Introduction to Firewise Minnesota – Instructor Notes

Slide 1	Title	Building a Firewise Community
Slide 2	**History 1985 Wildfires**	The National Firewise Program, originally called Wildland Urban Interface (WUI) actually began in 1986, following a particularly bad fire year in 1985. The states of California and Florida had fires so extensive that 1400 homes were lost that year. 400 of those homes were lost in one day in Florida (Black Friday, 5/24/85)
Slide 3	**Wildland/Urban Interface – Not a Geographical Location**	The National WUI Program research and case studies that have been done since 1986 indicate that the Wildland Urban Interface is not a geographical location (even though the 30+ definitions included the phrase: “The WUI is where…”) Rather, the WUI is actually a set of conditions that exist (or could exist) in nearly every community in the country (or North America, or world). These conditions include weather, humidity, type of vegetation, building construction, road construction, lot size, and others.
Slide 4	**West Virginia Wildfires**	The problem does exist in West Virginia! But not to the extent of other parts of the country. - At the turn of the 20th century, wildfires devastated West Virginia's forests. - In 1908, more than 1.7 million acres of forestland were destroyed by fire As a result of this devastation, the West Virginia Reform Law of 1909 was established to protect the State's only renewable resource, the forest. Today the West Virginia Division of Forestry is responsible for protecting nearly 12 million acres of forest land across West Virginia

Slide 5	**West Virginia Wildfires**	**Goals** 1. Reduce the chances of losing a home to wildland fire. 2. Target individual homes and communities in high-risk wildland/urban interface areas. 3. Offer assistance in developing wildfire plans aimed at lessening loss of property. 4. Focus on counties with rapid growth in population or an increase in homes built in the interface zone. **Pilot Program** Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan, Pendleton, Pocahontas and Tucker counties.
Slide 6	**A Bad situation**	A small Fire in the Woods, A Call to 911
Slide 7	**Only got worse**	Home is engulfed in flames before the fire trucks can arrive.
Slide 8	**A Home that does not ignite is a home that does not burn.**	
Slide 9	**Home Ignitability Factors…**	**"Home ignitability"** factors are the principal causes of home losses during WUI fires. These factors include the design and materials used for home construction, such as wooden versus metal roofs, and the amount and kind of vegetation located within approximately 200 feet of the home.
Slide 10	**Home Ignition Zone**	Jack Cohen, USFS research scientist researched homes destroyed by fire. His research concludes that home losses can be effectively reduced by focusing hazard reduction efforts on the home and its immediate surroundings. Cohen refers to the space around a home as the **<u>Home Ignition Zone.</u>** This zone extends to 90 – 120 feet around a home, not hundreds or thousands of feet or beyond.

Slide 11	**No Fuel Reduction**	Cohen modeled crown fires and determined that if fuel is within 30 feet of a structure, the radiant heat from the fire ignited structure. Homes with debris, pines or ladder fuel near the home will ignite the home.
Slide 12	**Fuel Reduction Near Home**	If debris, pines and ladder fuel are kept away from the home fires can be kept small and the home can be saved.
Slide 13	**West Virginia Firewise in the Classroom**	Air photos are used to identify and rate homes for the risk of Wildfire
Slide 14	**Use of GIS systems…**	Student look at how close fuels are to buildings. 1. Identity the degree of defensible space between the building outline and the surrounding trees 2. Buildings are rated 1 - 5 depending on the proximity of trees to homes.
Slide 15	**GIS Analysis of Data**	Using the power of GIS, data created in phase 1 is analyzed to create a Hazard Fuel layer
Slide 16	**GIS Systems**	Using a “Density Surface Model” students can pinpoint high-risk neighborhoods in a community. High Risk Areas can be prioritized and field trips can be scheduled to conduct a Level 2 evaluation of homes in the high risk areas.
Slide 17	**Level 2 – Wildfire Hazard Assessment Form**	West Virginia Division of Forestry has created a Woodland Home Wildfire Hazard Assessment Form.
Slide 18	**What Makes a Fire Prone Property**	**There are Three Factors:** 1. Site Hazards 2. Structure 3. Fire Use Practices
Slide 19	**What is Fire Prone Property - Site**	**Site Hazards:** 1. Pines and other evergreens within 30 ft. of house. 2. Ladder Fuel 3. Flammables near the house

Slide 20	**What is Fire Prone Property** **- Site Access**	If the fire truck cannot reach the home, it cannot protect it from wildfire. 1. Long narrow driveways 2. Small turnarounds 3. Steep slopes
Slide 21	**What is Fire Prone Property** **- Structure**	Most homes are actually lost when a flurry of embers from a large wildfire land and collect on buildings. If the roof, siding and decks are wood they will ignite more readily. Wind-blown embers can collect under decks and in debris on roofs.
Slide 22	**What is Fire Prone Property** **- Fire Use Practices**	Open burning practiced on the property, recreational fire use or Indoor fireplaces without spark arrestors all can start fires.
Slide 23	**What you can do . . .** **. . . to reduce your risk** **Site**	Thin and prune pines can save a home from a wildfire. Also cut the grass and remove debris from the yard.
Slide 24	**What you can do . . .** **. . . to reduce your ris** **Site Access**	Widen the driveway and trim over hanging branches
Slide 25	**What you can do . . .** **. . . to reduce your risk** **Structure**	**Repair fire prone design** 1. Enclose decks 2. Replace flammable materials Fire rated shingles 3. Clean off roof and gutters 4. Move wood piles away from the house.
Slide 26	**What you can do . . .** **. . . to reduce your risk** **Burning Practices**	Use alternatives to open burning on site.
Slide 27	**Questions?**	**Contact:** Roger Ozburn Forestry Specialist Route 2, Box 1100 Fairmont, WV 26554 mrozburn@ma.rr.com (304) 367-2793