creating a defensible space around your house can enable your home to survive a wildfire. It also provides access to your home for firefighters in case of a wildfire.

Much of the threat to your home comes from the amount of fuel continuity from the wildland surrounding your home. Look at your property—Is there a fire resistant green belt around your structures?

Heavier fuels, such as brush and coniferous trees, are very hazardous. They produce a more intense fire than light, fast burning grassy fuels.

Defensible Space Zones

Intensive Zone is the area of maximum modification and treatment. It consists of a 30-foot radius around all structures in which a majority of the flammable vegetation is reduced. The zone is measured from the outside edge of the home and any attached structures, such as decks, garages or outbuildings within 25 feet of the home. If it is attached to the house or within 25 feet of the house, consider it part of the house.

Extensive Zone is an area of fuel reduction. The size of this zone depends on the general conditions. Typically, this zone should extend at least 70 to 100 feet from the structure. In high risk situations this zone may need to extend to 200 feet or more from the structure. Within this zone, the continuity and arrangement of vegetation is modified. Remove stressed, diseased, dead or dying vegetation. Thin and prune the remaining trees and shrubs. Be sure to extend fuel modification along either side of your driveway all the way to your main access road.

General Management Zone is an area of traditional forest management and is of no particular size. It extends from the edge of your defensible space to your property boundaries.