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Release No. FS- 0411

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## RESEARCH PAPER SUPPORTS FUEL TREATMENTS TO REDUCE WILDFIRE THREATS

**WASHINGTON**, April 28, 2004 – The U.S. Department of Agriculture Forest Service today released a new scientific report that illustrates the use of hazardous fuel treatments as an effective means to reduce the threat of catastrophic fire to communities. The study also found that these treatments improve and maintain forest health as called for in the President Bush's Healthy Forests Initiative.

"This report provides a valuable summary of our current knowledge on the relationship between forest structure and wildfire intensity," said Deputy Chief of Forest Service Research and Development Ann Bartuska. "This information can be used to design more effective fuel treatments."

More than 80 years of fire research have shown that physical setting, weather and fuels combine to determine wildfire intensity and severity. Of these three factors, fuels are the only ones that can be treated. "Science Basis for Changing Forest Structure to Modify Wildfire Behavior and Severity" focuses on the effectiveness of fuel treatments in forests in the western United States that historically experienced frequent, low-intensity fires. The report found that thinning brush and trees and conducting prescribed burns are necessary to reduce the likelihood of extreme wildland fires known as "crown" fires. In dense forests, a combination of prescribed fire and thinning is more effective than either method by itself.

"The effectiveness of treatments that alter fire behavior and how often these treatments need to be maintained will vary with forest type, climate, soils, landscape patterns and overall forest health and productivity," Bartuska said. "Despite these variations, the bottom line is that fuel treatments reduce the threat of intense fires."

According to the report, states maintaining treatments over time can restore forests to a more resilient condition and improve forests health, particularly in ponderosa pine and the drier Douglas-fir forests. Historically, frequent low-intensity fires cleared these forests types of brush and grass but left trees alive and healthy. Extreme fires were uncommon. By excluding fire from the natural cycle through decades of fire suppression, extended drought and other changes, the result is greater tree densities and a buildup of flammable vegetation across large areas of the forest landscape.

The build up of vegetation provides "ladders" for wildfire to climb into the tree tops. In areas where trees are densely packed, the fires can spread rapidly from tree-to-tree in a phenomenon known as "crowning." Crown fires are intense, fast moving and nearly impossible for fire fighters to contain. They threaten communities and damage key resources, including timber, fish and wildlife habitat, soils and drinking water quality.

Under President Bush's Healthy Forests Initiative, the federal land management agencies plan to reduce hazardous fuels on almost 4 million acres of forests and rangelands in 2004 compared to 2.8 million acres in 2003.

"Science Basis for Changing Forest Structure to Modify Wildfire Behavior and Severity" is a comprehensive report that includes data from other previously released peer-reviewed scientific reports published by the Rocky Mountain Research Stations. These reports studied the relationship between fuel treatments and wildfire behavior. The full report is available at <a href="http://www.fs.fed.us/rm/pubs/rmrs\_gtr120.html">http://www.fs.fed.us/rm/pubs/rmrs\_gtr120.html</a>T.