



Center for Urban Forest Research
PACIFIC SOUTHWEST RESEARCH STATION

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FireWise is the new computer tool to make your home safe

Davis, CA, August 23, 2004 – The USDA Forest Service, Center for Urban Forest Research today announced the release of a new computer model that will help residents protect their property from wildfire. “FireWise” is designed to show residents how they can make fire safety choices, while still enhancing the beauty of their property, retaining native vegetation, providing privacy, conserving water, and saving energy.

Forty-two million homes in the United States are located in the “wildland-urban interface,” where homes are at high risk from wildfire. If you are one of these homeowners, you already know that hundreds, sometimes thousands of these homes are lost to fires every year. Dr. Greg McPherson, Director of the Center for Urban Forest Research where this new tool was developed, points out that “most, if not all, of these homeowners were not just unlucky, they simply failed to prepare their property for an eventual fire. We wanted to develop something to help, and think this new computer tool will assist homeowners in deciding how fire safe they are and what they need to do about it.”

Research on wildland/urban interface fires has found that landscaping directly influences the loss of homes to fires. But it’s the pre-fire actions by individuals responsible for the design and maintenance of these private properties that can prevent disasters. Many agencies have developed guidance for improving the fire safety of properties in the wildland-urban interface, but as Dr. McPherson’s research suggests, this general guidance may conflict with the desires of an owner for the appearance of the home exterior, use of the land, views, privacy, and wildlife habitat.

The FireWise computer model allows users to place their home on the lot and interactively add, remove, grow and prune trees. They can then see the likelihood of their home burning as a bar turns from green (low), to yellow, to red (high), in response to changing amounts of radiant heat on the house. The fire behavior principles behind the software are based on research conducted at the National Institute of Standards and Technology. The FireWise software is written in Java by Earthview Computing for web application. WaterWise and EnergyWise modules will be available in the future, and will estimate impacts of vegetation placement on storm-water runoff, landscape water use, and energy use.

FireWise is available for use free of charge at www.ecoSmart.gov. This is Version 1.0. Stay tuned for future upgrades.

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