



Protecting Our Communities: Building Resilience in the Wildland-Urban Interface

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What is the Wildland-Urban Interface?

- The Wildland-Urban Interface is the zone of transition between unoccupied land and human development. It is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.



<https://www.youtube.com/watch?v=kV5KPGwehjc>





Challenges & Conflicts

- The WUI is a focal area for human-environment conflicts, including the destruction of homes by wildfires, habitat fragmentation, introduction of exotic species, and biodiversity decline.
- Balancing the need for development with fire prevention and mitigation efforts is essential.



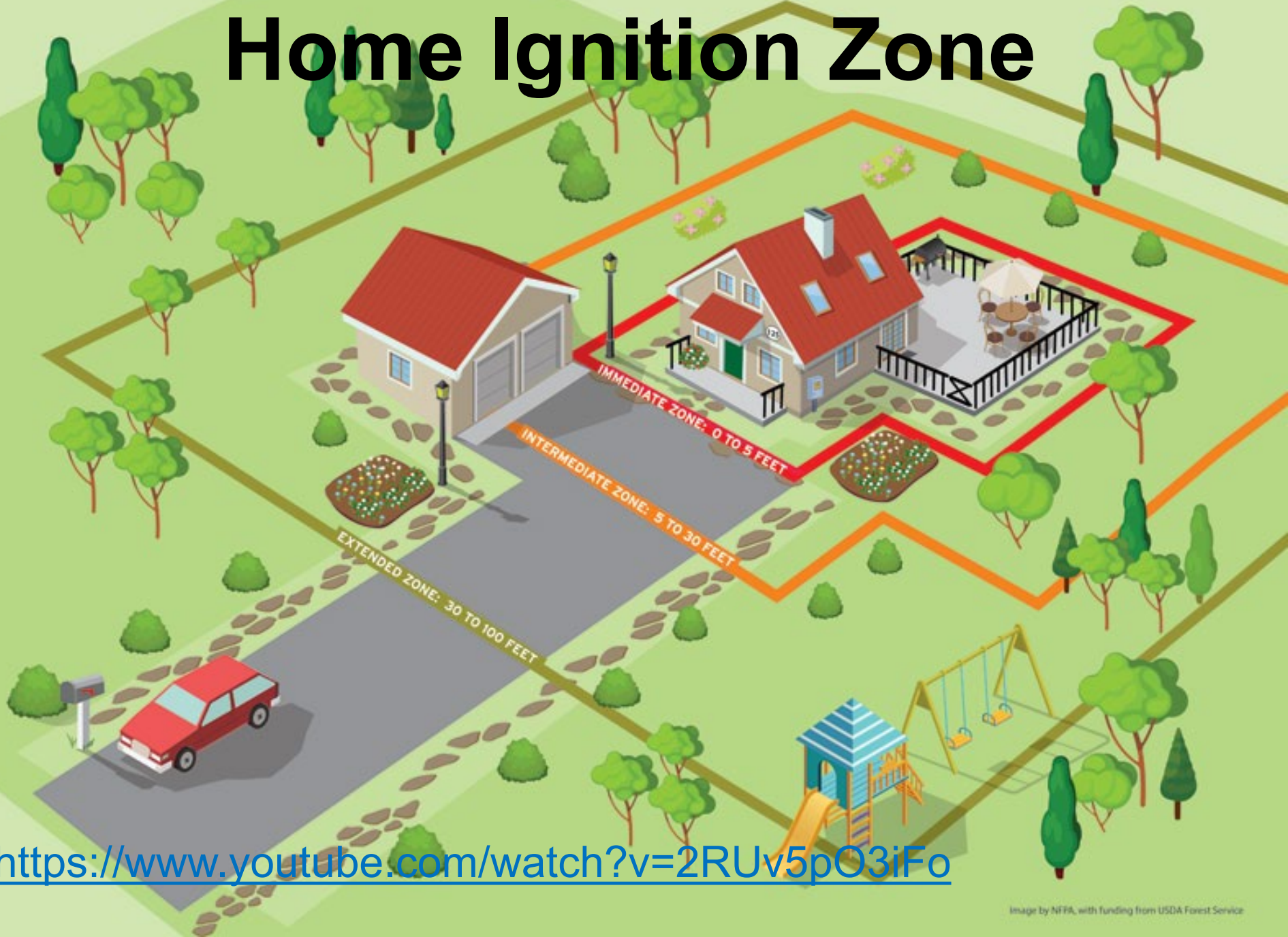
Prevention & Preparedness

- Communities can create **Community Wildfire Protection Plans (CWPPs)** to assess risks, document assets at risk, and engage stakeholders in fire-adapted strategies.
- Fire departments play a crucial role in responding to WUI fires, and training programs focus on WUI firefighting tactics and safety.



- **Ready** – Prepare now. Be aware of the hazards that can threaten your community.
- **Set** – Be alert. Know there is significant danger in your area
- **Go** – Evacuate. Follow instructions from officials, stay on designated evacuation routes

Home Ignition Zone



<https://www.youtube.com/watch?v=2RUv5pO3iFo>



Immediate Zone

The home and the area 0-5' from the furthest attached exterior point of the home; defined as a non-combustible area. Science tells us this is the most important zone to take immediate action on as it is the most vulnerable to embers. **START WITH THE HOUSE ITSELF** then move into the landscaping section of the Immediate Zone.



Intermediate Zone

5-30' from the furthest exterior point of the home. Landscaping/hardscaping-employing careful landscaping or creating breaks that can help influence and decrease fire behavior



Extended Zone

30-100 feet, out to 200 feet. Landscaping – the goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground.



Home Hardening Tips

















Firewise Virginia Community Hazard Mitigation Grant Program

- Available to organized communities through the federal funding of the National Fire Plan to help at-risk communities reduce, or mitigate, potential threats from wildfire.



Steps to Becoming a Firewise Community

Step 1 Contact Virginia Department of Forestry

Becoming recognized as a Firewise Community USA begins with the community itself.

Step 2 Site Visit

A Virginia Department of Forestry (VDOF) representative will schedule a visit to assess the community.

Step 3 Form a Firewise Committee

A Firewise committee can include homeowners, fire professionals, and/or members of other interest groups.

Step 4 Create a Plan

The community, VDOF and other partners will use the assessment as the basis for creating a plan that contains agreed-upon, area-specific solutions to its wildfire issues. Full development of the Firewise plan may take several months.

Step 5 Sponsor an Event

A Firewise Day must be held each year to maintain recognition status. Firewise Days can include chipping days, public awareness events, brush clearing or other activities.

Step 6 Minimum Investment

Each community is required to invest the equivalent of one volunteer hour per dwelling unit in wildfire risk reduction activities annually.

Step 7 Recognition

Firewise USA site recognition is achieved after completing the above steps and an application is submitted and approved. Your VDOF mitigation specialist will help with this process.

Step 8 Renewing Your Recognition Status

A yearly renewal is required, which is an easy on-line process.

A Disaster Plan

The time to plan for any emergency is prior to the event.

- ✓ Create your own action plan.
- ✓ Prepare a "GO Kit."
- ✓ Post local emergency telephone numbers in a visible place.
- ✓ Leave before it's too late. Decide where you will go and how you will get there. Two escape routes out of your home and out of your neighborhood are preferable.
- ✓ Have a plan for your pets.
- ✓ Practice family fire drills.



When wildfire conditions exist, evacuations can occur without notice; be ready to take action.

For More Information

For more information about VDOF services or programs, please contact your local Virginia Department of Forestry office or visit:

www.dof.virginia.gov

Western Region Office, Salem:

Phone: (540) 387-5461

Central Region Office, Charlottesville:

Phone: (434) 977-5193

Eastern Region Office, Providence Forge:

Phone: (804) 966-5092



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900 Natural Resources Drive, Suite 800
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www.dof.virginia.gov

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FIREWISE COMMUNITIES FOR VIRGINIA

Reduce the Wildfire Risk to Your Community!



www.firewisevirginia.org



Virginia Department of Forestry

Protect Your Community

From the beauty of the landscape to the privacy and quiet, the benefits of living in one of Virginia's forested areas are numerous and varied. Yet, with that high quality of life comes the risk of wildland fire.

Dry leaves, pine needles, dead tree limbs and flammable plants serve as the fuel for fires in communities such as yours. But there are several steps you can take to reduce the risk to you and your neighbors. By becoming "Firewise," you and your community will ensure that the quality of life you enjoy today will be there tomorrow.

Please take a few moments to read the material within this pamphlet, and share it with your neighbors. By following these guidelines, you will make your home and your neighbors' a Firewise community.

Emergency Access

Identify your home and neighborhood with legible and clearly marked street names and numbers so response vehicles can rapidly find the location of the emergency. Include a driveway that is at least 12 feet wide with a vertical clearance of 15 feet to provide access to emergency vehicles.

**Firefighters Need Your Help
Is Your Home Firewise?**



Firewise Landscaping

Fires in the wildland/urban interface are becoming more common as people choose to live in previously undeveloped areas. The vegetation in these areas often consists of trees, shrubs and grasses that are very flammable.

Firewise landscaping reduces the home's vulnerability. The goal is to use design, plant choice and maintenance to develop a landscape that offers the best fire protection while enhancing the property. The idea is to create defensible space and surround the house with materials that are less likely to burn.



Although mulch helps retain soil moisture, when dry, it can become flammable.

Defensible Space

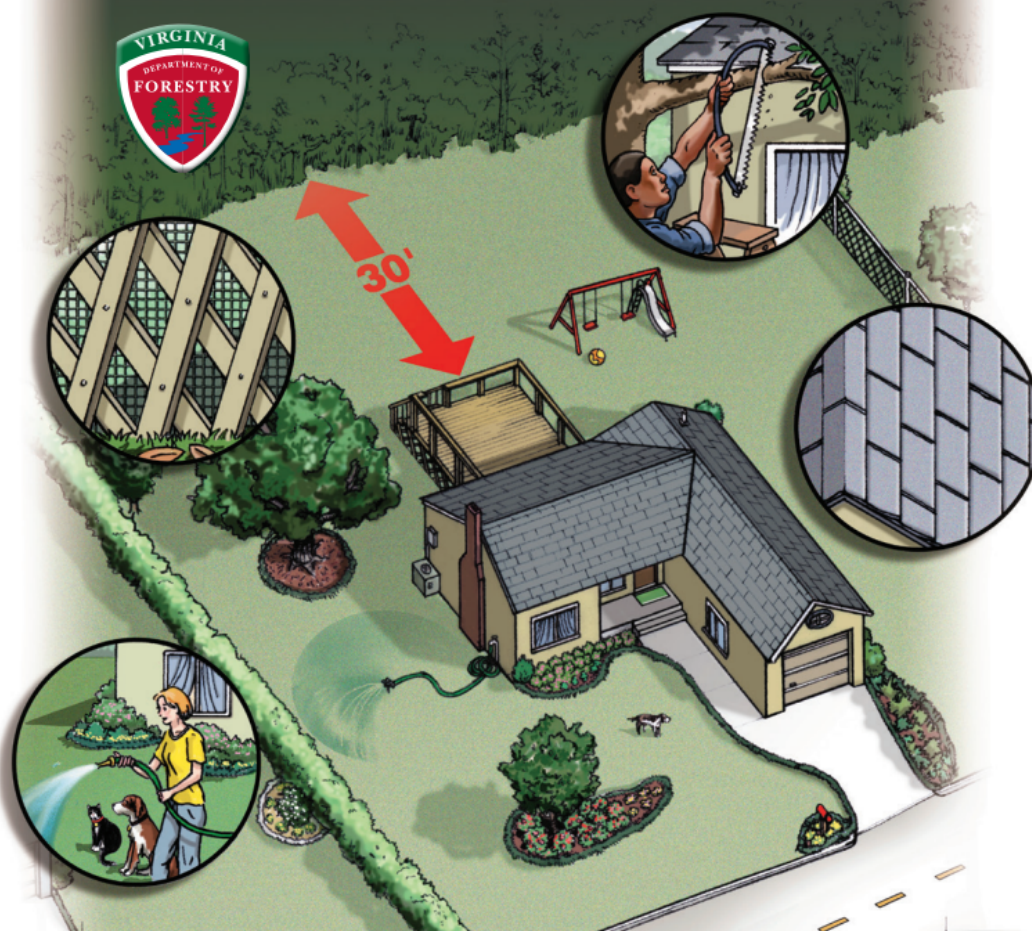
The home and the area up to five feet from the furthest attached exterior point of the home should be free of all combustible materials. Science indicates that this zone is the most vulnerable to embers and is the most important zone to take immediate action on.

Maintain at least 30 feet of space surrounding your home that is lean, clean and green.

Lean – Keep trees and shrubs well manicured and pruned. Prune shrubs and tree branches to a height of at least 6 to 10 feet from the ground, keep free of dead wood, and prune away from the roof and 15 feet of a chimney.

Clean – Remove all dead plant material from around your home, including leaves, dry vegetation and stacked firewood. Remove more flammable plants, such as ornamental junipers, hollies, red cedar and young pine that contain resins, oils and waxes. Deciduous trees and shrubs (drop their leaves every fall) burn with less intensity than evergreens and are a better choice to plant closer to your house.

Green – Plant fire-resistant vegetation that is healthy and green throughout the year. Use less-flammable plants: azalea, viburnum, crape myrtle,



spirea, hydrangea, annual and perennial flowers, ferns, dogwood, redbud, red maple and oak. Mow, maintain and water your lawn regularly.

Landscaping beyond 30 feet should remove enough flammable vegetation to slow a fire down, reduce its intensity, and move the fire out of the tree crowns and onto the ground.

Fire-Resistant Roof and Exterior Construction

- ✓ Firewise construction materials include Class-A asphalt shingles, metal, tile and concrete products. Additionally, the inclusion of a fire-resistant sub-roof adds protection.
- ✓ Wall materials that resist heat and flames include brick, cement, plaster, stucco and concrete masonry. Tempered and double-pane glass windows can make a home more resistant to wildfire heat and flames. Although some vinyl will not burn, vinyl soffits and plastic skylights can melt, allowing embers into the attic space.
- ✓ Wire mesh no larger than ¼ inch can be used to prevent sparks from entering your home through vents, and prevent combustible materials and debris from accumulating beneath decks or elevated porches.



Simply making sure that your gutters, eaves and roof are clear of debris will reduce your fire threat.

Fire-Resistant Attachments

- ✓ Attachments include any structure, such as decks, porches or fences, connected to your home. These structures can act as fuses or fuel bridges. If an attachment to a home is not fire-resistant, then the home as a whole is not firewise.
- ✓ If you wish to attach an all-wood fence to your home, use masonry or metal as a protective barrier between the fence and house.

For additional information about Firewise:

Virginia Department of Forestry
Firewise Program – firewisevirginia.org
Agency Web Site – dof.virginia.gov
Ready Set Go - wildlandfirersg.org

Fire-Adapted Communities
fireadapted.org
National Firewise Organization
firewise.org



FIREWISE USA®

Residents reducing wildfire risks



https://www.youtube.com/watch?v=vL_sy_p1ZScM&t=4s

For complete program info,
visit nfpa.org/firewise.





Wildfires in Virginia

- The types of vegetation in Virginia, which include forests, grasslands, and shrublands, can all fuel wildfires under the right conditions.
 - i.e. Mountain laurel – waxy leaves make it highly flammable
- In recent years, there have been notable wildfire incidents in Virginia, though they tend to be smaller and less frequent compared to western states.
 - Spring 2024 wind event

VIRGINIA WILDFIRES

by the numbers

DOF SUPPRESSED

600 
fires that burned
34,700 acres

DOF PROTECTED

900,000 
structures worth
\$229 million

**Fiscal year 2024*

90%
of wildfires are
PREVENTABLE



leads suppression efforts with:

160
4x4
Engines

14
Wildland
Brush Trucks

89
Bulldozer Fire
Plow Units



First responders



Wildfire cause:
escaped debris burns

4 Incident Management Teams

LEARN BEFORE YOU BURN !



DOF.VIRGINIA.GOV



Wildland & Prescribed Fire

Wildfire Incident Viewer

<https://dof.virginia.gov/>



Good vs Bad Wildfire

Good Fires (Prescribed Fires):

- **Definition:** Good fires, also known as **prescribed fires**, are intentionally set and controlled fires carried out by land managers for specific purposes.
- **Benefits:**
 - **Forest Health:** Prescribed fires help maintain healthy ecosystems. Many forest ecosystems evolved to tolerate semi-regular fires of lower intensity. These fires clear out underbrush, dead vegetation, and debris, which promotes forest health and diversity.
 - **Nutrient Cycling:** When prescribed fires burn dead logs, branches, and leaves, fewer of these materials remain for future fires. This reduces the fuel load and prevents intense wildfires.
 - **Habitat Improvement:** Controlled burns create open spaces, allowing sunlight to reach the forest floor. This benefits certain plant species and wildlife.
 - **Reducing Wildfire Risk:** By strategically burning areas, land managers reduce the risk of uncontrolled wildfires by reducing fuel buildup.



Good vs Bad Wildfire

Bad Wildfires:

- ◆ **Definition:** Wildfires occur naturally and can be both beneficial and destructive. However, when they become uncontrolled, they are considered bad wildfires.
- ◆ **Characteristics:**
 - **Uncontrolled Spread:** Bad wildfires spread rapidly, threatening lives, homes, communities, and forestland.
 - **Environmental Damage:** They damage ecosystems, destroy habitats, and release harmful pollutants into the air.
 - **Loss of Property:** Uncontrolled wildfires can lead to property loss and economic damage.



Good vs Bad Wildfire Summary

- In summary, good fires (prescribed fires) are intentionally managed for ecological benefits, while bad wildfires are uncontrolled and pose significant risks. Land managers use prescribed fires strategically to prevent dangerous wildfires and maintain healthy landscapes. Remember, fire management plays a crucial role in balancing ecosystem health and human safety





Virginia's 4 PM Burn Law

- Refers to a regulation aimed at reducing the risk of wildfires by restricting outdoor burning during certain times of the day. The law prohibits open-air burning before 4 p.m. each day from February 15 to April 30.

VIRGINIA'S FORESTRY LAWS



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Thank you



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