

# CHAPTER 1 — BACKGROUND AND SCOPE

## EVOLUTION OF FEDERAL WILDLAND FIRE MANAGEMENT POLICY

The first national fire policy came after several years of severe fires between 1910 and 1935. In the context of the ecological theory of the time, fire exclusion was believed to promote ecological stability. In addition, fire exclusion could also reduce commodity damages and economic losses. In 1935, the USDA Forest Service instituted the “10 AM Policy,” wherein the objective was to prevent all human-caused fires and contain any fire that started by 10 a.m. the following day.

By the 1960s, fire management costs were increasing exponentially. The 1964 Wilderness Act, Tall Timbers Research Conferences, and Southern Forest Fire Lab research demonstrated the positive benefits derived from natural and prescribed fire. As a result, national fire policy began to evolve to address both the economic and ecological benefits of not aggressively controlling, and even using, fire. In February 1967, the USDA Forest Service permitted leeway for early- and late-season fires. In 1968, the National Park Service changed its policy to recognize the natural role of fire, allow natural ignitions to run their course under prescribed conditions, and use prescribed fires to meet management objectives. In 1971, the USDA Forest Service 10-Acre Policy was added, which set a pre-suppression objective of containing all fires within 10 acres.

In 1977 a new fire policy was selected by the USDA Forest Service that replaced both the 10 AM and 10-Acre policies. The new policy encouraged a pluralistic approach — fire by prescription. Even for suppression, once initial attack failed, alternatives to full suppression were to be considered. Fire suppression became fire management.

The 1989 review of the 1988 Yellowstone fires continued fire policy evolution. The review report affirmed the positive benefits of fire, but also identified the inherent risks and liabilities of using fire and recommended greater planning, preparation, cooperation, and management oversight.

The 1994 fire season with its 34 fatalities (14 at South Canyon, Colorado) precipitated the **1995 Federal Wildland Fire Management Policy & Program Review** (1995 Report). This review again affirmed the positive benefits of fire. It recognized that fire was part of a larger problem, one of several symptoms of natural ecosystems becoming increasingly unstable due to altered ecological regimes. It talked about the needs for landscape-level resource management, the integration of fire into land management planning and implementation, and the involvement of all affected landowners and stakeholders.

In light of the extensive fires in the summer of 2000, President Clinton asked the Secretaries of the Interior and Agriculture to prepare an analysis of actions and requirements. Their report, *Management the Impact of Wildfires on Communities and the Environment: A Report to the President in Response to the Wildfires of 2000* focused on several key points: restoring landscapes and rebuilding communities, undertaking projects to reduce risks, working directly with communities, and establishing accountability. The Congress expressed its support with substantial new financial resources in the two Departments' Fiscal Year 2001 appropriations, along with direction for aggressive planning and implementation to reduce risks of wildland fire in Wildland Urban Interface areas.

## 1995 FIRE POLICY AND PROGRAM REVIEW

The 1995 Report resulted in the first comprehensive statement of wildland fire policy coordinated between the Departments of the Interior and Agriculture. In addition to the two Departments joining together in unified policy, the 1995 Report articulated clear direction on important issues of safety, the role of fire in natural resource management, and the relative roles of federal and non-federal agencies in the Wildland Urban Interface. The 1995 Report also contained significant background narrative and documentation on the importance of these policy positions.

This Review and Update builds on the 1995 background and rationale for the underlying body of Federal Wildland Fire Management Policy. In particular, the following ideas from the 1995 Report remain valid:

1. Protection of human life is the first priority in wildland fire management.
2. Every firefighter, every fireline supervisor, every fire manager, and every agency administrator takes positive action to ensure compliance with established safe firefighting practices.
3. Fire exclusion efforts, combined with other land-use practices, have in many places dramatically altered fire regimes so that today's fires tend to be larger and more severe. It is no longer a matter of slow accumulation of fuels; today's conditions confront us with the likelihood of more rapid, extensive ecological changes beyond any we have experienced in the past. To address these changes and the challenge they present, we must first understand and accept the role of wildland fire, and adopt land management practices that integrate fire as an essential ecosystem process.
4. The task before us – reintroducing fire – is both urgent and enormous. Conditions on millions of acres of wildlands increase the probability of large, intense fires beyond any scale yet witnessed. These severe fires will in turn increase the risk to humans, to property, and to the land upon which our social and economic well being is so intimately intertwined.

5. Agencies must create an organizational climate that supports employees who implement a properly planned program to reintroduce wildland fires.
6. Where wildland fire cannot be safely reintroduced because of hazardous fuel build-ups, some form of pretreatment must be considered, particularly in Wildland Urban Interface areas.
7. The Wildland Urban Interface is defined as the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.
8. The Wildland Urban Interface has become a major fire problem that will escalate as the nation moves into the 21<sup>st</sup> Century. People continue to move from urban to wildland areas. They give little thought to the wildfire hazard, and bring with them their expectations for continuation of urban emergency services. Further, property owners believe that insurance companies or disaster assistance will always be there to cover losses. There is a widespread misconception by elected officials, agency managers, and the public that Wildland Urban Interface protection is solely a federal concern.
9. Fire protection problems in the Wildland Urban Interface are complex. Complicated barriers must be overcome to address them. These barriers include legal mandates, zoning regulations, fire and building codes, basic fire protection infrastructure, insurance and fire protection grading and rating systems, environmental concerns, and Fire Protection Agreements. Political, social, and psychological factors further complicate the problems. There is no one simple solution. Leadership and cooperation are essential.
10. The problem is not one of finding new solutions to an old problem, but of implementing known solutions. Deferred decision making is as much a problem as the fires themselves. If history is to serve us in the resolution of the Wildland Urban Interface problem, we must take action on these issues now. To do anything less is to guarantee another review process in the aftermath of future severe fires.

#### **CHARGE FROM THE SECRETARIES OF THE INTERIOR AND AGRICULTURE**

Following the investigation, and subsequent report by the Independent Review Board, of the May 2000 Cerro Grande Prescribed Fire in New Mexico, the Secretary of the Interior announced that he and the Secretary of Agriculture would reconvene the Working Group that developed the 1995 Federal Fire Policy to assess the status of the policy and its implementation.

In a June 27, 2000, memorandum the two Secretaries outlined their direction for reviewing the 1995 Policy and its implementation. This memorandum identified five specific review tasks:

1. Review the status of the implementation of the 1995 Federal Fire Policy and provide recommendations to the Secretaries for completing full implementation of the policy.
2. Address specific issues raised in the Cerro Grande Prescribed Fire Investigation Report and the subsequent Independent Review Board Report, and provide recommendations to the Secretaries for resolving these issues.
3. Provide recommendations to the Secretaries for strengthening the organizational aspects of the wildland fire management programs in the two Departments to ensure effective implementation of the 2001 Federal Fire Policy.
4. Provide any other recommendations to the Secretaries that would improve the wildland fire management programs in the two Departments.
5. Recommend a management structure for completing implementation of the recommendations.

#### HOW THE REVIEW WAS DONE

The Secretaries of the Interior and Agriculture asked that the Working Group that developed the 1995 Federal Fire Policy be reconvened. To honor this request, the structure and membership of the earlier group was replicated as nearly as possible, using as many of the same individuals as available. In some cases, individuals had retired or moved to other positions, so their successors or individuals in similar positions or with similar backgrounds were asked to serve. As in 1994-95, the Working Group was co-chaired by the USDA Forest Service and the Department of the Interior.

In recognition of the importance of wildland fire in other agencies, the Departments of Energy and Defense and the Bureau of Reclamation were invited to join the Working Group. In addition, the National Association of State Foresters was invited to join the group to represent the important perspectives of non-federal wildland fire agencies. The resulting group included a broad mix of fire and resource managers, line managers, and program managers from programs closely associated with fire management. Professional staff from all of the participating agencies supported the Working Group.

To respond to the tasks in the memorandum from the Secretaries, the Working Group used the following principal sources of information:

- ***Status of the implementation of the specific Action Items in the 1995 Report*** – each of the five bureaus with fire management programs (USFS, BLM, NPS, BIA, FWS) was asked to report on the status of the Action Items. Their responses were tabulated and reviewed.
- ***Survey of Employees*** – the Brookings Institution was commissioned to survey a random sample of fire managers, resource

managers, and agency administrators in each bureau around the country regarding their views on adequacy and implementation of the 1995 Federal Fire Policy.

- **Employee Input**— employees were invited to provide their views on the 1995 Federal Fire Policy and its implementation through a Web site.
- **Non-governmental Input**— letters were sent to non-governmental organizations requesting their views on the 1995 Federal Fire Policy and its implementation.
- **Reports, Reviews, Studies**— a variety of internal and external reports, reviews, studies, and investigations of various aspects of wildland fire were reviewed.
- **Program Data**— statistical and other descriptive sources of information about wildland fire scope and activity were compiled and reviewed.
- **Issue-specific Analyses**— a number of short papers or oral presentations on specific issues were developed by professional staff.

The 2001 Federal Wildland Fire Management Policy (2001 Federal Fire Policy) contained in this Review and Update replaces the 1995 Federal Fire Policy. It should be adopted by all federal agencies with fire-management-related programs and activities as appropriate through directives, manuals, handbooks, and other documents.

The Working Group focused its efforts on “strategic” issues surrounding the 1995 Federal Fire Policy and its implementation. More specific implementation issues are best addressed at the program management level. Thus, a number of important but specific operational or policy implementation issues were raised in the course of the Working Group’s discussions, but not addressed in this Review and Update.

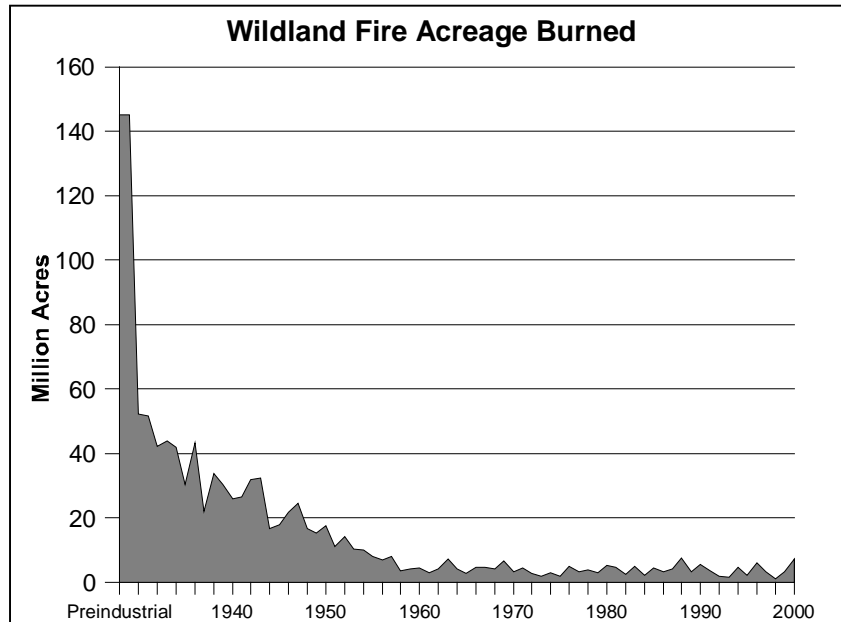
## IMPORTANT FIRE MANAGEMENT ISSUES

### HISTORICAL CONTEXT

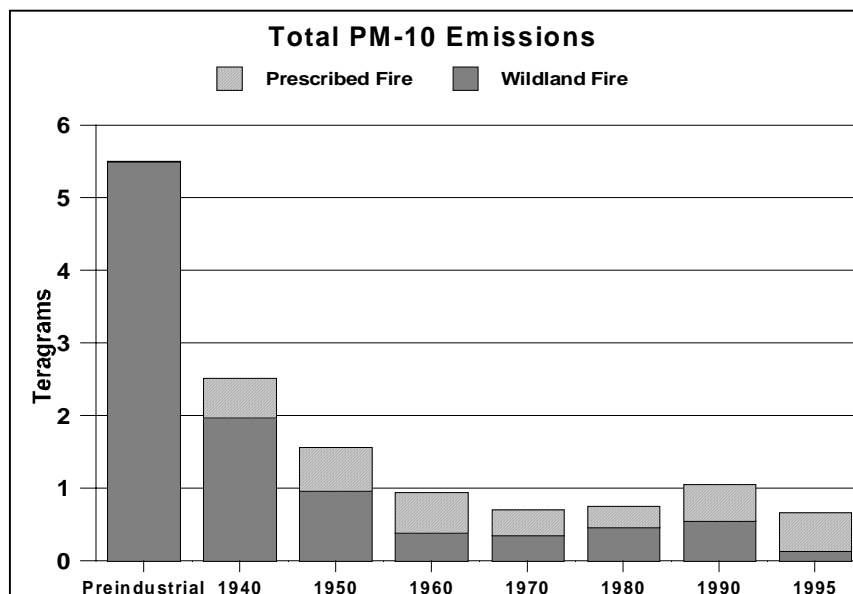
Historically, fire has been a frequent and major ecological factor in North America. In the conterminous United States during the preindustrial period (1500-1800), an average of 145 million acres burned annually. Today only 14 million acres (federal and non-federal) are burned annually by wildland fire from all ignition sources. Land use changes such as agriculture and urbanization are responsible for 50 percent of this 10-fold decrease. Land management actions including land fragmentation and fire suppression are responsible for the remaining 50 percent.

This decrease in wildland fire has been a destabilizing influence in many fire-adapted ecosystems such as ponderosa pine, lodgepole pine, pinyon/juniper woodlands, southern pinelands, whitebark pine, oak savanna, pitch pine, aspen, and

tallgrass prairie. Fuels increased and understory vegetation became more dense. As a result, those wildland fires that did occur were larger and more severe than historical fires. Eliminating fire also affected individual plant species. For example, Hessel and Spackman (1995) found that, of the 146 threatened, endangered, and rare plant species found in the conterminous U. S. for which there is conclusive information on fire effects, 135 species benefit from wildland fire or are found in fire-adapted ecosystems.



This decrease in wildland fire has also provided positive human health and welfare benefits by significantly decreasing natural air pollution (e.g., particulate matter less than 10 microns in size: PM-10.).



**CURRENT CONDITION OF FEDERAL LANDS**

In 1999, Hardy et al. published a preliminary course-scale analysis of current fire regimes and land condition classes in the conterminous U. S. This analysis, for the first time, provided a complete fuels management assessment of all federally managed lands, and a picture of the magnitude of the ecological effects of the exclusion of landscape-scale fire. Refinement of this preliminary data (e.g., chaparral) is currently underway and will eventually provide greater resolution and improved usefulness.

The federal government has management responsibility for approximately 415 million acres of fire-adapted land in the conterminous United States. Approximately 200 million of these acres were historically subject to *frequent* fire regimes with fire return intervals of less than 35 years. Included in these lands are ponderosa pine forests, southern pinelands, and prairie grasslands. Another 215 million acres were historically subject to *infrequent* fire regimes with fire return intervals greater than 35 years. Examples include lodgepole pine, northern hardwoods, and desert shrublands.

The federal lands in these two fire regimes have been further classified into three condition classes (Hardy et al. 1999):

Condition Class	Frequent	Infrequent	Total
.....Millions of Acres.....			
1	69	135	204
2	93	48	141
3	38	32	70
Total	200	215	415

Over 200 million acres of federal land are in Condition Class 1, where human activity has not significantly altered historical fire regimes, or adequate land management activities have successfully maintained ecological integrity. These areas usually pose relatively low public safety and ecological risks, and need little corrective management. However, current maintenance management actions such as prescribed fire need to continue.

On the 141 million acres of Condition Class 2 land, human activity has moderately altered historical fire regimes, and/or land management actions have been ineffective, partially compromising ecological integrity. One or more fire return intervals have been missed, resulting in moderate increases in fuel load and fire size, intensity, and severity. These areas pose a moderate public safety and ecological risk from severe fire, and need moderate levels of restoration treatments (e.g., mechanical fuel removal, prescribed fire). Without any management action, these lands will degrade to Condition Class 3. Continued maintenance treatments following restoration are also needed to prevent severe fires and sustain ecological integrity.

Ecological integrity has been significantly compromised on 70 million acres of Condition Class 3 lands, and fires are a high risk factor because of their potential risk to human values (public safety and health, property, economies) and natural resource values (watersheds, species composition). Several fire return intervals have been missed, resulting in considerable accumulation of live and dead fuels, and increasing the potential of high-severity fires. These lands pose the greatest risk to public safety and are in most danger of ecological decline. They require extensive restoration and diligent maintenance.

### **THE 2000 FIRES**

More acres burned in 2000 than in any other year in the last half-century. By mid-December, approximately 4.8 million acres had been burned by wildland fires and 1.0 million acres by prescribed fires on federal lands alone.

With a better understanding of the magnitude of the fire management problem, the federal land management agencies are now planning aggressive actions to mitigate the situation. The USDA Forest Service has proposed fuels management treatments (prescribed fire and mechanical) of up to 3 million acres annually. Department of the Interior bureaus and the Department of Defense have also proposed similar activities. Fiscal Year 2001 fire management appropriations for the Department of the Interior and the USDA Forest Service have been increased to begin to address these landscape stewardship responsibilities.