UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF INSPECTOR GENERAL

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Good morning, Chairman Bingaman, Ranking Member Domenici, and Members of the Committee. Thank you for inviting me to testify before you today to discuss our recent audits pertaining to the U.S. Forest Service's (FS) Healthy Forest Initiative (HFI) and Large Fire Suppression Costs. The Office of Inspector General (OIG) devotes extensive audit and investigative resources to evaluate and improve the Department of Agriculture's (USDA) management of its public assets and resources, including FS and its National Forest System (NFS) lands. We are committed to conducting reviews of FS programs and activities to assist agency officials and Members of this Committee in their respective administrative and legislative oversight responsibilities.

USDA, through FS, is responsible for the management of our Nation's national forests and grasslands. FS oversees these lands through 155 national forests and 20 grasslands. Wildfires on FS lands are becoming larger and more expensive to extinguish. From fiscal year (FY) 2000 to 2006, FS suppression costs averaged \$900 million annually and exceeded \$1 billion in 4 of those 7 years. In some years, FS has had to borrow funds from other programs to pay for its wildfire suppression activities, and this has adversely affected FS' ability to accomplish work in other areas.

We recently completed two audits that evaluated FS efforts to reduce the threat of wildfires. Our first audit evaluated FS implementation of the HFI. One of the primary goals of this initiative is to reduce the threat of wildfire by removing hazardous fuels from areas in national forests that constitute the greatest threats of catastrophic fire. Our second audit evaluated the controls FS had in place to contain wildfire suppression costs.

In both audits, FS agreed to take action on all our recommendations. Summarized below are the results of each audit.

I. IMPLEMENTATION OF THE HEALTHY FORESTS INITIATIVE

FS manages more than 192 million acres in the NFS. The agency has estimated that 73 million acres of this land and 59 million acres of privately owned forest land are at high risk of ecologically destructive wildland fire. One of the most extensive and serious problems related to the health of national forests is the over-accumulation of dead vegetation that can fuel fires. The increase in the amount of hazardous fuels is the result of several major factors. First, extended drought conditions have significantly increased the amount of unhealthy or dead forests and vegetation. Second, widespread disease and insect infestations have killed or affected the health of large areas of national and private forestland. Third, past fire suppression practices of the Federal, State, and local governments, companies, and individuals have prevented the natural use of wildland fire (Wildland Fire Use – WFU) to reduce accumulated forest vegetation. It has been estimated by some FS managers that hazardous fuels are accumulating three times as fast as they can be treated. The accumulation of hazardous fuels has contributed to an increasing number of large, intense, and catastrophically destructive wildfires. Reducing the buildup of hazardous fuels is crucial to reducing the extent, severity, and costs of wildfires.

We focused our audit work on the agency's hazardous fuels reduction program because more than half of FS' funding under the HFI is allocated for this purpose. For FY 2005 and 2006, the FS budget for hazardous fuels reduction was approximately \$262 million and \$281 million, respectively. Specifically, our audit evaluated FS management controls related to (1) determining if projects were cost beneficial, (2) identifying and prioritizing projects, (3) allocating funds among projects, and (4) reporting accomplishments. The following are the major issues identified in our audit.

Assessment of Risk

At the time of our audit, we found that FS lacked a consistent analytical process for assessing the level of risk that communities faced from wildland fire and determining if a hazardous fuels project would be cost beneficial. FS had not developed specific national guidance for weighing the risks against the benefits of fuels treatment and restoration projects.

In order to allocate resources most effectively, it is important for FS to be able to identify which communities and what NFS resources are at risk. FS needs to be able to determine the level of risk for significant and destructive wildland fires throughout the NFS and what the potential benefit or payback would be from conducting a specific fuels reduction project. While we agreed with FS that a traditional cost benefit analysis would be impractical, we concluded that FS could develop a set of criteria to compare the relative degrees of exposure and risk to wildland fire that each community faces. The assessment should include a measure of the benefits and/or consequences of selecting one project over another for treatment. Currently, FS' nine regions each have different ways of

identifying priorities. At the time of our audit, FS could not adequately compare hazardous fuels reduction projects among regions. This affects the ability to identify, on a national basis, those projects that should be funded and completed first. While some areas or communities may be at high risk from wildfires, it may not be effective for FS to spend large sums of money on hazardous fuels reduction projects if the communities have not enacted and enforced rigorous building and zoning regulations, otherwise known as "Firewise" regulations. A community's lack of "Firewise" regulations could significantly reduce the effectiveness of any effort by FS to reduce hazardous fuels around the community. FS officials believe that the new LANDFIRE system being developed will provide more accurate nationwide data so that they can better define and identify areas where fuels treatment would be most cost beneficial.

Prioritizing and Funding Projects

FS also did not have the ability to ensure that the highest priority fuels reduction projects were funded first. Because projects were not prioritized under uniform, national criteria, there was no systematic way to allocate funds to the most critical projects. Funds were allocated based upon a region's historical funding levels and targets for number of acres to be treated that are set by the FS Headquarters office in Washington, D.C. There were no controls in place to prevent funds from being allocated to projects in order to achieve targets of acres treated instead of reducing the most risk. This could lead to less important projects being funded.

We recommended that FS develop and implement specific national guidance for assessing the risks wildland fires present to residents and communities and determining the comparative value and benefit of fuels treatment/restoration projects. We also recommended that FS establish controls to ensure that the process and methodology to identify and prioritize the most effective fuels reduction projects can be utilized at all levels to ensure funds are distributed according to the priority of the projects. This process should have uniformity (and comparability) from the local level (districts) through to the Headquarters office and across geographic boundaries (i.e. among regions).

Performance Measures and Reporting Standards

We found that FS performance measures and reporting standards did not provide adequate information to evaluate the effectiveness of a fuel treatment practice. They did not communicate to either FS managers or other stakeholders whether the treatment of an acre of forest had resulted in changing its condition class ¹ or if the project reduced the risk from catastrophic wildland fire. The agency's focus has been on achieving firm annual targets (output) that are measured in the number of acres treated. However, these acres are not homogenous, meaning that some acres of hazardous fuels create much more risk to communities and resources than others. Reporting the number of acres treated did not communicate the amount of risk that has been reduced. Focusing only on acres

¹ The fire-regime condition class is an expression of the departure of the current condition from the historical fire regime resulting in alterations to the ecosystem. A condition class is measured as a 1, 2, or 3, with 3 being the most significant departure from the historical fire regime. Activities that cause the departure include fire exclusion, timber harvesting, grazing, growth of exotic plant species, insects, and disease.

treated does not communicate key information on the effectiveness of the treatment practice. In addition, hazardous fuels accomplishment reports did not provide detailed information to evaluate the overall progress of the program; details such as the location of treatments, changes in condition class, and initial or maintenance treatments are not reported.

We recommended that FS develop and implement a more meaningful and outcomeoriented performance measure for reporting metrics, such as acres with "risk reduced" or "area protected." Also, FS should direct that implementing effective integrated treatments are more important than solely meeting acreage targets. We also recommended that FS improve accomplishment reporting by including more detailed information, such as breaking down accomplishments by region, noting changes in condition class, and differentiating between initial and maintenance treatments and multiple treatments on the same acres.

FS agreed with our audit findings and recommendations and has committed to take action on them.

II. LARGE FIRE SUPPRESSION COSTS

As part of the agency's ongoing effort to contain wildfire suppression costs and increase the Wildland Fire Management Program's accountability, FS senior management requested that OIG evaluate FS' controls over its wildfire suppression costs. FS wanted OIG to take an objective and unbiased look at FS' current large fire management practices. Our primary objective was to evaluate the controls FS had in place to contain wild fire suppression costs. Specifically, we sought to (1) determine whether FS ensured non-Federal entities paid an equitable share of wildfire suppression costs, (2) evaluate whether wildland fire use (i.e. the management of naturally ignited wildland fires to accomplish specific management objectives like fuels reduction) was optimized, and (3) assess the cost effectiveness of FS wildfire suppression activities.

Suppression Costs Driven by Efforts to Protect Private Property

The Federal Wildland Fire Management Policy of 1995 and its 2001 update direct Federal fire management agencies, including FS, to safely suppress wildfires on Federal lands at minimum cost considering the relative values of property and natural resources at risk.² The Federal Wildland Fire Management Policy also makes State and local governments responsible for protecting structures within the Wildland Urban Interface (WUI)³ from fire.

We found that the majority of FS' large fire suppression costs are directly linked to protecting private property in the WUI. The number of private homes being built in the WUI is increasing each year. The Federal Government has little or no control over this property development that has a major impact on FS fire suppression costs. Much of this development is basically unregulated from a fire protection standpoint. Many

 $^{^2}$ The Federal Wildland Fire Management Policy, chartered in 1994 by the Secretaries of the Interior and Agriculture, provides the foundation for Federal interagency fire management activities.

³ The WUI is the area where structures and other human development meet or intermingle with undeveloped wildland. Wildland urban interface is any area containing human developments, such as a rural subdivision, that may be threatened by wildland fires.

communities have few or no regulations mandating the use of fire resistant building materials or establishing/maintaining fire safe areas around structures. FS suppression costs are likely to continue to rise because current public expectations and uncertainties among Federal, State, and local fire management agencies about fire protection roles and responsibilities compel FS to suppress fires when private property is at risk, even when fires pose little threat to NFS lands. Giving natural resource protection an equal priority to private property protection in the WUI (or conducting any sort of cost/benefit analysis) is considered by FS managers to be politically infeasible.

Although the Federal Wildland Fire Management Policy makes State and local governments primarily responsible for protecting structures in the WUI, FS managers have not renegotiated their agreements with State and local governments to apportion responsibilities and costs as required. State and local governments control building and zoning in the WUI. However, protection areas have not been redefined to reflect State and local governments' responsibilities accompanying this growth. FS managers continue to make it a priority to protect private property over natural resources. Consequently, FS WUI protection expenditures have increased rather than decreased. In FY 2003 and 2004, about 87 percent of the large wildfires we reviewed identified protecting private property as a major strategy objective for the suppression effort.⁴ Some FS managers estimate that between 50 to 95 percent of large wildfire costs borne by the agency are directly related to protecting private property in the WUI. Based on

⁴ Based on an analysis of 37 wildfires occurring in 2003 and 2004 with suppression costs exceeding \$5 million each.

these estimates, FS spent as much as \$1 billion during those 2 years protecting private properties in the WUI. ⁵

To ensure that the burden of protecting property in the WUI is shared equitably among the Federal, State, and local entities involved, we recommended that FS seek clarification from Congress as to the responsibilities of both FS and its non-Federal partners to protect private properties threatened by wildfires. FS should renegotiate wildfire protection agreements as appropriate. The Federal Government should also find ways to encourage State and local governments to enact and vigorously enforce "Firewise" building and zoning codes.

Use of Wildland Fire Should Be Expanded To Control Costs of Future Fires

Wildland fire use (WFU)⁶ lets naturally occurring fires burn accumulated hazardous fuels that increase the likelihood of large expensive wildfires. Naturally occurring forest fires can also be beneficial for forest and plant health by returning the forests back to their natural state. To control the risk of costly, catastrophic wildfires, the Federal Wildland Fire Management Policy specifies that FS give WFU and fire suppression equal consideration. However, existing FS firefighting policies and the lack of qualified WFU personnel restrict FS managers from doing so.

⁵ This calculation is based on our characterization of "large wildfires" as those exceeding \$1 million as recorded in FS' financial information system.

⁶ WFU is the management of naturally ignited wildland fires to accomplish specific resource management objectives such as fuels reduction in pre-defined geographic areas outlined in fire management plans.

Under current FS fire policies, FS can manage a fire for either WFU or suppression. Once a fire has been fought for suppression, it may not again be managed for WFU. Concerns that a natural fire could potentially escape FS control if not suppressed and the protection expectations of private landowners in nearby communities result in most NFS fires being treated initially as suppression. Many potentially beneficial fires may be suppressed because of the restriction on switching firefighting management objectives. Of the almost 80,000 natural ignitions that occurred on FS land from 1998 through 2005, approximately 1,500 – only 2 percent – were allowed to burn as WFU. In addition, FS managers have access to far fewer teams for WFU (7) than teams for suppression (55). FS estimates it needs to have 300 fire use managers to be able to select WFU as a strategy for all eligible fires.⁷ At the time of our audit, the agency had only 83 fire use managers.

The restrictive policies and lack of qualified personnel contribute to the overwhelming predisposition for FS to suppress fires rather than let them burn as WFU. Consequently, FS may have missed opportunities to reduce the hazardous fuels that contribute to large, expensive fires and may have unnecessarily spent millions of dollars suppressing wildland fires.

To address the need to optimize wildland fire use, we recommended that FS modify current policies to allow (1) concurrent management of wildland fires for both WFU and suppression, (2) transition between WFU and suppression, and (3) management of wildfire suppressions to accomplish fuel reductions. We also recommended that FS

⁷ Eligible fires are those that meet the specific WFU criteria established by each national forest.

prioritize funding to accomplish the staffing and training changes needed to implement an expanded WFU program.

FS Cost-Containment Controls Need To Be Strengthened

FS has developed internal controls to strengthen financial accountability for line officers and incident commanders. However, we found that the cost-effectiveness of managers' and incident commanders' decisions and oversight were neither tracked during the fire nor evaluated afterwards. In addition, the agency's performance measures and reporting mechanisms did not adequately allow FS management to assess the effectiveness of its wildfire suppression cost-containment efforts, because the information FS summarized at the end of each fire season lacked essential data (such as the kinds of critical infrastructure or natural resources lost or saved) that policymakers need to evaluate FS suppression activities in relation to the monies spent.

We also determined that FS national and regional wildfire cost-containment reviews have limited effectiveness in identifying and correcting suppression cost inefficiencies because they (1) did not sufficiently address large cost factors such as the selection of suppression alternatives and the effectiveness of tactics, (2) did not help to improve performance because identified problems were not communicated to affected parties and corrected, and (3) did not occur with sufficient frequency.

We recommended that FS (1) develop a reporting mechanism to gather and summarize more meaningful wildfire suppression information, (2) increase the accountability of line

officers and incident commanders by incorporating into their evaluations an assessment of strategic and tactical cost-effectiveness, and (3) formalize newly developed wildfire cost assessment review procedures in FS directives and provide training to FS staff that perform the reviews.

In summary, we concluded that FS' escalating cost to fight fires is largely due to its efforts to protect private property in the WUI bordering FS lands. Homeowner reliance on the Federal Government and the lack of "Firewise" building and zoning regulations results in an enormous financial burden on FS as it suppresses wildland fires. Efforts to reduce these costs need to include more equitably sharing the burden with State and local governments who have the authority to regulate growth in the WUI. In order to help reduce future costs, FS needs to revise policies that limit or restrict WFU. FS also needs to improve the accountability of its line officers and incident commanders and improve the effectiveness of its large fire reviews.

FS has agreed with our findings and recommendations and has already begun discussions regarding appropriate incentives to encourage States to enter into equitable protection agreements. The agency has advised OIG that it will expand these discussions to include its Federal wildland fire management partners and the Office of Management and Budget. Any agreed upon incentives will be included in national directives so that they will be considered as each region renegotiates agreements with States. FS has already taken steps to accomplish the needed staffing and training recommended so that more

people can be qualified and available for critical positions to manage WFU events on incident command teams.

I want to express my sincere thanks to FS officials and employees for the assistance and considerable cooperation they extended to OIG during these two audits. FS faces many difficult programmatic issues and natural resource challenges as it strives to provide good stewardship of America's national forests. OIG's management and staff greatly appreciate the admirable but frequently uncredited work that FS employees perform on a daily basis to preserve and enhance our precious national forests.

This concludes my testimony. Thank you again for inviting me to testify before the Committee. I would be pleased to address any questions you may have.