

Report to Congressional Requesters

January 2002

SEVERE WILDLAND FIRES

Leadership and Accountability Needed to Reduce Risks to Communities and Resources



Contents

Letter		1			
	Results In Brief	3			
	Background	5			
	The Federal Effort to Reduce Hazardous Fuels Lacks Clearly	0			
	Defined and Effective Leadership	6			
	Little Progress Made In Implementing a Sound Performance Accountability Framework to Spend Funds Appropriated to				
	Reduce Hazardous Fuels Effectively	11			
	Data Are Not Available to Make Informed Decisions and to				
	Measure Progress				
	Conclusions	21 24			
	Matters for Congressional Consideration	25			
	Recommendation for Executive Action	25			
	Agency Comments and Our Evaluation	26			
	Scope and Methodology	28			
Appendix I	Comments From the Departments of the Interior				
	and Agriculture	32			
Appendix II	Objectives, Scope, and Methodology	38			
Appendix III	GAO Contacts and Staff Acknowledgments	41			
	GAO Contacts	41			
	Acknowledgments	41			
Tables					
	Table 1: Funds Appropriated to Reduce Hazardous Fuels on				
	Federal Lands, Fiscal Years 1998- 2002	6			
Figures					
riguics					
	Figure 1: Entities Established by Interior and Agriculture to				
	Coordinate Hazardous Fuels Reduction and Other Key	0			
	Elements of the National Fire Plan	8			

Figure 2: Proposed National Wildland Fire Policy Implementation	
Council	10
Figure 3: Location of Major Wildland Fires During the 2000	
Wildland Fire Season	16
Figure 4: Number of Communities by State Identified by Interior as	
Being at Highest Risk from Wildland Fire	16



United States General Accounting Office Washington, DC 20548

January 31, 2002

Congressional Requesters

Human activities—especially the federal government's decades-old, well-intended policy of suppressing all wildland fires, including naturally occurring ones—have resulted in dangerous accumulations of brush, small trees, and other hazardous vegetation on federal lands, especially in the dry, lower-elevation, fire-adapted regions of the interior western United States. This vegetation has increasingly provided fuel for large, intense (severe) wildland fires.

The 2000 wildland fire season was one of the worst in 50 years. The scale and intensity of the fires capped a decade that was characterized by dramatic increases not only in the number of severe wildland fires, but also in the costs associated with suppressing them. These fires have also posed increasing risks to communities in the wildland-urban interface—areas where human development meets or intermingles with undeveloped wildland—as well as to municipal watersheds and individual resources, such as threatened and endangered species, clean water, and clean air.

To respond to the wildland fires in 2000, then-President Clinton requested, and the Secretaries of the Interior and Agriculture submitted, a September 8, 2000, report on managing the impact of wildland fires on communities and the environment. This report together with the accompanying budget request; Congressional direction accompanying substantial new appropriations for wildland fire management for fiscal year 2001; and resulting strategies, plans, projects, and other activities have become known as the National Fire Plan. In addition, the 1995 Federal Wildland Fire Management Policy, updated in 2001, provides the philosophical and

¹ Managing the Impact of Wildfires on Communities and the Environment, A Report to the President In Response to the Wildfires of 2000, Secretaries of the Interior and Agriculture (Sept. 8, 2000).

² Federal Wildland Fire Management Policy and Program Review, Report to the Secretaries of the Interior and of Agriculture by the Federal Wildland Fire Management Policy and Program Review Steering Group (Dec. 18, 1995).

³ Review and Update of the 1995 Federal Wildland Fire Management Policy, Report to the Secretaries of the Interior, of Agriculture, of Energy, of Defense, and of Commerce; the Administrator, Environmental Protection Agency; and the Director, Federal Emergency Management Agency, by an Interagency Federal Wildland Fire Policy Review Working Group (Jan. 2001).

policy foundation for hazardous fuels reduction as well as for other federal interagency wildland fire management activities conducted under the National Fire Plan.

The National Fire Plan advocates a new approach to wildland fires. This approach shifts emphasis from reactive to proactive—from attempting to suppress wildland fires to reducing the buildup of hazardous vegetation that fuels severe fires. The Plan recognizes that, unless hazardous fuels are reduced, the number of severe wildland fires and the costs associated with suppressing them will continue to increase.

Reducing the buildup of hazardous vegetation that fuels severe fires requires primarily vegetation management, including fires set by federal land managers (prescribed fires), mechanical thinning, and timber harvesting. On federal lands, these activities are conducted primarily by five agencies—the National Park Service, the Fish and Wildlife Service, the Bureau of Land Management, and the Bureau of Indian Affairs within the Department of the Interior, and the Forest Service within the Department of Agriculture.

Prior to fiscal year 1998, the administration did not request, and the Congress did not appropriate, funds specifically for hazardous fuels reduction. For fiscal years 1998 through 2000, funds requested and appropriated specifically for these activities totaled less than \$93 million a year. For fiscal year 2001, the Clinton administration requested a substantial increase, and the Congress appropriated \$401 million to reduce hazardous fuels. For fiscal year 2002, the Congress appropriated another \$395 million for hazardous fuels reduction. Congressional committees have also recognized the need to sustain increased funding for hazardous fuels reduction in future fiscal years.

Because the Congress is prepared to fund an aggressive, multi-year campaign to reduce hazardous fuels, it is imperative that the five federal land management agencies receiving these funds act quickly to develop the leadership and performance accountability framework to spend the funds in an efficient, effective, and timely manner. In this report we discuss (1) the need for clearly defined and effective leadership to reduce the buildup of hazardous vegetation that fuels severe wildland fires, (2)

⁴ See Reducing Wildfire Threats: Funds Should Be Targeted to the Highest Risk Areas (GAO/T-RCED-00-296, Sept. 13, 2000).

the progress that the five federal land management agencies have made in implementing a sound performance accountability framework to spend effectively the funds appropriated for hazardous fuels reduction, and (3) the availability of data on which to make informed decisions and to measure progress.

Results In Brief

Our work has shown that a single focal point is critical for efforts—such as reducing severe wildland fires and the vegetation that fuels them—that involve many federal agencies as well as state and local governments, the private sector, and private individuals. However, over a year after the Congress substantially increased funds to reduce hazardous fuels, the federal effort still lacks clearly defined and effective leadership. Rather than a single focal point, authority and responsibility remain fragmented among Interior, the Forest Service, and the states. In a December 2001 report for the Department of the Interior, the National Academy of Public Administration recommended that, to provide the required leadership, the Secretaries of the Interior and of Agriculture should establish an interagency national council to implement the Federal Wildland Fire Management Policy as well as hazardous fuels reduction and other key elements of the National Fire Plan, such as fire suppression.

A sound framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner is needed. Such a framework is grounded in federal wildland fire management policies, the National Fire Plan, and Congressional direction. This framework includes, among other things, (1) consistent criteria to identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fires; (2) clearly defined and outcome-oriented goals and objectives, as well as quantifiable long-term and annual performance measures, to assess progress in reducing the risks of severe wildland fires in wildland-urban interface areas as well as in other areas; (3) a comprehensive long-term strategy that incorporates the criteria, goals, objectives, and measures; and

⁵ Managing Wildland Fire: Enhancing Capacity to Implement the Federal Interagency Policy, A Report by a Panel of the National Academy of Public Administration for the United States Department of the Interior (Dec. 2001).

⁶ The National Academy of Public Administration is an independent, nonprofit organization chartered by the Congress in 1967 to improve governance at all levels—local, regional, state, national, and international.

(4) yearly performance plans and reports. However, just as leadership for reducing hazardous fuels is fragmented among Interior, the Forest Service, and the states, so too is implementation of a performance accountability framework. As a result, (1) high-risk communities have not been identified and prioritized, (2) multiple strategies have been developed with different goals and objectives, (3) quantifiable indicators of performance have not been developed to measure progress in reducing risks, and (4) annual plans and reports that have been developed do not describe what will be accomplished with the appropriated funds. Therefore, it is not possible to determine if the \$796 million appropriated for hazardous fuels reduction in fiscal years 2001 and 2002 is targeted to the communities and other areas at highest risk of severe wildland fires.

Federal land management agencies do not have adequate data for making informed decisions and measuring the agencies' progress in reducing hazardous fuels. These processes require accurate, complete, and comparable data. The infusion of hundreds of millions of dollars of new money for hazardous fuels reduction activities for fiscal years 2001 and 2002 and the expectation of sustained similar funding for these activities in future fiscal years accentuate the need for accurate, complete, and comparable data. However, the five federal land management agencies have not initiated the research needed to better identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from wildland fire. Moreover, the agencies are not collecting the data required to determine if changes are needed to expedite the project-planning process. They are also not collecting the data needed to measure the effectiveness of efforts to dispose of the large amount of brush, small trees, and other vegetation that must be removed to reduce the risk of severe wildland fire.

We agree with the National Academy of Public Administration that an interagency national council is needed to provide the strategic direction, leadership, coordination, conflict resolution, and oversight and evaluation necessary to ensure that funds appropriated to implement the hazardous fuels reduction, as well as other elements of the National Fire Plan, are spent in an efficient, effective, and timely manner. However, even though the September 2000 National Fire Plan—prepared at the request of the President of the United States—directed them to establish a similar Cabinet-level coordinating team, the Secretaries of the Interior and of Agriculture have not done so. Therefore, we suggest that the Congress consider directing the Secretaries to immediately establish the council. In addition, we suggest that the Congress consider directing the Secretaries to consolidate under the council the current fragmented implementation

of a sound performance accountability framework. We also recommend that the Secretaries of the of the Interior and Agriculture gather the data to make more informed decisions and to measure the agencies' progress in reducing hazardous fuels. The departments of Agriculture and the Interior generally agreed with our recommendations. However, they were concerned that we had not given them enough credit for several actions taken or underway related to enhancing interagency leadership; establishing a framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner; and undertaking adequate research and data collection efforts. Where appropriate, we have included reference to these activities.

Background

The federal government's share of the nation's total surface area, is now about 29 percent. Today, four agencies—the National Park Service, the Fish and Wildlife Service, and the Bureau of Land Management within the Department of the Interior and the Forest Service within the Department of Agriculture—manage about 655 million acres, or 96 percent of all federal lands. In addition, Interior's Bureau of Indian Affairs manages another 55 million acres. Most federal lands in the 48 contiguous United States are located in 11 western states.

Primarily as a result of human activities, ecological conditions on 211 million acres—or almost one-third of all federal lands and about 10 percent of the nation's total surface area—continue to deteriorate. According to a 2001 update of federal wildland fire management policy, these ecological conditions have increased "the probability of large, intense fires beyond any scale yet witnessed." A 1994 report on wildland fire disasters states that these fires "will periodically and tragically overwhelm our best efforts at fire prevention and suppression." Coupled with the explosive growth of people and structures in the wildland-urban interface, these fires have, in turn, increased the risks to communities, watersheds, ecosystems, and species. They have also placed in jeopardy

⁷ See *Review and Update of the 1995 Federal Wildland Fire Management Policy*, Report to the Secretaries of the Interior, of Agriculture, of Energy, of Defense, and of Commerce; the Administrator, Environmental Protection Agency; and the Director, Federal Emergency Management Agency, by an Interagency Federal Wildland Fire Policy Review Working Group (Jan. 2001).

⁸ See *Report of the National Commission on Wildfire Disasters* (1994). The National Commission on Wildfire Disasters was established on May 9, 1990, by the Wildfire Disaster Recovery Act of 1989 (Pub. L. No. 101-286).

the lives of the public as well as the lives of the firefighters charged with controlling or suppressing them.

For fiscal years 1998 through 2002, the administration has requested and the Congress has appropriated funds to the five major federal land management agencies specifically to reduce hazardous fuels on federal lands. (See table 1.) Each of the agencies then allocates the funds through their individual organizational structures to their field units.

Table 1: Funds Appropriated to Reduce Hazardous Fuels on Federal Lands, Fiscal Years 1998- 2002

Dollars in millions					
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Agency	Actual	Actual	Actual	Actual	Est.
Forest Service	\$50.0	\$67.0	\$70.0	\$205.6	\$209.0
Bureau of Land Management	6.7	10.6	12.3	91.7	86.3
National Park Service	7.0	9.8	9.7	36.1	34.6
Fish and Wildlife Service	4.1	7.4	7.1	24.5	23.7
Bureau of Indian Affairs	2.3	6.3	8.8	43.1	41.5
Total	\$70.1	\$101.1	\$107.9	\$401.0	\$395.2

Source: GAO analysis of data provided by the Forest Service and the Department of the Interior.

The Federal Effort to Reduce Hazardous Fuels Lacks Clearly Defined and Effective Leadership Our work has shown that a single focal point is critical for efforts—such as reducing severe wildland fires and the vegetation that fuels them—that involve many federal agencies as well as state and local governments, the private sector, and private individuals. However, over a year after the Congress substantially increased funds to reduce hazardous fuels, the federal effort still lacks clearly defined and effective leadership. Rather than a single focal point, authority and responsibility remain fragmented among Interior, the Forest Service, and the states.

In a December 2001 report, a panel of the National Academy of Public Administration (NAPA) concluded that an interagency national council is needed to implement both the Federal Wildland Fire Management Policy

⁹ For example, we have observed that the federal government's efforts to combat terrorism have suffered because there is no single leader in charge of the many functions conducted by different federal departments and agencies.

and the National Fire Plan. Therefore, NAPA recommended that the Secretaries of the Interior and Agriculture immediately form and empower such a council.

Rather Than a Single Focal Point, Leadership and Management Are Fragmented

To be accountable for reducing hazardous fuels and other key elements of the National Fire Plan, the plan directed the Secretaries of the Interior and of Agriculture to "establish a Cabinet-level coordinating team to ensure that the actions recommended by the Departments receive the highest priority." However, rather than establish one Cabinet-level coordinating entity, the Secretaries established two separate entities.

In January 2001, the Secretary of the Interior established the Office of Wildland Fire Coordinator to coordinate and integrate the fire management programs of the Department's four land management agencies as well as the related activities of two other Interior agencies—the U.S. Geological Survey and the Bureau of Reclamation. That same month, the Secretary of Agriculture established a National Fire Plan Implementation Team headed by a National Fire Plan Coordinator. The coordinator and team are to work with stakeholders to achieve the goals of the National Fire Plan by assisting them in developing work plans, budgets, accomplishment reports, and operating principles.

In September 2001, Interior's Office of Wildland Fire Coordinator organized a Wildland Fire Steering Group consisting of representatives from Interior's four land management agencies. A representative from the Forest Service's National Fire Plan Implementation Team serves as an advisory member. The group is to "provide leadership and oversight for the fuels management program" and unite Interior's agencies and programs under the common purpose of reducing risks to communities and improving land health.

Figure 1 depicts the entities established by Interior and Agriculture to coordinate hazardous fuels reduction and other key elements of the National Fire Plan.

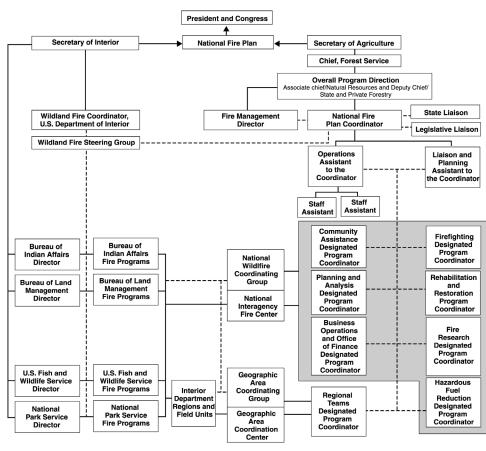


Figure 1: Entities Established by Interior and Agriculture to Coordinate Hazardous Fuels Reduction and Other Key Elements of the National Fire Plan

Source: Managing Wildland Fire: Enhancing Capacity to Implement the Federal Interagency Policy, A Report by a Panel of the National Academy of Public Administration for the United States Department of the Interior (Dec. 2001).

In addition to the three coordination entities established within Interior or Agriculture, the Western Governors' Association in September 2000 established a fourth coordination entity. This entity—composed of stakeholders from all levels of government, tribal interests, conservation and commodity groups, and community-based restoration groups—has

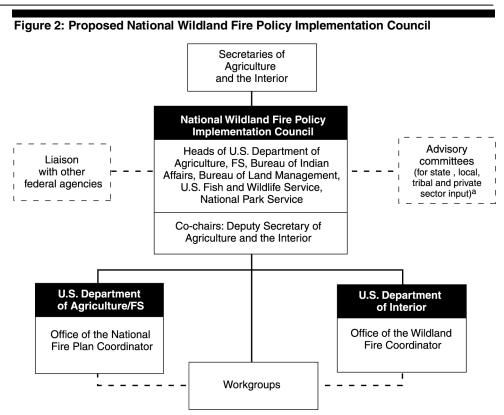
¹⁰ The Western Governors' Association is an independent non-partisan organization of governors from 18 western states as well as two territories and a commonwealth in the Pacific. Its mission is to identify and address key policy and governance issues in the West, advance the role of Western states in the federal system, and strengthen the social and economic fabric of the region.

assumed roles and responsibilities similar to those of the other three coordination entities. For example, the coordination entity established by the Western Governors' Association has developed a 10-year strategy for reducing wildland fire risks to communities and the environment¹¹ and is developing a plan to implement its strategy. However, the Secretaries of the Interior and of Agriculture have not delegated clear authority to any of the four groups to implement the National Fire Plan, including hazardous fuels reduction, or to unite the agencies' programs to reduce risks to communities and improve land health.

The National Academy of Public Administration Has Proposed Establishing a Single Focal Point

NAPA's December 200l report for the Department of the Interior observed that (1) the current approach to coordinate the implementation of the Federal Wildland Fire Management Policy and the National Fire Plan is not working and (2) a coordinated interagency, intergovernmental, and interdisciplinary approach is needed to implement the policy and the plan. The report evaluated a wide variety of options for establishing and locating an effective interagency coordination entity. These options ranged from establishing a typical interagency coordination committee to creating a wildland fire czar or combining the five federal land management agencies into a new Department of Natural Resources. NAPA concluded that a National Wildland Fire Policy Implementation Council was needed to implement both the policy and the plan. Therefore, NAPA recommended that the Secretaries of the Interior and Agriculture immediately form and empower such a council. (See figure 2.)

¹¹ A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy, (Aug. 2001).



Source: Managing Wildland Fire: Enhancing Capacity to Implement the Federal Interagency Policy, A Report by a Panel of the National Academy of Public Administration for the United States Department of the Interior (Dec. 2001).

According to NAPA, this council should (1) consist of the heads of the five federal land management agencies and the respective deputy secretary in both Interior and Agriculture; (2) have adequate, permanent, interdisciplinary staff in both departments to support the work of the council as well as implementation of the policy and the plan; (3) be advised by a committee composed of states and other nonfederal parties; and (4) seek advice and active participation in implementing the policy and plan from other federal agencies. However, according to NAPA, if the council cannot ensure effective implementation of the policy and plan within 3 years, "it would be advantageous to find ways to make the Council a more unified operation."

Little Progress Made
In Implementing a
Sound Performance
Accountability
Framework to Spend
Funds Appropriated
to Reduce Hazardous
Fuels Effectively

A sound framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner is needed. Such a framework is grounded in federal wildland fire management policies, the National Fire Plan, and Congressional direction. This framework includes, among other things, (1) consistent criteria to identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fires; (2) clearly defined and outcome-oriented goals and objectives, as well as quantifiable long-term and annual performance measures, to assess progress in reducing the risks of severe wildland fires in wildland-urban interface areas as well as in other areas; (3) a comprehensive long-term strategy that incorporates the criteria, goals, objectives, and measures; and (4) yearly performance plans and reports.

However, just as leadership for reducing hazardous fuels is fragmented among Interior, the Forest Service, and the states, so too is implementation of a performance accountability framework. As a result, (1) high-risk communities have not been identified and prioritized, (2) multiple strategies have been developed with different goals and objectives, (3) quantifiable indicators of performance have not been developed to measure progress in reducing risks, and (4) annual plans and reports that have been developed do not describe what will be accomplished with the funds appropriated for hazardous fuels reduction. Therefore, it is not possible to determine if the \$796 million appropriated for hazardous fuels reduction in fiscal years 2001 and 2002 is targeted to the communities and other areas at highest risk of severe wildland fires.

A Sound Performance Accountability Framework

The Federal Wildland Fire Management Policy provides the philosophical and policy foundation for hazardous fuels reduction as well as for other federal interagency wildland fire management activities conducted under the National Fire Plan. In addition, the acts making appropriations to Interior and the Forest Service for fiscal years 2001 and 2002 and their legislative histories provide clear direction to the five federal land

¹² See Western National Forests: Catastrophic Wildfires Threaten Resources and Communities (GAO/T-RCED-98-273, Sept. 28, 1998), Western National Forests: Nearby Communities Are Increasingly Threatened by Catastrophic Wildfires (GAO/T-RCED-99-79, Feb. 9, 1999), Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats (GAO/RCED-99-65, Apr. 2, 1999), and Western National Forests: Status of Forest Service's Efforts to Reduce Catastrophic Wildfire Threats (GAO/T-RCED-99-241, June 29, 1999).

management agencies concerning funding priorities related to reducing hazardous fuels. The Government Performance and Results Act of 1993 (the Results Act) provides a framework that can be used to implement the Federal Wildland Fire Management Policy, the National Fire Plan, and the Congressional direction.

Wildland Fire-Specific Policy and Congressional Direction

Severe wildland fires and the vegetation that fuels them do not recognize the administrative boundaries of the individual federal land management agencies or the boundaries between federal and nonfederal lands. To address this challenge, the Federal Wildland Fire Management Policy calls for federal agencies to develop a uniform, national federal wildland fire management process to enhance efficient and effective management across administrative boundaries on a landscape scale.¹³

Toward this end, the policy urges coordination, consistency, and agreement not only among the five federal land management agencies but also between these agencies and other federal agencies as well as state, tribal, and private stakeholders. It stresses the need for these parties to jointly (1) develop clearly defined fire management goals and objectives, (2) establish consistent criteria for evaluating ecosystem conditions in order to prioritize areas for treatment, (3) monitor results, and (4) conduct a fire research program to improve the understanding of fire behavior and its role in ecosystems.

The acts making appropriations to Interior and the Forest Service for fiscal years 2001 and 2002 and their legislative histories complement the Federal Wildland Fire Management Policy. For example, the policy identifies the need for a consistent national process to assess wildland-urban interface hazards, risks, values, and losses in order to prescribe mitigation measures, including hazardous fuels reduction. The fiscal year 2001 appropriations act required the Secretaries of the Interior and of Agriculture, after consultation with state and local firefighting agencies, to publish jointly in the *Federal Register* a list of all wildland-urban interface communities, as defined by the Secretaries, within the vicinity of federal lands that are at high risk from wildfire, as defined by the Secretaries. The list was to be published by December 10, 2000.

¹³ A landscape is an area composed of interacting and interconnected patterns of habitats (ecosystems) that are repeated because of the geology, landform, soils, climate, biota, and human influences throughout the area. A landscape is composed of watersheds and smaller ecosystems. It is the building block of biotic provinces and regions.

In addition, the conference committee report accompanying the fiscal year 2001 appropriations act directed the Secretaries of the Interior and of Agriculture to "engage governors in a collaborative structure to cooperatively develop a coordinated National 10-Year Comprehensive Strategy with the states as full partners in the planning, decision making, and implementation of the [National Fire] plan." According to the report, "key decisions should be made at the local levels." Moreover, in an effort to ensure accountability for the appropriated funds, the report directed the Secretaries of the Interior and of Agriculture to develop an action plan and a companion financial plan to provide operational and financial details.

The Results Act Provides a Framework to Implement the Federal Wildland Fire Management Policy and Congressional Direction The Results Act seeks to improve the effectiveness, efficiency, and accountability of federal programs by establishing a system for agencies to set goals for their programs' performance and to measure results. In an October 1999 report, we set forth a framework for using the Act to improve performance accountability within the Forest Service. ¹⁴ The same framework can be used to effectively implement the Federal Wildland Fire Management Policy, the National Fire Plan, and Congressional direction. Specifically, to improve their efforts, the five federal land management agencies would need to:

- establish consistent criteria to identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fires.
- develop clearly defined and outcome-oriented goals and objectives, as well
 as quantifiable long-term and annual performance measures, to assess
 progress in reducing the risks of severe wildland fires in wildland-urban
 interface areas as well as in other areas.
- incorporate the criteria, goals, objectives, and measures into a comprehensive 10-year strategy.
- use the strategy to develop yearly action plans and as a basis for reporting accomplishments in future fiscal years' budget requests.

¹⁴ See Forest Service: A Framework for Improving Accountability (GAO/RCED/AIMD-00-2, Oct. 13, 1999).

High-Risk Communities Have Not Been Identified and Prioritized

The fiscal year 2001 appropriations act required the Secretaries of Agriculture and of the Interior to jointly publish in the *Federal Register* by January 2001 a list of all "urban-wildland interface communities," as defined by the Secretaries, "within the vicinity of federal lands that are at high risk from wildfire," as defined by the Secretaries. However, as a result of inconsistencies in the processes that Interior and the Forest Service used to identify and prioritize communities for funding, it is not known whether the communities being funded are the ones at highest risk of wildland fire.

Interior and the Forest Service did not establish well-defined criteria to identify wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fire. Instead, each state and tribe was allowed to use different data and criteria for identifying communities at risk. For example, California considered communities within 1.5 miles of federal lands to be at high risk from wildland fire. Idaho, on the other hand, considered communities within 20 miles of federal lands to be at high risk. The individual state lists were then published in the *Federal Register* in January 2001.

The January 2001 Federal Register notice provided the federal government's initial definition of wildland-urban interface communities. The notice defined wildland-urban interface community to mean those communities "where humans and their development meet or intermix with wildland fuel." The notice identified three types of wildland-urban interface communities: (1) "interface community," where structures directly abut wildland fuels; (2) "intermix community," where structures are scattered throughout a wildland area; and (3) "occluded community," where structures abut an island of wildland fuels such as a park.

In addition, the January 2001 Federal Register notice provided preliminary criteria that were to be used by the Secretaries of the Interior and of Agriculture to rank and prioritize communities for treatment. These criteria included (1) three "risk factors" for evaluating the risk to wildland-urban interface communities (fire behavior potential; values at risk; and infrastructure) and (2) two or three "situations" that contribute to risk for each of the three factors. For example, the two situations for values at risk divided communities into those in an "urban interface setting" and those in an "intermix or occluded setting."

However, rather than the Secretaries ranking and prioritizing communities for treatment, they deferred this responsibility to the states in February 2001 guidance. The definition of wildland-urban interface communities as

well as the risk factors and situations in the January 2001 *Federal Register* notice were very general and were subject to broad interpretation by the states. Moreover, the guidance (1) did not specifically identify federal lands that are at high risk from wildland fire and (2) did not define what is meant by "within the vicinity of" federal lands.

Without knowing which federal lands are at high risk from wildland fire or what is meant by "within the vicinity of" federal lands and with the risk factors and situations subject to broad interpretation, each state used criteria that it believed to be appropriate for identifying communities at risk. For example, some states identified communities within the vicinity of (1) small units of federal land, such as lighthouses and cemeteries, which are not at high risk from wildland fire and (2) lands managed by federal agencies other than the five agencies receiving the funds to reduce hazardous fuels. In addition, two states—California and Idaho refused to rank their communities published in the January 2001 *Federal Register* notice on the basis of the definition of wildland-urban interface communities as well as the risk factors and situations in the notice.

By May 2001, the states had identified over 22,000 communities that they believed to be at high risk from wildland fire. By August 2001, Interior and the Forest Service had reduced this number by about half by excluding communities that (1) are near lands managed by other federal agencies or (2) they believed are not within the vicinity of lands that they manage that are at high risk from wildland fire. In August 2001, Interior and the Forest Service published the remaining 11,376 communities in the *Federal Register*. Interior and the Forest Service then used different approaches to prioritize these communities for funding.

To help prioritize the 11,376 communities for funding, Interior assigned numeric values to each of the "situations" in the January 2001 *Federal Register* notice. However, this approach, coupled with the refusal of California and Idaho to rank their communities published in the January 2001 *Federal Register* notice—resulted in over half of the "highest-risk" communities (278 of 545) being in three southeastern states—Georgia, North Carolina, and Tennessee—that are not prone to severe wildland fires. (See figures 3 and 4.)

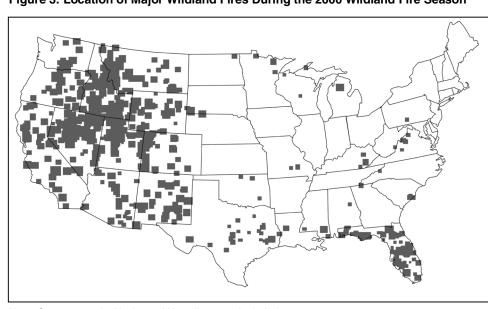


Figure 3: Location of Major Wildland Fires During the 2000 Wildland Fire Season

Note: Occurrences in Alaska and Hawaii are not included.

Source: Adapted by GAO from U.S. Department of the Interior data.

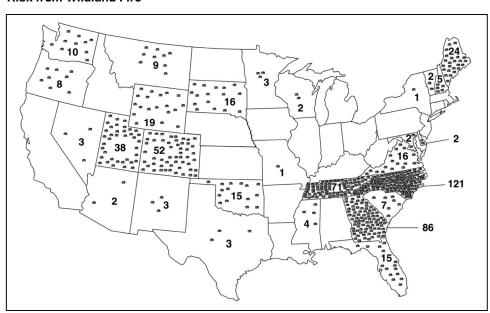


Figure 4: Number of Communities by State Identified by Interior as Being at Highest Risk from Wildland Fire

Source: Adapted by GAO from U.S. Department of the Interior data.

Interior next convened state teams consisting of state, state forestry, and/or local officials to select projects on federal lands within the wildland-urban interface that are either near the 545 communities or near other communities that the states proposed, including communities in Idaho and California. The state-by-state lists were then forwarded to Interior's headquarters for approval. According to Interior, for fiscal year 2002, it is funding projects near these communities. Thus, the projects being funded by Interior are not based on a consistent national prioritization of communities at high risk from wildfire.

The Forest Service, on the other hand, left the prioritization of communities and projects primarily to the discretion of its field unit managers. The agency's headquarters did, however, instruct its field unit managers to use the August 2001 list of 11,376 communities as guidance in identifying projects for funding. The lists developed by the field unit managers were then forwarded to the Forest Service's headquarters for approval. Thus, the projects being funded by the Forest Service are also not based on a consistent national prioritization of communities at high risk from wildfire.

Multiple Strategies For Reducing Hazardous Fuels Have Been Developed With Different Goals and Objectives The conference committee report accompanying the fiscal year 2001 appropriations act directed the Secretaries of the Interior and of Agriculture to "engage governors in a collaborative structure to cooperatively develop a coordinated National 10-Year Comprehensive Strategy with the states as full partners in the planning, decision making, and implementation of the plan." However, rather than one comprehensive strategy, Interior, the Forest Service, and the states have developed multiple strategies with different goals and objectives.

For example, in August 2001, the Secretaries of the Interior and of Agriculture endorsed a 10-year strategy for reducing wildland fire risks to communities and the environment. The strategy included four goals, one of which is to reduce hazardous fuels. Moreover, during fiscal year 2001, three of the five federal land management agencies—the National Park Service, the Bureau of Land Management, and the Bureau of Indian Affairs—developed agency-specific implementation strategies.

¹⁵ A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy, (Aug. 2001).

In September 2001, Interior and Forest Service officials informed the Congress that they were working together to develop a cohesive strategy to reduce hazardous fuels. According to these officials, the cohesive strategy will combine a long-term strategy finalized by the Forest Service in October 2000¹⁶ and a draft strategy developed by Interior in June 2001.¹⁷ Like the 10-year strategy, the cohesive strategy being developed by Interior and the Forest Service is intended to provide a framework for reducing the risk and consequences of unwanted wildland fire. It is also intended to provide direction to, and coordinate the activities of, the five federal land management agencies.

However, Interior and the Forest Service are developing their cohesive strategy to reduce hazardous fuels independent of, and apart from, the 10-year strategy prepared pursuant to the conference committee report. Moreover, the agency-specific implementation strategies developed by the National Park Service, the Bureau of Land Management, and the Bureau of Indian Affairs are not linked to each other or to the 10-year strategy, the cohesive strategy being developed, or the Forest Service's final and Interior's draft long-term strategies to reduce hazardous fuels. In addition, the 10-year strategy has different goals and objectives than the Forest Service's final and Interior's draft long-term strategies on which the cohesive strategy is based. For instance, two priorities under the long-term strategies of both the Forest Service and Interior—conserving accessible municipal watersheds and protecting threatened and endangered species—do not appear as priorities under the 10-year strategy.

According to Interior and Forest Service headquarters officials, they have developed, or are developing, numerous strategies that are not linked and that have different goals and objectives primarily because they have planned and managed their lands on an agency-by-agency basis for decades. Moreover, they observed that since Interior, the Forest Service, and the states have not been able to agree on one strategy or on similar goals and objectives, they have gone their separate ways. However, according to Interior and Forest Service headquarters officials, they will

¹⁶ Protecting People and Sustaining Resources in Fire-Adapted Ecosystems: A Cohesive Strategy, The Forest Service Management Response to the General Accounting Office Report GAO/RCED-99-65 (Oct 13, 2000).

¹⁷ Integrating Fire and Natural Resource Management – A Cohesive Strategy For Protecting People by Restoring Land Health, The Department of the Interior (June 2001).

continue to work with the states in an effort to reach agreement on one strategy and on similar goals and objectives.

Clearly Defined, Outcome-Oriented Objectives and Quantifiable Performance Indicators Have Not Been Developed to Measure Progress in Reducing Risks To assess progress in reducing the risks of severe wildland fires in wildland-urban interface areas as well as in other areas requires clearly defined and outcome-oriented goals and objectives as well as quantifiable long-term and annual performance measures. However, none of the strategies developed to date contain clearly defined, outcome-oriented objectives or quantifiable performance indicators.

For example, although one of the four broad goals under the 10-year strategy is to "reduce hazardous fuels," the strategy lacks clearly defined, outcome-oriented objectives between this broad goal and long-term and the annual performance measures intended to gauge the agencies' progress in achieving the goal. For instance, one objective of the strategy is to "reduce the total number of acres at risk to severe wildland fire." However, this objective does not distinguish between those landscapes where science indicates that frequent fire use to predominate and now does not and those landscapes that normally burn less frequently and where efforts to reduce fire intensity would disrupt and damage forest health.

Another objective of the 10-year strategy is to "ensure communities most at risk in the wildland-urban interface receive priority for hazardous fuels treatment." However, the strategy does not include any clearly defined, outcome-oriented objectives that can be used to assess the agencies' progress in achieving this goal.

In addition, the strategies developed by the Forest Service, Interior, the National Park Service, the Bureau of Land Management, and the Bureau of Indian Affairs do not contain consistent national performance measures and reporting procedures. For instance, the Forest Service proposes to measure and report on (1) the percent of wildland-urban interface areas with completed fuels treatments and (2) the percent of all acres with fuel levels meeting "condition class 1;" that is, where human activities have not significantly altered historical fire regimes or where management activities have successfully maintained or restored ecological integrity. ¹⁸ Conversely

¹⁸ Managing the Impacts on Communities and the Environment Performance Accountability, Forest Service (May 2001).

Interior plans to use only the number of acres treated to measure and report to the Congress its progress in reducing hazardous fuels. However, Interior cannot identify how many of these acres are within areas at high risk from wildland fire.

The 10-year strategy developed by the Western Governors' Association in collaboration with the Departments of the Interior and of Agriculture recognizes the need to develop consistent national performance measures and reporting procedures to aid in monitoring results. The strategy proposes to include these measures and reporting procedures in a detailed implementation plan to be developed by May 1, 2002. In the interim, Interior and the Forest Service have initiated a study to develop "consistent performance measures that capture the intent and new strategic direction of the National Fire Plan and the policies, guidelines and actions of the 2001 Federal Wildland Fire Management Policy." However, as of December 2001, the agencies had not established a clear sequence or schedule to deliver the performance measures and this effort had not been integrated with the effort by the Western Governors' Association to develop a 10-year strategy. Thus, at a minimum, funds appropriated for hazardous fuels reduction for fiscal years 2001 and 2002 have been, or will be, allocated to the five agencies' field units and the President's budget for fiscal year 2003 will be submitted to the Congress before clearly defined, outcome-oriented objectives and quantifiable performance indicators are developed.

Action and Financial Plans Will Describe How Federal Funds Will Be Spent, Not What Will Be Accomplished With the Money

In an effort to ensure accountability for the appropriated funds, the conference committee report accompanying the fiscal year 2001 appropriations act directed the Secretaries of the Interior and of Agriculture to (1) develop an action plan and a companion financial plan to provide operational and financial details and (2) report on accomplishments in future fiscal years' budget requests. However, rather than developing one action plan and one financial plan, in January 2001, the Secretaries of the Interior and of Agriculture signed similar, but separate action plans and financial plans for their respective departments.

Moreover, while Interior's and the Forest Service's action and financial plans describe the work they plan to accomplish and how they plan to allocate and spend the funds, they do not describe how the work and the expenditure of funds will reduce the risk of severe wildland fires to communities or to other areas at risk on either a local or national basis. For example, both the Forest Service's and Interior's plans consist largely of lists of projects, including their location, cost, and acreage. They do not, however, describe how the projects will reduce the risk of severe wildland

fires to communities, watersheds, ecosystems, or species on either a local or national basis. As a result, while the five federal land management agencies will be able to provide the Congress with assurance that they spent the funds appropriated for hazardous fuels reduction for fiscal years 2001 and 2002, they will not be able to report to the Congress on what they accomplished with the money.

According to Interior and Forest Service headquarters officials, they have developed separate action plans and financial plans because they have planned and managed their lands on an agency-by-agency basis for decades. Moreover, they observed that, since Interior and the Forest Service prepare separate budget requests and the Congress provides separate appropriations each fiscal year, it seemed reasonable to develop separate action plans and financial plans. Future fiscal years' action plans and financial plans should better describe how their work and their expenditure of funds would reduce the risk of severe wildland fires to communities or to other areas at risk, according to the Interior and Forest Service officials.

Data Are Not Available to Make Informed Decisions and to Measure Progress

Making informed decisions and measuring the agencies' progress in reducing hazardous fuels require accurate, complete, and comparable data. The infusion of hundreds of millions of dollars of new money for hazardous fuels reduction activities for fiscal years 2001 and 2002 and the expectation of sustained similar funding for these activities in future fiscal years accentuate this need. Despite ongoing research efforts to study the effectiveness of fuels treatments, however, the five federal land management agencies have not initiated the research needed to better identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from wildland fire. Moreover, although directed to do so in the fiscal year 2001 appropriations act, the agencies are not collecting the data required to determine the effectiveness of changes in the project-planning process. They are also not collecting the data needed to measure the effectiveness of efforts to dispose of the large amount of brush, small trees, and other vegetation that must be removed to reduce the risk of severe wildland fire.

Data Are Not Available to Better Prioritize Communities and Projects for Funding

Through the National Fire Plan, 24 research projects in support of hazardous fuels reduction were funded at a total cost of about \$10.2 million in fiscal year 2001. These projects continue to be funded in fiscal year 2002. The intent of the projects is to study and collect data on, among other things, optimizing fuel reduction, wildfire risk, impacts of fuels

reduction on fire behavior, and effects of fuel reduction on resources such as water, soil, and species.

Although available data can help focus attention on areas at high risk from severe wildland fire, they are currently not adequate for prioritizing communities and projects for funding, according to many Interior and Forest Service officials to whom we spoke. According to these officials, the agencies need better data on (1) hazard (an area's accumulation of hazardous fuel and its combustibility); (2) risk (the probability of ignition); and (3) value (physical, social, and economic costs of potential damage). Although limited research efforts are underway to study these issues, neither Interior nor the Forest Service has funded a research program to gather these data on a systematic and comprehensive basis.

For instance, the Forest Service proposed a project-referred to as LANDFIRE—that within 12 to 18 months could have provided better data on the current condition of the lands and communities at risk in the interior western United States. Within 4 years, LANDFIRE also could have provided these and other data nationwide. However, the project, which was estimated to cost at least \$45 million, has not been funded. As a result, much of the data needed to prioritize communities and projects for funding might never be available.

Data Are Not Available to Determine if Changes Are Needed to Expedite the Project-Planning Process Before the five federal land management agencies can implement a hazardous fuels reduction project, they must ensure that the project complies with the requirements of numerous environmental statutes addressing individual resources, such as endangered and threatened species, clean water, and clean air. They must also ensure that the project complies with the requirements of various planning laws, whose purpose is to ensure that important effects on the environment are not overlooked or understated. Securing this assurance and completing the required environmental analyses can take a year or more. The fiscal year 2001 appropriations act directed the Secretaries of the Interior, of Agriculture, and of Commerce as well as the Chairman of the Council on Environmental Quality to evaluate the need for revised or expedited environmental compliance procedures for hazardous fuels reduction projects occurring within the vicinity of wildland-urban interface communities in fiscal year 2001.

To respond to Congressional directive, the Secretaries of the Interior and of Agriculture identified a number of efforts that they were taking to reduce the time and improve the efficiency of environmental compliance. Specifically, they cited efforts to (1) assign experienced and trained

personnel to conduct the analyses, (2) provide consistent direction, (3) develop swift dispute resolution procedures, and (4) share information. During the course of our review, agency officials also reported that (1) some field units were sharing experienced and trained personnel, (2) both departments contributed funding to hire additional biologists for determining compliance with the Endangered Species Act, and (3) the Forest Service's Region 3 had streamlined consultation with the U.S. Fish and Wildlife Service on 283 wildland-urban interface projects involving approximately 1.9 million acres. Also, the Forest Service reported that it increased training and coaching as a means of sharing best practices and lessons learned among its field units. While these efforts are clearly a step in the right direction, neither Interior nor the Forest Service is gathering and analyzing the data necessary to show the extent to which they are reducing the time and improving the efficiency of environmental compliance.

Data Are Not Available to Measure the Effectiveness of Efforts to Dispose of the Large Amounts of Material that Must Be Removed

An aggressive, 10-year effort to reduce hazardous fuels on federal lands will require the five federal land management agencies to dispose of large amounts of brush, small trees, and other vegetation that must be mechanically removed before fire can be safely reintroduced. To this end, the Department of the Interior and the Forest Service have prepared a preliminary estimate of the amount of biomass that could be utilized through hazardous fuels treatments, and the Forest Service together with the Department of Energy have studied the economics of biomass utilization. Various efforts are underway to identify viable disposal options, including some that could generate revenue to partially offset the costs of reducing hazardous fuels.

For instance, the Forest Service is studying the application of small-diameter trees for wood composites and other wood products, the production of ethanol and electricity from the material, and the use of biomass to produce heat and hot water for office buildings and apartment buildings. The Bureau of Land Management is selling wood from mechanical thinning for personal use, such as home heating, in northern New Mexico.

The successes encountered to date in biomass utilization, however, have been localized. For example, while BLM has been successful in disposing of biomass through the sale of firewood in New Mexico, the Forest Service has been largely unsuccessful with similar efforts in the Front Range west of Denver due largely to differences in lifestyles and burning restrictions. Similar to their efforts to reduce the time and improve the efficiency of environmental compliance, neither Interior nor the Forest Service has gathered and analyzed the data necessary to show on a national scale (1)

the extent to which these efforts are accomplishing their goal of disposing of large amounts of material, (2) how these efforts might be increased, or (3) what would be required to do so.

Conclusions

Without clearly defined and effective leadership, the five federal land management agencies have made little progress in implementing a sound performance accountability framework. Without a sound performance accountability framework, it is not possible to determine if the hundreds of millions of dollars being appropriated each fiscal year for hazardous fuels reduction are being targeted to the communities and other areas at highest risk of severe wildland fires. By not targeting these communities and areas, the risks to human lives and development as well as to municipal watersheds and individual resources—such as threatened and endangered species, clean water, and clean air—are increased.

Over a year after the Congress substantially increased funds to reduce hazardous fuels, the federal effort still lacks clearly defined and effective leadership. Rather than a single focal point, authority and responsibility remain fragmented among Interior, the Forest Service, and the states. Therefore, we agree with NAPA that an interagency national council is needed to provide the strategic direction, leadership, coordination, conflict resolution, and oversight and evaluation necessary to ensure that funds appropriated to implement the hazardous fuels reduction, as well as other elements of the National Fire Plan, are spent in an efficient, effective, and timely manner. However, even though the September 2000 National Fire Planprepared at the request of the President of the United States—directed them to establish a similar Cabinet-level coordinating team, the Secretaries of the Interior and of Agriculture have not done so.

Implementation of a sound performance accountability framework to spend funds appropriated to reduce hazardous fuels effectively as well as funds appropriated for other elements of the National Fire Plan is also fragmented among Interior, the Forest Service, and the states. As a result, it is not possible to determine if the \$796 million appropriated for hazardous fuels reduction in fiscal years 2001 and 2002 is targeted to the communities and other areas at highest risk of severe wildland fires. Our findings indicate that there is a need for the agencies' current fragmented performance accountability framework to be consolidated.

Finally, the infusion of hundreds of millions of dollars of new money for hazardous fuels reduction activities for fiscal years 2001 and 2002 and the expectation of sustained similar funding for these activities in future fiscal

years accentuate the need for accurate, complete, and comparable data on which to make informed decisions and measure the agencies' progress in reducing hazardous fuels. However, the five federal land management agencies have not initiated the research needed to better identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from wildland fire. Moreover, the agencies are not collecting the data required to determine if changes are needed to expedite the project-planning process. They are also not collecting the data needed to measure the effectiveness of efforts to dispose of the large amount of brush, small trees, and other vegetation that must be removed to reduce the risk of severe wildland fire.

Matters for Congressional Consideration

To provide the clearly defined and effective leadership required to ensure that funds appropriated to reduce hazardous fuels as well as to implement other key elements of the National Fire Plan, such as fire suppression, are spent in an efficient, effective, and timely manner, we believe that the Congress should consider directing the Secretaries of the Interior and of Agriculture to establish the interagency national council recommended by National Academy of Public Administration.

Moreover, to better ensure that funds appropriated to reduce hazardous fuels as well as funds appropriated for other elements of the National Fire Plan are spent effectively, we believe that the Congress should consider directing the Secretaries of the Interior and of Agriculture to consolidate under the council the current fragmented implementation of a sound performance accountability framework. Such a framework should include, among other things, (1) consistent criteria to identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fires; (2) clearly defined and outcome-oriented goals and objectives, as well as quantifiable long-term and annual performance measures, to assess progress in reducing the risks of severe wildland fires in wildland-urban interface areas as well as in other areas; (3) a comprehensive long-term strategy that incorporates the criteria, goals, objectives, and measures; and (4) yearly performance plans and reports.

Recommendation for Executive Action

To make more informed decisions about, and to better measure progress in, reducing hazardous fuels, we recommend that the Secretaries of the Interior and of Agriculture jointly direct the heads of the National Park Service, the Fish and Wildlife Service, the Bureau of Land Management, the Bureau of Indian Affairs, and the Forest Service to collect the accurate,

complete, and comparable data needed to (1) better identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from wildland fire, (2) determine if changes are needed to expedite the project-planning process, and (3) measure the effectiveness of efforts to dispose of the large amount of brush, small trees, and other vegetation that must be removed to reduce the risk of severe wildland fire.

Agency Comments and Our Evaluation

We provided a draft of this report to the departments of Agriculture and the Interior for review and comment. The departments provided a consolidated response to our report. They generally agreed with our recommendations. However, the departments expressed concerns that we had not given them enough credit for several actions taken or underway related to (1) enhancing interagency leadership; (2) establishing a framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner; and (3) undertaking adequate research and data collection efforts.

First, with respect to enhancing interagency leadership, the departments felt that we should consider the efforts of its officials to work together and what has been accomplished in the short period of time since adoption of the National Fire Plan. For example, they noted a close working relationship between the National Fire Plan Coordinators and cited various efforts to collaborate among the federal agencies. During the course of our review we noted this close working relationship and efforts to collaborate. However, our report notes that the federal government's efforts to reduce hazardous fuels lack clearly defined and effective leadership because this leadership is fragmented among the Department of Agriculture's Forest Service, the Department of the Interior, and the states. Thus, our discussions in the report pertain to the leadership structure for fuels reduction efforts, not to the relationships or efforts at collaboration among individual agency officials. More than these relationships and collaboration are necessary to develop and implement a framework to effectively spend funds appropriated to reduce hazardous fuels. Our work over the years has shown that the effective coordination and implementation of interagency programs requires effective leadership from a single focal point empowered with the authority and responsibility for interagency actions. For example, we have observed that the federal government's efforts to combat terrorism have suffered because there is no single leader in charge of the many functions conducted by different federal departments and agencies. We continue to believe that a single focal point is crucial to resolve discrepancies and to finalize decisions on

fuel reduction issues for which stakeholders may have differing viewpoints and that the Congress should consider establishing the interagency national council recommended by the National Academy of Public Administration.

Second, with regard to establishing a framework to ensure funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner, the departments state that all agencies have such frameworks and they are making efforts to improve them, sometimes on a joint basis. For example, they note that they plan to incorporate wildland fire performance measures in the implementation plan for the 10-Year Comprehensive Strategy. However, on the basis of our review of the 10-Year Comprehensive Strategy we believe it contains a series of actions that are largely unclear, not specific, and output-oriented rather than results-oriented and the actions contained in the strategy appear difficult to measure, thus making it difficult for the agencies and states to develop corresponding performance indicators. Moreover, our report notes that performance measures are only one part of the needed framework. The framework that we refer to in our report includes several components that are contemplated by the National Wildland Fire Management Policy, the National Fire Plan, the Government Performance and Results Act, and the fiscal year 2001 appropriations act for the Department of the Interior. These components are: (1) consistent criteria to identify and prioritize wildland-urban interface communities within the vicinity of federal lands that are at high risk from severe wildland fire; (2) clearly defined and outcome-oriented goals and objectives; (3) quantifiable and long-term performance measures to assess progress in meeting these strategic objectives; (4) a comprehensive long-term strategy that incorporates the criteria, goals, objectives, and performance measures; and (5) yearly performance plans and measures. Additionally, the agencies need to use the same such framework, not separately defined ones. Because the Forest Service and the Department of the Interior have not collectively and adequately developed these components, they have not developed the framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner. Moreover, the agencies' current efforts at developing such a framework are divided into two separate strategic documents—the 10-Year Comprehensive Strategy developed with the states and a second, interagency cohesive strategy currently being drafted. During our review, officials from both departments told us that they were unclear as to which strategy will be controlling.

Finally, the departments noted that some research has been initiated and some data collection is underway. They mentioned several specific

research and data collection efforts that they felt we should have mentioned, and we have now included several. For example, we have revised our report to include research and data collection efforts on environmental compliance, biomass utilization, and fuels reduction effectiveness. However, our discussion in the report centers on the fact that the Forest Service and Interior are collecting data that, for the most part, are not national in scope. For example, the Forest Service and Interior have been reluctant to collect the necessary data to better prioritize communities and projects nationwide for hazardous fuels treatment. On the basis of our review, LANDFIRE is the only proposed research project so far that appears capable of producing consistent national inventory data for improving the prioritization of fuel projects and communities. We first learned of the LANDFIRE project in 1998 during our initial work on catastrophic wildfires in western national forests. 19 At that time, the Forest Service was testing a prototype to determine the feasibility of LANDFIRE. During this review, which is about 3 years after our initial review in 1998, the Forest Service showed us this same prototype. Also, during our current review, we observed that the enthusiasm for moving forward with LANDFIRE waned due to disputes over content and funding considerations. As a result, we believe LANDFIRE or some similar project for producing consistent national inventory data for improving the prioritization of fuels projects and communities is no closer to being funded today than it was in 1998. Thus, agency promises with regard to research and data collection efforts--as with enhancing interagency leadership and ensuring funds are spent in an efficient, effective, and timely manner-are not new. The departments have been pledging to jointly undertake improvements in all of these areas since at least the adoption of the 1995 Federal Wildland Fire Management Policy.

Where appropriate, we have included additional references to the activities mentioned in the department's comments. The departments' comments appear in appendix I.

Scope and Methodology

In reviewing the efforts of the Forest Service and the Department of the Interior to reduce hazardous fuels, we considered available literature, reviewed pertinent legislation and policies, examined agency documents

¹⁹ Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats. (GAO/RCED-99-65, Apr. 2, 1999).

and budget data, conducted interviews, and visited agency field units. Specifically, we reviewed prior GAO reports, the report by the National Academy of Public Administration, reports by conservation groups and trade organizations, the agencies' cohesive strategies for fuels reduction, the 10-Year Comprehensive Strategy, and other agency documentation. We also analyzed requirements germane to hazardous fuels in the Government Performance and Results Act, the 1995 Federal Wildland Fire Management Policy, and the acts making appropriations to the Department of the Interior and the Forest Service for fiscal years 2001 and 2002. We interviewed Forest Service, Department of Interior, and state officials on efforts to reduce hazardous fuels, issues that transcend the administrative boundaries of the lands they manage, their organizational structures, efforts to prioritize communities and projects for treatment, research activities, information systems, environmental compliance, and disposal of biomass. In addition, we toured federal lands that agency personnel treated for hazardous fuels in Colorado, New Mexico, and California

We conducted our work from November 2000 through December 2001 in accordance with generally accepted government auditing standards. For a more detailed discussion of our scope and methodology, see appendix II.

We are sending copies of this report to the Chairman, Subcommittee on Public Lands and Forests, Senate Committee on Energy and Natural Resources; the Ranking Minority Member, House Committee on Forests and Forest Health, House Committee on Resources; the Ranking Minority Member, Subcommittee on Interior and Related Agencies, House Committee on Appropriations; the Ranking Minority Member, Subcommittee on Department Operations, Oversight, Nutrition, and Forestry, House Committee on Agriculture; and interested congressional committees. We are also sending copies of this report to the Secretaries of the Interior and of Agriculture; the Chief, Forest Service; the Director, Bureau of Land Management; and the Director, National Park Service. The report is also available on GAO's home page at http://www.gao.gov.

If you have any questions about this report, please call Chester F. Janik or me at $(202)\,512\text{-}3841$. Key contributors to this report are listed in Appendix III.

Barry T. Hill

Director, Natural Resources and Environment

List of Requesters

The Honorable Larry Craig Ranking Minority Member Subcommittee on Public Lands and Forests Committee on Energy and Natural Resources United States Senate

The Honorable James Hansen Chairman, Committee on Resources House of Representatives

The Honorable Scott McInnis Chairman, Subcommittee on Forests and Forest Health Committee on Resources House of Representatives

The Honorable Joe Skeen Chairman, Subcommittee on Interior and Related Agencies Committee on Appropriations House of Representatives

The Honorable Bob Goodlatte Chairman, Subcommittee on Department Operations, Oversight, Nutrition, and Forestry Committee on Agriculture House of Representatives

The Honorable Mark Udall House of Representatives

The Honorable Don Young House of Representatives

Appendix I: Comments From the Departments of the Interior and Agriculture



WASHINGTON



THE DEPARTMENT OF AGRICULTURE

THE DEPARTMENT OF THE INTERIOR

January 16, 2002

Barry T. Hill, Director Natural Resources and Environment United States General Accounting Office 441 G. Street, N.W. Washington, D.C. 20548

Dear Director Hill:

Thank you for the opportunity to review the draft of GAO-02-259 entitled, "Severe Wildland Fires: Leadership and Accountability Needed to Reduce Risks to Communities and Resources."

In general, the Departments of the Interior and Agriculture agree with the Recommendation for Executive Action that more can be done to collect accurate, complete, and comparable data for National Fire Plan activities. We also do not disagree with the Results In Brief—that more can be done to enhance leadership, coordination, integration, research, data collection, and reporting on activities associated with the National Fire Plan. We believe, however, that much has been accomplished—both on-the-ground and organizationally—in the relatively short time since the Departments of the Interior and Agriculture received direction and additional funding for National Fire Plan activities. We are currently addressing many issues raised in the report and believe that the approaches that we are taking together will continue to have effective and positive results for communities and the resources. We would also note that many of the successes to date are built on newly strengthened intergovernmental, collaborative relationships with State and local governments and other partners on these tasks, including the Western Governors Association and our largest non-federal firefighting partner, the National Association of State Foresters.

It is important to look at the result of the past fire season to put the issue of leadership and accountability in perspective. Results are important. This past fire season almost five million fewer acres were burned as compared to the acres burned in 2000. This occurred in a year when fuel load conditions on public lands continued to be severe and when several regions of the country experienced great drought. Because of the unpredictability of fire ignitions, we cannot claim full credit. But there is evidence that the additional funds and fuel treatments and coordination provided through the National Fire Plan made a difference in the suppression and containment of fires, including fires located in the wildland urban interface.

In response to the first recommendation, the Departments of the Interior and Agriculture agree in concept to the establishment of an interagency council. In July in testimony before the

Subcommittee of Forests and Forest Health, Committee on Resources, of the U.S. House of Representatives, we stated that the Secretarics of the Interior and Agriculture had appointed their respective deputies to jointly lead the effort to integrate program activities between the two Departments and direct the National Fire Plan Coordinators to take action. Since that time, the two Departments have drafted a charter for an Interagency Wildland Fire Leadership Council led by the heads of the five land managing agencies. Many of the issues highlighted in this report are identical to the issues planned to be addressed by the Interagency Wildland Fire Leadership Council. We believe this approach will assure accountability at the agency-head level and assure positive results.

We disagree with the assumption in the report, however, that no strong, interagency leadership currently exists to implement the activities associated with the National Fire Plan, including providing strategic direction, leadership, coordination, conflict resolution, and oversight and evaluation functions. Under the direction of the Deputy Secretary of the Interior and the Under Secretary of Agriculture, there is a close and effective working relationship between the two National Fire Plan Coordinators for both Departments. Also, all five agencies work together through various existing organizations, as well as the leadership command structure of each individual agency to provide strategic direction, leadership, coordination, conflict resolution, and oversight and evaluation functions. There is also a review underway in the Forest Service to improve the integration of National Fire Plan activities across the agency.

The Conference Report for P.L. 106-291 directed the Departments of the Interior and Agriculture to work closely with State and local communities to maximize benefits to the environment and to local communities; to seek the advice of the State Governors and local and tribal government representatives in setting priorities for fuels treatments, burned area rehabilitation, and public outreach and education. The Report also directed the Departments to work together to formulate complementary budget requests and to carry out the other tasks, including developing criteria for rehabilitation projects, developing a list of all communities within the vicinity of Federal lands at high risk from fire, and working collaboratively with the State Governors to develop a 10-year comprehensive strategy.

We are continuing to work together to develop components of the implementation plan called for by the Comprehensive Strategy. In August 2001, the Secretaries of the Interior and Agriculture and the Western Governors Association completed the 10-year comprehensive strategy and began work on an implementation plan that will be completed in May 2002. This includes common wildland fire management performance measures. In November, the Department of the Interior contracted with the Performance Institute to assist in the development of these measures through a series of internal agency and external public stakeholder meetings. These dialogue sessions, held in November and December, have included stakeholders who were involved in the development of the 10-Year Comprehensive Strategy as well as a host of other interested parties. The wildland fire performance measures, as well as the Cohesive Strategy, will be finalized in early fiscal year 2002, and will be incorporated into the 10-Year Implementation Plan. All of these efforts are being done in collaboration with the Western Governors Association, National Association of State Foresters, National Association of Counties, Tribes and others.

2

In terms of assuring a sound framework to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner, the Departments are well on their way to improving coordination on all activities associated with the National Fire Plan. Here are a few examples of activities we have initiated or accomplished together since the Congress appropriated funds specifically for the National Fire Plan to the five firefighting agencies in 2001:

- Conceptual planning for a new planning and budgeting process that crosses boundaries (Fire_MAP).
- A new mapping project providing 30-meter resolution (medium scale) for assisting in regional priority setting and risk mapping.
- Development of common performance measures that meet Government Performance and Results Act requirements and are outcome based.
- Federal agency cohesive fuels strategy that establishes common fuel treatment
 priorities to ensure that funding for reducing fuels is distributed to high-risk areas.
- Development of a joint data system, referred to as "data-mart" that is a real time information reporting system for all National Fire Plan accomplishments.
- Development of an implementation plan for the 10-year comprehensive strategy in collaboration with the Western Governors' Association, National Association of State Foresters, National Association of Counties, and other groups that addresses the issues of working with local communities in the prioritization and support for locallydeveloped hazardous fuels reduction projects.
- New research projects that evaluate the effectiveness of an array of fuel treatments and allow for study of the impact of fuel treatments on wildland fire behavior.
- Development of a consistent format and protocol for fire management planning across all landscapes.
- Distribution by Interior agencies, under a new Interior rural fire assistance program, of \$10 million for the first time to improve training, equipment purchase, and prevention/education to enhance safety and capabilities of rural fire departments.
- New research projects that are refining the criteria and basis for treatments, increasing the science behind the work.
- An interagency team is developing a program to supply and manage native plant materials for restoration and rehabilitation on Federal lands.
- In 2001, we accomplished approximately 2.088 million acres of hazardous fuels treatment on Federal land. This is more acres than we have treated in recent years.
- The Department of Interior, in response to recommendations made by the National Association of Public Administrators, recently decided to continue operation of the Office of Wildland Fire Coordination. This office, led by Tim Hartzell who has nearly 30 years of experience in public lands management, coordinates policy, mission and performance for Interior's four bureaus with fire responsibility. The Department has also increased the budget for this office by \$600,000. Mr. Hartzell, on a daily basis, coordinates Department of Interior's National Fire Plan activities with the U.S. Forest Service.
- Leading up to the summer fire season, bureau and fire directors for Interior's four bureaus with fire responsibility and the wildland fire office met as often as weekly, under the auspices of the Secretary's Chief of Staff, to coordinate hiring and fuels

3

treatment work. This coordinated effort led to the additional hiring of approximately 1,500 front-line firefighting personnel.

While the recommendation in the report continues to call for Federal development of criteria to identify wildland-urban interface communities at risk in the vicinity of Federal lands, the five firefighting agencies worked with States, Tribes, and local communities to provide general guidance in establishing priorities. This allowed the collaborative groups at the local levels to identify and prioritize communities that fit the criteria for communities at risk from wildland fire. We felt it was critical to work with the States, Tribes, and local communities at risk. In 2001, the five firefighting agencies developed agency-specific criteria and allocated Federal funds for projects in order to facilitate the distribution of funds and the accomplishment of work on the ground. This year, the five firefighting agencies are working together to develop common Federal criteria to prioritize funding related to the National Fire Plan near identified wildland-urban interface communities and all other areas. These prior criteria are presented in the Federal Cohesive Strategy nearing completion.

We disagree with the assumption in the report that no framework exists to ensure that funds appropriated to reduce hazardous fuels are spent in an efficient, effective, and timely manner. In fact, all five agencies have frameworks in place to assure appropriated funds are spent appropriately. We are working diligently to develop a strong, interagency framework in response to Congressional direction. This framework is supported by land use plans that define resource objectives from which fire management plans establish activities and priorities in regard to hazardous fuel reduction and restoration of fire-adapted ecosystem. In the meantime, the agencies are giving priority focus to ensuring that hazardous fuels reduction work is being accomplished in an efficient and timely manner.

In response to the third recommendation concerning research and data collection, the Departments of the Interior and Agriculture have made strides in these areas. Sixty-three National Fire Plan research teams were funded in 2001 and will be funded in FY 2002 at over \$27 million. The research momentum established with National Fire Plan funding is already evident in the 252 new studies initiated in 41 States, the 49 new scientists and 131 technicians hired, the origination of 167 new cooperative studies and contracts with universities and other partners, and the more than 250 consultations with national forests, State governments, and communities. These teams will continue to lead national efforts to better predict fire and smoke behavior, assess the risks associated with hazardous fuels buildup, and find better ways to rehabilitate burned areas and minimize the spread of invasive species. Research will proceed on developing new alternatives for managing fuels and using forest undergrowth and small-diameter material, and in evaluating the effects of fire and fuels treatments on water, wildlife, recreation and other resources. Teams will also develop methods for assessing the economic and social impacts of fires and discovering new ways that communities and individuals can live safely in fire-adapted ecosystems. Through mapping, researchers are pursuing better delineation of wildland urban interface areas to enable agencies to better define the scope of the problem.

In the arena of data collection, the report mentions the LANDFIRE project, specifically, and indicates that it has not been funded. LANDFIRE is one approach to identifying the current ecosystem conditions to measure the effectiveness of efforts and to determine what changes, if

4

any, may be needed to improve the effectiveness of the fuels treatment program. This year we are jointly funding a LANDFIRE prototype to explore the feasibility and applicability of the methods and products prior to committing to this expensive project. In the meantime, individual agencies and their local units are conducting monitoring to evaluate the effectiveness of treatments.

The Department of the Interior and the Department of Agriculture, Forest Service, are preparing a long term, interagency, renewable energy strategy as part of the National Energy Plan. The agencies have already prepared a preliminary estimate of the amount of biomass that could be utilized through hazardous fuel treatments. There are data and ongoing studies on the economics of biomass utilization. The utilization and data are highly localized. However efforts are being made to estimate national potential.

The agencies have taken and continue to take a number of actions to improve efficiency and share improvements and lessons learned. These are being done project-by-project as well as with joint and individual agency efforts. For example, both Departments executed interagency agreements with U.S. Fish and Wildlife Service and National Marine Fisheries Service to add additional biologists for Endangered Species Act Section 7 consultations. In addition, the Forest Service has increased training to improve the skill level in the field and train new employees by sharing successful environmental compliance strategies. They have also provided environmental document templates to facilitate document preparation. The Forest Service has provided experienced personnel to coach and advise teams. They share lessons learned on previous timesensitive projects so efficiencies are gained in project management, environmental compliance, and decision-making. Similar actions are going on in the Interior agencies. In addition, all five firefighting agencies, as well as the Environmental Protection Agency, the Advisory Council on National Historic Preservation, and the National Oceanic and Atmospheric Administration signed a letter of "Guidance for Screening 2001 Fuel Reduction Projects under Title IV -Wildland Fire Emergency Appropriations" on January 17, 2001. The letter contains a set of 12 screening criteria to expedite fuel treatment projects, including Endangered Species Act consultations. In the Southwest, streamlined consultation with the U.S. Fish and Wildlife Service was accomplished on 283 wildland urban interface projects on approximately 1.9 million acres over a 6-8 month period. All of these and other actions are being taken to facilitate both decision-making and environmental compliance. Reduction in time is a critical measure of successful decisions, agency credibility, and the collaboration that are paramount for effectively implementing the National Fire Plan. The ultimate measure for results continues to be decisions implemented with objectives met.

We disagree with the assumption in the report that no research has been initiated and no data collection is underway to assure the effectiveness of the projects associated with the National Fire Plan. The Joint Fire Science Program has funded the Fire-Fire Surrogate Study to look specifically at fuel treatment effectiveness in representative ecosystems across the country. An additional 21 projects have been funded by the Joint Fire Science Plan dealing with fuel and fuel treatment effectiveness.

In closing, let us reiterate that much has been accomplished in the relatively short time since the Agencies received direction and additional funding for the National Fire Plan. We are currently addressing many issues raised in the report and believe that the approaches we are taking

together will continue to have effective and positive results for communities and the resources. As with all successes, gains are made one step at a time. We believe that given adequate time and continued funding, the improvements already underway in leadership, interagency coordination, and improved research and integrated data collection will become realities.

Mark Rey

Under Secretary
Natural Resources and the Environment
U.S. Department of Agriculture

LYNN SCARLETT

Assistant Secretary

Policy, Management and Budget U.S. Department of the Interior

Appendix II: Objectives, Scope, and Methodology

In this report we discuss (1) the need for clearly defined and effective leadership to reduce the buildup of hazardous vegetation that fuels severe wildland fires, (2) the progress that the five federal land management agencies have made in implementing a sound framework to spend effectively the funds appropriated for hazardous fuels reduction, and (3) the availability of data on which to make informed decisions and to measure progress.

To identify the need for clearly defined and effective leadership, we reviewed prior GAO and other reports and studies addressing issues that transcend the administrative boundaries of the individual federal agencies and/or the boundaries between federal and nonfederal lands. We then identified efforts to date by Interior, Agriculture, and the states to establish such an entity that could address interagency issues.

To identify the progress that the five federal land management agencies have made in implementing a sound framework to spend effectively the funds appropriated for hazardous fuels reduction, we reviewed the requirements of the Government Performance and Results Act of 1993 (the Results Act) and an October 1999 GAO report that portrayed the process of implementing the Act within the Forest Service as a number of interrelated steps. As noted in the report, a discussion of what the agency has done to implement each step provides a benchmark for measuring its future progress. We also reviewed the 1995 Federal Wildland Fire Management Policy, updated in 2001, which provides the philosophical and policy foundation for hazardous fuels reduction as well as for other federal interagency wildland fire management activities conducted under the National Fire Plan. In addition, we reviewed the acts making appropriations to Interior and the Forest Service for fiscal years 2001 and 2002 as well as their legislative histories. We then reviewed the 10-year strategy for reducing wildland fire risks to communities and the environment, signed by the Secretaries of the Interior and of Agriculture in August 2001. We also reviewed

¹ See Forest Service: A Framework for Improving Accountability (GAO/RCED/AIMD-00-2, Oct. 13, 1999).

² Federal Wildland Fire Management Policy and Program Review, Report to the Secretaries of the Interior and of Agriculture by an Interagency Federal Wildland Fire Policy Review Working Group (Dec. 18, 1995).

³ Review and Update of the 1995 Federal Wildland Fire Management Policy, Report to the Secretaries of the Interior, of Agriculture, of Energy, of Defense, and of Commerce; the Administrator, Environmental Protection Agency; and the Director, Federal Emergency Management Agency, by an Interagency Federal Wildland Fire Policy Review Working Group (Jan. 2001).

⁴ A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy, (Aug. 2001).

the long-term strategy to reduce hazardous fuels finalized by the Forest Service in October 2000⁵ and a similar draft strategy developed by Interior in June 2001.⁶ In addition, we reviewed the agency-specific implementation strategies developed during fiscal year 2001 by the National Park Service, the Bureau of Land Management, and the Bureau of Indian Affairs. We also reviewed the February 2001 guidance issued by Interior and the Forest Service to the states that defined wildland-urban interface, identified three criteria for evaluating the risk to wildland-urban interface communities, and fire behavior potential that provided some general information on identifying fire risk. In addition, we reviewed and analyzed the various lists of communities that Interior and the Forest Service believed are at high risk from severe wildland fire. We also reviewed the action plans and financial plans signed by the Secretaries of the Interior and of Agriculture in January 2001. These plans were intended to provide the operational and financial details necessary to ensure accountability for appropriated funds.

To identify the availability of data on which to make informed decisions and to measure progress, we reviewed reports and studies on, and interviewed Interior and Forest Service officials about, data available and needed to address challenges that could significantly affect their ability to spend funds appropriated to reduce hazardous fuels in and efficient, effective, and timely manner.

During the course of our review, we interviewed and gathered documentation from Interior and Forest Service officials in their Washington, D.C. headquarters as well as in various field units. These field units included the Forest Service's regional offices in Denver, Colorado (Region 2); Albuquerque, New Mexico (Region 3); and Vallejo, California (Region 5) as well as the Arapaho-Roosevelt and Pike-San Isabel National Forests in Colorado, the El Dorado National Forest in California, and the Santa Fe National Forest in New Mexico. We also visited the Bureau of Land Management's state offices in Colorado and Idaho and field offices in Colorado and New Mexico; the regional offices of the National Park Service and the Fish and Wildlife Service in Denver, Colorado; and Yosemite National Park in California. In addition, we interviewed and gathered documentation from the State Foresters of California, Colorado, Texas, and New Mexico as well as from representatives of the Western Governor's Association, the Society of American Foresters, the National Interagency Fire Center, the Wilderness Society, and the Pinchot Institute. We also reviewed

⁵ Protecting People and Sustaining Resources in Fire-Adapted Ecosystems: A Cohesive Strategy, The Forest Service Management Response to the General Accounting Office Report GAO/RCED-99-65 (Oct 13, 2000).

⁶ Integrating Fire and Natural Resource Management – A Cohesive Strategy For Protecting People by Restoring Land Health, The Department of the Interior (June 2001).

Appendix II: Objectives, Scope, and Methodology

reports by the Congressional Research Service, the National Fire Protection Association, the Forest Trust, the Southwest Forest Alliance, the Defenders of Wildlife, and the Taxpayers for Common Sense. In addition, we attended conferences on wildland fire and hazardous fuels reduction in Boise, Idaho and Conifer, Colorado. Finally, we briefed and were briefed by the panel within the National Academy of Public Administration that prepared the October 2001 draft report on implementation of the Federal Wildland Fire Management Policy and the National Fire Plan.

Appendix III: GAO Contacts and Staff Acknowledgments

GAO Contacts	Barry T. Hill (202) 512-3841 Chester F. Janik (202) 512-6508
Acknowledgments	In addition to those named above, Ronald Belak; Charles Cotton, Alan Dominicci; Richard Johnson; James Jones, Jr.; Chester Joy; and Maria Vargas made key contributions to this report.

GAO's Mission

The General Accounting Office, the investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to daily e-mail alert for newly released products" under the GAO Reports heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office P.O. Box 37050 Washington, D.C. 20013

To order by phone: Voice:

Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061

Visit GAO's Document Distribution Center

GAO Building

Room 1100, 700 4th Street, NW (corner of 4th and G Streets, NW)

Washington, D.C. 20013

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm,

E-mail: fraudnet@gao.gov, or

1-(800) 424-5454 or (202) 512-7470 (automated answering system).

Public Affairs

Jeff Nelligan, Managing Director, NelliganJ@gao.gov (202) 512-4800 U.S. General Accounting Office, 441 G. Street NW, Room 7149, Washington, D.C. 20548

