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Wild Land, Healthy Land

Interior's Cohesive Strategy to Improve Land Health and Reduce Catastrophic Wildland Fire

U.S. Department of the Interior

Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
National Park Service
U.S. Fish and Wildlife Service
U.S. Geological Service

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I Executive Summary

Running the football on a gymnasium floor – it may have been a first, at least for the boys of Idaho's Salmon High School football team. But, they were making the best of it, working their drills on the polished wood floor, going out for passes that took them into the bleachers.

Indeed, holding football practice in the school's gymnasium may have been unusual the summer of 2000, but the thick, acrid smoke that forced the players indoors was not. In fact, residents of the Bitterroot Valley in Montana or citizens of Los Alamos in New Mexico would likely share similar stories. A year earlier the tales came from Nevada, Idaho, and Florida.

Different years, different places, same story: massive, uncontrollable, destructive wildland fires. Threatening the lives of the public and firefighters, leveling homes, wiping out valuable forage for livestock and wildlife, and generating smoke that sends people to the hospital and blankets the sky for days and weeks, these wildland fires are not normal.

Ironically, human presence – coupled with beliefs that wildland fire is dangerous, threatens our livelihood, damages habitat, and ruins the beauty of parks – has driven fire management, or fire *"suppression"* for decades. The result is heavy fuels and invasions of non-native plant species that have, in turn, fueled wildland fire; which, in turn, threatens lives, natural resources and property.

Complicating the situation still more is our appreciation for wildlands, and an increasing desire to live near or within them to enjoy their beauty, watch the wildlife living in them, or enjoy the solitude. Increasing numbers of people are moving into what is known as the "wildland-urban interface," or the areas that meet or mix with wildlands. This means increasing numbers of people and property at risk from wildland fire.

When smoke enveloped their small town in Idaho's central mountains and they needed to practice somewhere, the Salmon High School football team found a solution. Not unlike those young athletes and their coaches, Department of the Interior wildland agencies have also found a solution.

Though Interior's solution, and the purpose of this strategy, may seem simple – reduce catastrophic wildland fire by improving land health – planning and implementing the work will take time, patience and intense coordination with partners and stakeholders.

Seven objectives will be met as the strategy progresses:

1. ab Improve public and firefighter safety;
2. ab Protect, maintain or restore properly functioning ecological conditions of forests, woodlands, shrublands and grasslands;
3. ab Reduce the risk of wildland fire to communities, municipal watersheds, cultural and historic features, and other community values through collaborative

risk assessment, planning and mitigation projects;

4. ab Endeavor to reduce losses and maintain and enhance opportunities related to traditional and subsistence uses of public lands by local communities and individuals;
5. ab Maximize efficiency and effectiveness of fire suppression and emergency rehabilitation; and
6. ab Increase collaboration among federal, tribal, state and local agencies and partners, stakeholders and others to increase fire suppression efficiency and improve rehabilitation and restoration techniques.
7. ab Enhance the integration and cohesion of fire and resource management issues, programs and initiatives.

The challenge appears monumental, but Interior agencies have much going for them. First, they have the support of Congress and funding in a 2001 budget appropriation that targets money for fuel reduction in wildland-urban interface communities. Second, these agencies know the land. They know the history of the land and how's it's been changed by human uses and management. They know how to treat the land, and modify their work to ensure success. Last, and critically important, Interior agencies have the power of collaboration, and the partners and stakeholders to practice it with. Together, with their federal, tribal, state and local partners, land owners, land users and stakeholders, the work can begin and the ultimate goal reached.

This document defines Interior's cohesive strategy, its purpose and objectives. It also includes background information on the history of wildland fire, condition of the land today, the wildland-urban interface, and discusses the regulations and policy that guides Interior agencies as they plan and implement actions on the land. Also included is a section that describes the benefits that will be derived from the implementation of this cohesive strategy, and what could result if treatments are postponed. Finally, this strategy provides a list of actions tempered by priority considerations and guiding principles to help land managers and their partners and stakeholders plan and implement projects that reduce risks to communities and improve land health. A tentative treatment schedule is also included that can help Interior agencies identify workloads by year for improving land health.

Accomplishing the many important tasks outlined in this strategy will be at times challenging, frustrating, and rewarding. However, Interior agencies are determined to accomplish the huge feat before them: reduce the risk and consequences of catastrophic wildland fire by improving land health. The charge isn't impossible, but it will take time and persistence.
The Salmon High School football team probably knows all about that.

II Introduction

Considering The Past

This strategy is about timing. It's about the past and the present coming together with a force and a purpose that will change how federal agencies care for and manage fire on public land, wildlife refuges, national parks and monuments, and Indian trust land. It's about how the social, political and economic effects of wildland fire have driven land management for decades, and how this management has affected the condition of the land today.

The past – human presence, agriculture, livestock grazing, aggressive and effective fire suppression – has collided, head-on, with the present. Today, wildland fire is fueled by overgrown or non-native vegetation in our forests, rangelands and grasslands. The outcome? Homes burned to the ground; critical wildlife habitat scorched bare and forage for livestock lost; nuclear research and storage plants under siege; ancient Indian sites damaged; the character of our national treasures altered for decades.

Complicating this situation is the ever-expanding "wildland-urban interface." Wildlands are appreciated by so many for beauty or solitude, or simply for wide-open spaces on which entire communities have developed. Defined by the Society of American Foresters as the "line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland," the interface attracts more and more residents each year. And this means more and more homes each year are at risk from wildland fire.

Losses of homes or income as a result of wildland fire were unacceptable in the past. They are just as unacceptable today. But there's a difference. Although we have known for many years that fire belongs on the land and sometimes plant communities even need fire, we are just now beginning to realize how dramatically social, political and economic influences have affected the land's management.

The Present: Reality, Support and Funding

Until now it has never been more clear that Americans, their property, and one of their most treasured values – wild, open space – are at imminent risk from wildland fires fueled by accumulated or non-native vegetation.

Indeed, the 1999 and 2000 fire seasons focused attention on the critical condition of public land, national parks, Indian trust land, and on various communities. In 1999, nearly 94,000 fires burned more than 5.6 million acres of land, erasing important sage grouse habitat, and dramatically reducing or eliminating valuable forage for livestock. Then, in 2000, lightning struck again – this time in the forests – igniting thousands of fires, threatening hundreds of

homes and burning many, and stretching firefighting resources so thin the military and some of our international partners were brought in to help. Eventually, more than seven million acres burned. Images of homeowners packing belongings and fleeing their homes are indelibly printed on our memory as is the picture of the elk standing in the middle of a river surrounded by fire in Montana.

In 1999, the General Accounting Office documented the issue and asked the Forest Service to develop a "cohesive strategy" to reduce fuels in fire-prone forests in the interior West to protect people and sustain resources. The Forest Service strategy was published in October 2000. Titled *"Protecting People and Sustaining Resources in Fire-Adapted Ecosystems,"* the strategy outlines approaches to protect communities and restore and maintain forest health across the West.

Meanwhile in August 2000, after visiting a fire in Idaho, the President asked the Secretaries of Agriculture and Interior to develop recommendations on how to reduce the impacts of fire on rural communities, and ensure sufficient firefighting resources in the future. Their response, "Managing the Impacts of Wildfires on Communities and the Environment: A Report to the President in Response to the Wildfires of 2000," was issued September 8, 2000.

Congress responded strongly to the report with a the 2001 Appropriation Bill that met the wildland fire budget requests of both the Department of the Interior and Forest Service. Funding in this budget is not only targeted to reduce wildland fire hazards to communities, increase firefighting capabilities of federal wildland agencies and rural fire departments, but also to rehabilitate and restore burned land, and to plan and implement fire and resource management together on the land.

Embracing The Future: A Cohesive Strategy

This strategy takes Congress' direction and funding from the 2001 appropriation and does several things. First, it aligns Department of the Interior resource and fire programs under one common objective to support the overarching goal of reducing risks to communities by improving land health. Second, it complements and builds upon the work of all Interior agencies. Third, it encourages development of procedures that bring together and overlay agency objectives for watershed protection, species conservation, cultural and historic resource preservation, protection and preservation of Indian trust land, and overall land health.
This plan addresses all lands administered by Department of the Interior agencies, including forestlands, woodlands, shrublands, grasslands and tundra. Broad in scope, the strategy provides the background necessary for Interior agencies to work with the Forest Service to develop a national coordinated 10-year comprehensive strategy.

The objectives of this strategy include: 1) Improve public and firefighter safety; 2) Protect, maintain or restore properly functioning ecological conditions of forests, woodlands, shrublands and grasslands; 3) Reduce the risk of wildland fire to communities, municipal watersheds, cultural and historic features, and other community values through collaborative risk assessment,

planning and mitigation projects; 4) Endeavor to reduce losses and maintain and enhance opportunities related to traditional and subsistence uses of public lands by local communities and individuals; 5) Maximize efficiency and effectiveness of fire suppression and emergency stabilization and rehabilitation; 6) Increase collaboration among federal, tribal, state and local agencies and partners, stakeholders and others to increase fire suppression efficiency and improve rehabilitation and restoration techniques.; and 7) Enhance the integration and cohesion of fire and resource management issues, programs and initiatives.

This strategy lists actions that can be taken to reduce risks to communities and improve land health. It discusses priorities, such as wildland-urban interface, watersheds, special status species, cultural and historic resources and cultural landscapes to help managers plan and make decisions on the ground. It provides background information on the condition of lands managed by Interior agencies, and establishes a treatment schedule to protect healthy lands and restore and maintain those areas requiring attention. Finally, with the support of Congress' funding, it reinforces and expands on the importance of partnering and working with stakeholders to make the best decisions for the land and for those who depend upon it to live, to recreate or to preserve ancestral ways.

This strategy is about timing. Past land use and management has merged with the present reality of the risks and consequences of disastrous wildland fire, culminating in this cohesive strategy that aims to improve the health of forests, rangelands and grasslands to reduce the risk of wildland fire to people, property, and natural resources. Social, political and economic forces have driven wildland fire management in the past and they will drive it in the future. However, the key is to ensure these same forces steer wildland fire management into a future where healthy land reduces the risk of catastrophic wildland fire.

The success of this strategy will stand on its cohesive nature, the collective strength of its elements, and a continued commitment to partner and work closely with the land's stakeholders.

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III Purpose and Objectives

Federal agencies within the Department of the Interior manage {blank} percent of all the land in the United States. Wildland fire has periodically swept across most of these landscapes. However, in recent decades the nature of fire on these lands has changed.

In response to human presence and the subsequent social, political and economic concerns, wildland fire has been suppressed on much of the land resulting in altered landscapes and vegetation which can, in turn, feed wildland fires. To manage the severity and magnitude of these fires, federal agencies are developing cohesive strategies to minimize the risk and consequences of these fires. While each agency's strategy may differ, their premise is the same: the key to minimizing the risks and consequences of wildland fire is to manage for healthy ecosystems in which wildland fire generally behaves as it did prior to settlement. This strategy is based on that premise; however, it blends and builds upon Interior agency strategies to provide one common, focused purpose with clear objectives.

Purpose

Provide Department of the Interior agencies with a framework for reducing the risk and consequences of catastrophic fire by protecting, maintaining, and restoring land health and desired fire cycles on lands under Interior stewardship.

Objectives

1. ab *Improve public and firefighter safety.*

"No resource or property value is worth endangering people; all of our actions and plans must reflect this commitment."

Federal Wildland Fire Management Policy, 1995

The equation is simple: increased hazardous fuels equals increased safety risks to the public and firefighters. There is little doubt that thick unhealthy vegetation can lead to large, unpredictable and disastrous wildland fire. Examples of these situations dominated American television news throughout the summers of 1999 and 2000: Burgdorf Junction Fire, Idaho; Valley Complex, Montana; Cerro Grande Fire, New Mexico; Mesa Verde Fire, Colorado; Texas and Florida examples of 1999. Worse, because of their unpredictable and intense nature, these types of fires endanger the lives of both the public and firefighters. Like the equation, the solution is simple: reduce the fuels, reduce the risks—increase public and firefighter safety.

2. ab*Protect, maintain or restore properly functioning ecological conditions of forests, woodlands, shrublands and grasslands.*

Much of the land managed by Interior agencies has been altered by land use, management practices, invading non-native species, and fire suppression. Thus, diverse plant and grass and shrub communities that once supported an array of wildlife and plant species have been

significantly altered. For example, shrublands have become pure stands of juniper, wetlands have been degraded by melaluca, and shrub grasslands have become fields of cheatgrass. In short, levels of vegetation – both native and non-native species – have increased as well as the potential for uncharacteristically severe fire, and diversity of plants and animals has decreased.

Restoring degraded areas will allow these lands to once again support a broader array of plants and animals. In addition, the land will burn less severely – reducing the unwanted effects of either too little or too much fire on the land.

3. ab*Reduce the risk of wildland fire to communities, municipal watersheds, cultural and historic features, and other community values through collaborative risk assessment, planning and mitigation projects.*

Catastrophic wildland fire threatens a wide variety of natural and cultural resources that have immense value to humans. These include water, wildlife habitat, ancient ruins, historic landscapes, recreation opportunities, and timber and grazing resources. The risk wildland fire poses to these community and public resources can be most effectively addressed through long-term, landscape-scale planning and mitigation efforts. By working collaboratively with state and local partners, federal agencies can design and implement hazard mitigation, ecosystem restoration, and public education projects that benefit vital resources under both federal and non-federal management.

4. ab*Endeavor to reduce losses and maintain and enhance opportunities related to traditional and subsistence uses of public lands by local communities and individuals.*

Healthy lands support diverse species of wildlife and plants while also providing economic opportunities to local communities through ranching, grazing, mining, timber harvest, or recreation. The loss of these economic and cultural resources can have a significant impact on community sustainability. Federal land managers must try to reduce or reverse these losses whenever possible to restore and maintain healthy ecological conditions.

5. ab*Maximize Efficiency and Effectiveness of Fire Suppression and Emergency Stabilization and Rehabilitation.*

Interior maintains a premiere firefighting cadre extremely capable of suppressing wildland fire. Indeed, the average size fire – despite the occasional large fire – is generally small. In addition, Interior agency rehabilitation projects – aimed at protecting life and property, minimizing soil loss, and maintaining or improving ecosystem functionality – have occurred over millions of wildland acres.

Suppressing fire and rehabilitating burned land, however, is expensive. Experts estimate fire suppression costs about $71 per acre, and rehabilitation costs approximately $64 an acre. Restoring natural fire regimes and healthy ecosystems will reduce the costs of fire suppression.

6. *Increase collaboration among federal, tribal, state and local agencies and partners, stakeholders and others to increase fire suppression efficiency and improve rehabilitation and restoration techniques.*

Coordination with partners and stakeholders is critical to the success of most land management strategies and projects. This is particularly true when the goal is to reduce

the risks of wildland fire to lives and communities. While collaboration is not new to federal agencies, the need for this interaction has increased with changing patterns of landownership, and the greater focus now placed on reducing hazards within or adjacent to rural and interface communities.

Partnerships with other federal agencies; state, tribal and local governments; private landowners; and other stakeholders will help establish goals and priorities for: fuel reduction, methods for implementing projects, promoting efforts to reduce the spread of wildland interface areas, and effective ways to monitor progress and outcomes.

7. ab *Enhance the integration and cohesion of fire and resource management issues, programs and initiatives.*

Resource management across Interior agencies is very complex. A wide variety of programs, disciplines and initiatives affect wildland fire management. Implementation of the 2001 budget appropriation must be closely coordinated and integrated among Interior resource management programs, which differ from agency to agency.
The following should be incorporated into efforts to reduce fire risk and restore ecosystems to maximize the goals and effectiveness of all of these programs:

- ab the efforts and knowledge of habitat maintenance and restoration activities;
- ab silvicultural treatments;
- ab local and regional planning efforts;
- ab program management standards and guidelines; and
- ab watershed/ecosystem analyses.

This cohesive approach will help ensure the fire management programs of Interior agencies are planned and implemented effectively. It will also serve to reduce the potential for conflicting direction with other resource management goals.

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IV Background: Considering the Past as a Map to the Future

Wildland Fire of the Past

Over the millennia, human cultures and ecosystems have both evolved with the same fundamental process: fire.

Indeed, since the beginning of time, the land has been shaped by fire. Native Americans used fire throughout the prehistoric and historic eras for many reasons, including to encourage certain plants to grow. During the 19th century, as people were settling from the mid-west to the west coast, they needed to clear the land. Fire was their principal force and the smoke from the fires was considered an encouraging sign of progress.

There's no question that fire has influenced 74 percent of the 436 million acres of Department of the Interior-managed lands. Fires occurred at a variety of frequencies: from one to two-year fire cycles in the southeastern longleaf pine forests, 60 to 80-year fire cycles in Wyoming's big sagebrush country, 60 to 100-year fire cycles in Alaska's black spruce forests, and 200 to 500-year fire cycles inside the coastal rain forests of the Pacific Northwest.

In most ecosystems plant species adapted to fire. Plants developed survival and recovery mechanisms such as thick tree bark, ability to resprout and seeds that require heat to germinate. Fires burned in some ecosystems as often as every two to three years, and in others as infrequently as every 500 years. The effects of these fires varied greatly from low-severity surface fires that killed only a few plants in an area to very hot or high intensity that killed most of the plants in the area.

A Changing Landscape

Prior to the 20th Century, most of the interior West's fire-adapted ecosystems were stable. Risk of uncharacteristic landscape change from fire was low. These ecosystems were sparsely inhabited and fuel loads were also comparatively low. Non-native species were a minor landscape component.

During the majority of the last century however, due to a fusion of political, social, economic, and ecological influences, wildland fire, for the most part, was vigorously suppressed.

Decades of this effective fire suppression combined with impacts such as livestock

grazing, timber harvest, invasion and spread of alien weeds, and human development and land use, all contributed to significant changes to the fire regimes in our country's forests, woodlands, shrublands, and grasslands.

Because fire exclusion in some areas has allowed increased tree and shrub densities, as well as amounts of fuel on the ground, wildland fires are burning with uncharacteristically severe effects. This means threats to: native plant species, watersheds and water quality, soils, wildlife species and habitat, cultural resources, and recreational opportunities. At the same time, the safety and well-being of firefighters, the public, and wildland urban interface communities are all at risk.

In other areas, non-native species have replaced native vegetation, resulting in fire occurring more frequently. In Idaho and Oregon sagebrush-steppe areas, for instance, these repeated fires have triggered an invasion of cheatgrass. The native sagebrush, which cannot sprout after fire, is being replaced by cheatgrass and other weeds, increasing the potential for rapidly spreading large fires. In turn, the sage grouse and other wildlife species that rely on sagebrush for food and cover are seriously threatened.

Humans, Wildland Fire and the Growing Connection

For many years the risk of wildland fire burning homes and threatening communities seemed isolated to a few places in California. The statistics supported this perception: 203 wildland fires burned in California's wildland-urban interface between 1955 and 1999, scorching more than 3.2 million acres, destroying at least 11,000 structures, and taking the lives of 62 firefighters and citizens.

The concept that wildland-urban interface areas are isolated, however, has changed dramatically in the last decade. This is evidenced by the high-profile interface fires across the United States from Alaska to Florida and New Mexico to Montana.

Each year, increasing news reports and television coverage provide the nation with a very emotional definition of "interface" as places where people, their homes and their dreams for the future, are lodged precariously amidst a landscape thick with fuel ready to burn. Though there are many land management challenges across the country, many believe that none are more critical than reducing the risk of wildland fire to lives, property, and natural resources in the interface.

Ironically, many of these same interface areas where wildland fire poses the greatest threat to human lives and values have evolved with fire. In these areas, long before human settlement, lightning fires commonly occurred and plants and animals adapted to this natural process. The legacy of fire on these lands broadened as American Indians and the early settlers used fire for their purposes.

Historically, in most pine forests, fires thinned trees and cleared areas of accumulated debris or materials that, otherwise, would allow flames to climb into tree tops and spread–impacting thousands of acres of forest. And in many shrublands, occasional fires removed young trees–allowing shrubs and flowering plants and grasses to flourish.

Unfortunately, interface homeowners often increase the risk of wildland fire endangering their lives or damaging their property by making unwise landscaping and building choices. While wood shake roofs, natural wood siding and decks, thick grasses and shrubs, overhanging tree limbs and nearby wood piles complement natural surroundings, they also make them much easier for fire to engulf property and homes. At the same time, these decisions can endanger the wildland and structural firefighters charged with protecting life and property from fire.

Although federal agencies and their partners will never be able to completely remove the risk of wildland fire in the interface, the funding provided by Congress in the 2001 budget and the actions outlined in this strategy can help *reduce* the risks. However, land managers at all levels must work together and with local communities to design hazard reduction coupled with public outreach efforts to improve public safety. People within interface communities must also contribute by using fire-safe building materials and creating survivable space around their homes.

Condition of the Land

This strategy adopts the three fire condition classes used by the USDA Forest Service in its cohesive strategy. These conditions help describe the degree of fire regime departure from historical fire cycles. In doing so, they identify changes to key ecosystem components such as species composition, structural stage, tree or shrub stand age, and canopy closure. Influences besides fire suppression that have affected or altered these components include: timber harvesting, grazing, insects and disease, and the introduction and establishment of non-native plant species.

Using these three condition classes, Interior agencies can estimate the amount of work required to restore and maintain fire-adapted ecosystems and help reduce catastrophic fire. Once these lands have been restored, they will need ongoing maintenance treatments.

Fire Condition Class One

For the most part, fire regimes in this condition class are within historical ranges. Thus, the risk of losing key ecosystem components from the occurrence of fire in these lands is relatively low. Maintenance management such as prescribed fire, mechanical treatments, or preventing the invasion of non-native weeds, may occur to prevent these lands from becoming degraded.

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Fire Condition Class Two

Fire regimes on these lands have been moderately altered from their historical range–either increased or decreased fire frequency. A moderate risk of losing key ecosystem components has been identified in these lands. To restore their historical fire regimes, these lands may require some level of restoration through prescribed fire, mechanical or chemical treatments, and the subsequent reintroduction of native plants.

Fire Condition Class Three

These lands have been significantly altered from their historical range. Because fire regimes have been extensively altered, risk of losing key ecosystem components from fire is high. Consequently, these lands verge on the greatest risk of ecological collapse. To restore their historical fire regimes, before prescribed fire can be utilized to manage fuels or obtain other desired benefits, these lands may require multiple mechanical or chemical restoration treatments and the reintroduction of native species.

The Department of the Interior has management responsibility for 490 million acres of land (Figure XX). Department of the Interior lands in the conterminous United States were assessed according to fire regime and fire condition class on a course scale (Figure XX) using a vegetation mapping process that utilized available satellite imagery and existing digital imagery analysis. (Alaska's 217 million acres of Interior-managed lands were not included in this mapping effort. They are generally presumed to be in Fire Condition Class 1.)

While an inability to differentiate among some shrub and grass types exists, the preliminary data estimates indicate that within "the lower 48 states" the DOI has:

- abAt least 96 million acres (Fire Condition Class 2 and 3) lands are in need of high priority treatment to reduce risk and restore the natural role of fire;
- abApproximately 131 million acres (Fire Condition Class 1) lands require maintenance treatment;
- abOnce fire Condition Class 2 and 3 lands are restored, continued maintenance treatments will be required on those lands as well.

Please note this data most likely underestimates acres in Fire Condition Class 2 and 3. Better analysis and data will be required to better estimate the expanse of non-native grass displacement of native perennial grasses and the expansion of woodlands beyond historical ranges.

To improve this data resolution, the Forest Service is undertaking a fine-scale risk mapping assessment of fire regime, ecosystem and fuels. Interior collaboration with this effort would be beneficial.

Agency Missions

Four bureaus manage the majority of Department of the Interior lands: the Bureau of Land Management, the National Park Service, the U.S. Fish and Wildlife Service, and the Bureau of Indian Affairs (including the many tribes and Alaska Native Corporations under PL 93-638 contracts or self-governance compacts).

Bureau of Indian Affairs
This bureau provides wildfire protection for 60 million acres of American Indian reservations and other trust lands. Its mission is to enhance the quality of life, promote economic opportunity, and carry out the responsibility to protect and improve the trust assets of American Indians, Indian tribes and Alaska Natives. To do so through the delivery of quality services and by maintaining government-to-government relationships within the spirit of Indian self-determination.

Bureau of Land Management
This bureau manages 264 million acres of public lands and provides fire protection for 388 million acres. Its mission is to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Bureau of Reclamation
The mission of this bureau is to manage, develop, and protect the water and related resources in an environmentally and economically sound manner in the interest of the American public.

National Park Service
80 million acres of national parks, monuments, historic sites, natural areas, and other federal lands are managed under this bureau, whose purpose includes conserving scenery, natural and historic objects, and wildlife, and to provide for their enjoyment by such means as will leave them unimpaired for the enjoyment of future generations.

U.S. Fish and Wildlife Service
This bureau manages more than 92 million acres of national wildlife refuges and wetland areas. Its mission is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

U.S. Geological Survey
The USGS serves the nation by: providing reliable scientific information to describe and understand the earth; minimizing loss of life and property from natural disasters; managing water, biological, energy and mineral resources; and enhancing and protecting our quality of life.

V Planning: Laws, Partners and Stakeholders

{Sidebar: The Primary Laws}

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Guiding Legislation in Resource and Fire Management

Public land, national parks, and Indian trust land represent different things to different people. To some, this land represents a place to hike, fish or drive off-road; to others these areas are a preserve for wild animals. Many think of nature's most awesome wonders and love vacationing in the nation's parks and monuments. Some people value Indian trust land as sacred and a place to preserve ancient traditions. Generations of families have depended, and continue to rely, on public land for their livelihood, while more and more people are building homes near these scenic, wild spaces.

No matter the reason people appreciate these lands, we are all stakeholders in these lands rich with natural, cultural and historic values. Each of us has a say in how they are cared for and used.

One way to make sure every person has a voice in land management, and every resource and use on the land is considered, is through the suite of laws and regulations established to guide federal agencies as they tend the land. Some of these laws affect the work of all federal wildland agencies such as the Endangered Species Act, the National Environmental Policy Act, National Historic Preservation Act, and the acts that mandate clean air and water.

Other regulations are more specific to a particular agency. For instance, the National Indian Forest Resources Management Act directs the Bureau of Indian Affairs in the actions it takes on Indian forest land, and the National Park Service Organic Act promotes and regulates the use of national parks as well as the Reclamation Act which directs water development in the western United States. The National Wildlife Refuge System Improvement Act guides the U.S. Fish and Wildlife Service, while the Federal Land Policy and Management Act directs Bureau of Land Management efforts toward maintaining the land's health so that it supports many uses and resources.

When a particular aspect of land management is not specifically addressed by regulation or law, policy may be established. For example, the Federal Wildland Fire Management Policy and Program Review was approved by all federal wildland agencies in 1995. This policy reaffirms public and firefighter safety as the first priority in fire management. It also emphasizes the importance of fire as a natural process and directs the Forest Service, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service and Bureau of Indian Affairs to reintroduce fire onto landscapes where it used to occur naturally.
All together, these rules help balance use, cultural and historic preservation, conservation of plants and animals, and fire and resource management on the land.

With an umbrella of guidance in place and the passage of the "Government Performance and Results Act" (GPRA) in 1993, the agencies have each developed overall management strategies. The GPRA directs Interior wildland agencies to develop strategic plans for their activities and develop measures they can take to conserve natural resources, water, or wildlife, and preserve cultural and historic sites to meet the overarching goal: maintain healthy, diverse ecosystems that

meet long-term human and resource needs.

On-the-Ground: The Work Begins

Armed with this collection of regulations, guidance and policies, planning on the ground work begins. In fact, that is when land management decisions are made through a coordinated planning effort that involves other federal agencies, tribal, state, and local governments, land owners and local businesses, people who depend on the land for their livelihood, and those who use and appreciate the land for its many values.

Where fire is a natural part of the landscape, land management planning requires an integration and understanding of many things including land-use history and landscape change, past and current management actions, soil and watershed processes, how plant and animal species respond to fire and what their habitat requirements are, wildland fire history and behavior, and the risk of wildland fire to humans and their communities. Although these are critical to good land management decisions, there is more. Inventory of resources, monitoring of the success of actions, scientific research and coordination with partners are also vital aspects of planning and implementation. However, one of these – monitoring – is particularly valuable when managers are trying to determine if their plan is working or needs to be modified.

Monitoring helps validate assumptions, reduce uncertainties and measure progress. Information provided through monitoring can help resource specialists determine whether to continue to pursue or modify actions, or to propose new actions.

The 2001 budget appropriation provides $450 million to reduce hazardous fuel on Interior-managed land, especially in areas where the land pushes up against or mixes with urban communities. To land and fire managers this funding signals a tremendous challenge to plan and implement additional fuel reduction projects, or other protection or restoration work as quickly as possible. These managers understand the importance of involving all partners – from the federal level to private land owners – in both the planning and implementation of these projects. And the 2001 budget gives them the power through Congress' support and funding to accomplish this.

Ongoing Efforts

Efforts throughout Interior to improve the planning process while maintaining its integrity are underway. For example, the U.S. Fish and Wildlife Service, Bureau of Land Management, Forest Service, and National Marine Fisheries Service signed a memorandum of agreement on August 30, 2000, establishing working groups to improve efficiency and speed the Section 7 consultation process, as well as the consideration of special-status species in land management actions designed to reduce the risk of catastrophic wildland fire.

Focusing restoration projects on interface areas where the effects of fire suppression or alien weeds have increased fire risks will benefit local communities, native ecosystems, and endangered species. Projects that restore natural processes and plant communities should also benefit from streamlined consultation and review. Actions that result in unnatural fire cycles, fuel loads, or vegetative types should be discouraged.

Another ongoing effort is the Ecological Restoration Institutes work with the Bureau of Land Management to support new and existing ecologically based forest restoration activities in ponderosa pine forests. The goal is to develop a scientifically-based model that promotes the restoration of forest ecological health in the southwest United States, while reducing the threat of wildland fire to forest communities.

The 1999 Great Basin fires stimulated the creation of a Bureau of Land Management initiative to restore the Great Basin. Interagency coordination and involvement of local residents are the cornerstones of this initiative.

In addition, the National Association of State Foresters and Western Governor's Association work with federal agencies to establish a list of "communities-at-risk" is directly related to the 2001 budget implementation and federal agency strategies to address catastrophic wildland fire. This list of wildland-urban interface communities at risk from wildland fire will help determine priorities for future projects and funding.

Whether ongoing or still in the planning stage, make no mistake: planning and implementing projects will be time-consuming and painstaking. For example, areas degraded by a combination of a lack of fire, invasion of non-native plants, and livestock grazing may require multiple treatments over a long period of time. Other areas may need a variety of treatments such as mechanical thinning, prescribed burning and planting. And once a site is restored, it may still require occasional treatments to maintain its condition. Whatever a particular site or landscape requires, the public involvement and planning process is critical and ensures each person has a say and an opportunity to participate.

While some uncertainties do, indeed, exist, implementing this strategy to reduce hazardous fuels and improve land health will help avoid the serious consequences of disastrous wildland fire.

VI Reaping the Benefits, Tangible and Intangible

Ecosystems, by their very nature, are dynamic. They constantly change and adapt. Under any treatment schedule, vegetation will therefore continue to grow, fuels will accumulate, and wildland fires will occur. The challenge: to use fire and treat fuels to maintain or restore ecosystem health. Then, when unplanned wildland fires occur, they are more manageable and less likely to be destructive.

Implementation of this strategy will yield a wide array of benefits–encompassing all objectives outlined in the Purpose and Objectives chapter. This chapter identifies benefits–both tangible and intangible–of reducing the risk of wildland fire to people, property and natural resources by improving land health. It also highlights some of the consequences that could occur if the strategy's actions are postponed.

D R A F T - January 19, 2001

Benefits of Implementation and Consequences of Deferral

Objective 1: Improve public and firefighter safety.	
Benefit	**Consequence**
Fewer dangerous situations for firefighters and the public.	If treatment is deferred, some areas will move from lower-risk to higher-risk condition, increasing dangerous situations for firefighters and the public. Also, as interface areas grow, they may exceed fire protection capabilities.
Reduced fire intensities, allowing firefighters to better manage fires.	If treatment is deferred, control of fires in high-risk areas will depend more on breaks in the weather or fuels.
Reduced health hazards from smoke. (Fire management models indicate wildland fires may generate more smoke than prescribed burns.)	If treatment is deferred, health hazards related to periodic and prolonged smoke from severe wildland fires, especially those in the wildland-urban interface, will occur.

Putting it All Together

General Accounting Office (GAO) Report

In 1999 GAO wrote a report about forest health problems in the West; the status of Forest Service efforts to manage these problems; and barriers to successfully addressing the problems and how the barriers could be overcome. In this report, **the GAO asked the Forest Service to develop a cohesive strategy to reduce wildland fire risk and restore forest ecosystem health.**

Forest Service Cohesive Strategy

In October 2000, the Forest Service issued its "Protecting People and Sustaining Resources in Fire-Adapted Ecosystems: A Cohesive Strategy," which **establishes a framework to restore and maintain land health in fire-adapted ecosystems to reduce catastrophic wildland fire**. This strategy includes objectives, priorities, strategies and suggested treatment schedules.

Interior Cohesive Strategy

Secretary of the Interior Bruce Babbitt reviewed the Forest Service cohesive strategy and asked Interior to develop something similar. Interior's cohesive strategy "Wild Land, Healthy Land: Interior's Cohesive Strategy to Improve Land Health and Reduce Catastrophic Wildland Fire," has been drafted and is being reviewed by Interior agency personnel. **Interior's document includes strategies and measures for success as these agencies work to reduce the risk of wildland fire to people, property and natural resources, while improving land health**.

Ten Year National Comprehensive Strategy

The Forest Service and Interior strategies provide the structure and background to develop **a coordinated, national ten-year comprehensive strategy for reducing hazardous fuels to protect communities and improve land health**. This 10-year comprehensive strategy is also required by

Congress in the 2001 budget appropriation.

Wildland Agency Implementation Strategies

Each agency has developed or is in the process of developing an implementation strategy to implement the 2001 budget appropriation. These strategies will **guide agency plans and projects as they enhance federal and local firefighting capabilities, and work with local communities to reduce hazardous fuels.**