April 26, 2005

WILDLAND FIRE MANAGEMENT

Progress and Future Challenges, Protecting Structures, and Improving Communications

GAO Accountability•Integrity•Reliability

Highlights

Highlights of GAO-05-627T, a testimony before the Subcommittee on Public Lands and Forests, Committee on Energy and Natural Resources, U.S.Senate

Why GAO Did This Study

Wildland fires are increasingly threatening communities and ecosystems. In recent years, they have become more intense due to excess vegetation that has accumulated, partly as a result of past suppression efforts. The cost to suppress these fires is increasing and, as more people move into fire-prone areas near wildlands, the number of homes at risk is growing. During these wildland fires, effective communications among the public safety agencies responding from various areas is critical, but can be hampered by incompatible radio equipment.

This testimony discusses (1) progress made and future challenges to managing wildland fire, (2) measures to help protect structures, and (3) the role of technology in improving responder communications during fires. It is based on two GAO reports: *Wildland Fire Management: Important Progress Has Been Made, but Challenges Remain to Completing a Cohesive Strategy* (GAO-05-147, Jan. 14, 2005) and *Technology Assessment: Protecting Structures and Improving Communications during Wildland Fires* (GAO-05-380, Apr. 26, 2005).

What GAO Recommends

In its report, GAO recommended that the Departments of Agriculture and the Interior develop a plan for completing a cohesive strategy that identifies options and funding needed to address wildland fire problems. The departments agreed.

www.gao.gov/cgi-bin/getrpt?GAO-05-627T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Robin M. Nazzaro at (202) 512-3841 or nazzaror@gao.gov.

What GAO Found

Over the last 5 years, the Forest Service in the Department of Agriculture and land management agencies in the Department of the Interior, working with the Congress, have made important progress in responding to wildland fires. Most notably, the agencies have adopted various national strategy documents addressing the need to reduce wildland fire risks, established a priority to protect communities in the wildland-urban interface, and increased efforts and amounts of funding committed to addressing wildland fire problems. However, despite producing numerous planning and strategy documents, the agencies have yet to develop a cohesive strategy that identifies the long-term options and related funding needed to reduce excess vegetation that fuels fires in national forests and rangelands. Reducing these fuels lowers risks to communities and ecosystems and helps contain suppression costs. As GAO noted in 1999, such a strategy would help the agencies and the Congress to determine the most effective and affordable long-term approach for addressing wildland fire problems. Completing this strategy will require finishing several efforts now under way to improve a key wildland fire data and modeling system, local fire management planning, and a new system designed to identify the most cost-effective means for allocating fire management budget resources, each of which has its own challenges. Without completing these tasks, the agencies will have difficulty determining the extent and location of wildland fire threats, targeting and coordinating their efforts and resources, and resolving wildland fire problems in the most timely and cost-effective manner over the long term.

The two most effective measures for protecting structures from wildland fires are (1) creating and maintaining a buffer around a structure by eliminating or reducing trees, shrubs, and other flammable objects within an area from 30 to 100 feet around the structure and (2) using fire-resistant roofs and vents. Other technologies—such as fire-resistant building materials, chemical agents, and geographic information system mapping tools—can help in protecting structures and communities, but they play a secondary role. Many homeowners, however, are not using the protective measures because of the time or expense involved, competing values or concerns, misperceptions about wildland fires, or lack of awareness of their shared responsibility for home protection. Federal, state, and local governments and others are attempting to address this problem through a variety of educational, financial assistance, and regulatory efforts.

Technologies exist and others are being developed to address communications problems among emergency responders using different radio frequencies or equipment. However, technology alone cannot solve this problem. Effective adoption of these technologies requires planning and coordination among federal, state, and local agencies involved. The Department of Homeland Security, as well as several states and local jurisdictions, are pursuing initiatives to improve communications.