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Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy

June 20, 2003

THE DEPARTMENT OF AGRICULTURE

WASHINGTON

APR 2 1 2004

THE DEPARTMENT OF THE INTERIOR

MEMORANDUM

To: Chief, USDA Forest Service
Director, Bureau of Indian Affairs
Director, Bureau of Land Management
Director, Fish and Wildlife Service
Director, National Park Service

Subject: Federal Wildland Fire Management Policy Implementation

On June 20, 2003, the Wildland Fire Leadership Council approved implementation direction for the Federal Wildland Fire Management Policy.

The Council directs representatives from each of the federal wildland agencies to work together in developing common language and unified direction or guidance for agency/bureau manuals, directives, handbooks, and guidelines to complete final implementation of this policy. The Council further directs that this effort go forward with State coordination in order that Cooperative Agreements and other reciprocal agreements reflect the implementation direction established in this document. Completion is targeted for 3/31/05.

We thank the interagency team that produced this implementation plan and extend special appreciation to the National Association of State Foresters for their support in completing the document.

Mark Rey, Under Secretary
Natural Resources and Environment
Department of Agriculture

Lynn Scarlett, Assistant Secretary
Policy, Management and Budget
Department of the Interior

APPROVAL

The Interagency Direction For the Implementation of Federal Wildland Fire Management Policy is hereby approved by the Wildland Fire Leadership Council. Implementation actions are to begin immediately.

6/20/03

National Park Service — Date
U.S. Department of Interior
Fran P. Mainella, Director

6/20/03

U.S. Department of Agriculture — Date
Forest Service
Dale N. Bosworth, Chief

6/20/03

Bureau of Land Management — Date
U.S. Department ~~of Interior~~
Kathleen Clarke, Director

For 6/20/03

Bureau of Indian Affairs — Date
U.S. Department of Interior
Terrence Virden, Deputy Commissioner

6/20/03

Fish and Wildlife Service — Date
U. S. Department of Interior
Steven A. Williams, Director

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Executive Summary

Clark Fire near Lowell, Oregon (July 2003).

An interagency group co-chaired by the Fire Directors for the US Forest Service and the Bureau of Land Management was originally tasked by the National Wildfire Coordinating Group to develop an implementation strategy for the federal wildland fire management policy. The Wildland Fire Leadership Council is the approving authority for the implementation strategy.

This policy implementation strategy addresses the safety of firefighters in extended attack operations (identified as a causal factor on the South Canyon Fire) and the sequencing of landscape scale fire use projects (identified as a causal factor at Cerro Grande). The decision flow chart (Page 16) reflects the operational requirements for both extended attack operations on wild fires and fire use projects that may involve multiple jurisdictions

This implementation strategy is for federal policy but has been developed with Tribal, state, county, and local cooperators in mind. While some policy will not fit all non-federal cooperators, the intent was to include everyone by establishing an implementation strategy that might result in that consequence. A future goal of the broader fire community is to create a national interagency policy that could fit all. The following are the key results of the implementation strategy.

Operational Clarification for Consistent Implementation

Several operational differences existed among the federal wildland fire management agencies. Discussions have led to consensus among the five federal wildland fire management agencies with regard to the following policies: (Note: Tribally operated programs may choose to implement some policy differently than the five Federal agencies with wildland fire management programs). This consensus will change fire management policy implementation for some federal wildland fire management agencies. Specifically:

1. Only one management objective will be applied to a wildland fire. Wildland fires will either be managed for resource benefits or suppressed. A wildland fire cannot be managed for both objectives concurrently. If two wildland fires converge, they will be managed as a single wildland fire.

2. Human caused wildland fires will be suppressed in every instance and will not be managed for resource benefits.

3. Once a wildland fire has been managed for suppression objectives, it may never be managed for resource benefit objectives.

4. The Appropriate Management Response (AMR) is any specific action suitable to meet Fire Management Unit (FMU) objectives. Typically, the AMR ranges across a spectrum of tactical options (from monitoring to intensive management actions). The AMR is developed by using FMU strategies and objectives identified in the Fire Management Plan.

5. The Wildland Fire Situation Analysis process is used to determine and document the suppression strategy from the full range of responses available for suppression operations. Suppression strategies are designed to meet the policy objectives of suppression.

Burnout operations on the Wedge Canyon Fire near Eureka, Montana (August 2003).

6. Wildland fire use is the result of a natural event. The Land/Resource Management Plan, or the Fire Management Plan, will identify areas where the strategy of wildland fire use is suitable. The Wildland Fire Implementation Plan (WFIP) is the tool that examines the available response strategies to determine if a fire is being considered for wildland fire use.

7. When a prescribed fire or a fire designated for wildland fire use is no longer achieving the intended resource management objectives and contingency or mitigation actions have failed, the fire will be declared a wildfire. Once a wildfire, it cannot be returned to a prescribed fire or wildland fire use status

Action Items from Previous Fire Policy Reviews Are Completed

Action items from previous policy revisions and implementation plans have been incorporated into normal business operations. Of the 106 items from those documents, 6 have been dropped, 11 have been assigned for completion and will be completed by specific work groups or individuals, 32 have been institutionalized into normal fire management operations (as required by the action item), and 57 have been completed.

Implementation Recommendations

The following recommendations are made to implement consistent policy, terminology, and processes:

- Establish common terms and definitions where inconsistencies exist.
- Develop consistent interagency language that describes how to implement each of the wildland fire policy statements.
- Revise department level and agency specific manuals, handbooks, guidebooks and other documentation as appropriate.
- Revise interagency fire management handbooks, guidebooks and other interagency documents as appropriate.
- Revise National Wildfire Coordinating Group (NWCG) and federal wildland fire management agencies' fire and fuel management training courses.
- Revise federal wildland fire management agency and interagency national and field level agreements to reflect fire policy and implementation language changes.
- Develop a periodic, internal review process that will identify how well the federal wildland fire management agencies are implementing the 17 fire policy statements, objectives and management intent.
- Develop a communications plan that will aid and assist internal and external understanding of the terminology and the implementation process.

These recommendations are a "short list" of actions but there is much work to be done to implement the strategy. Strong leadership and oversight will be required to ensure that implementation stays on course and "scope creep" does not become a problem.

Preface

One of the homes lost in the Cerro Grande Fire.

Many of America's wildlands are characterized as fire-dependent. That is, they require periodic fire in order to maintain a healthy, resilient condition. Within these ecosystems, certain kinds of fire are beneficial; conversely, in the absence of fire adverse impacts occur. Today, after a century of attempted fire exclusion, extensive areas of the country are at risk from intense, severe wildfires that threaten nearby communities and cause significant damage to soil and other key ecological components. The most dangerous, most damaging, and most costly wildfires in recent history are often in fire-dependent wildlands where conditions are altered, and wildlands that are no longer healthy or resilient, because several fire cycles have been missed.

Within the past decade, three major incidents have rocked the federal wildland fire management agencies. Each precipitated the need to re-examine wildland fire policies.

- On July 6, 1994 fourteen firefighters died during extended attack operations on the South Canyon Fire near Glenwood Springs, Colorado. The South Canyon tragedy resulted in a revision of the federal wildland fire policy. The revision was approved by the Secretaries of Agriculture and Interior in December 1995, and published in the Federal Register on February 14, 1996.

- Six years later (May 4, 2000), 235 homes and structures were destroyed following the escape of a landscape-scale prescribed fire that burned into Los Alamos, New Mexico. The Cerro Grande incident prompted further modification of the policy that was approved by the Secretaries of Agriculture and Interior on January 19, 2001.

- Four firefighters died on the Thirty-Mile Fire in west-central Washington State, again during extended attack operations, on July 10, 2001.

Fundamentally, policy modifications are formulated to correct or mitigate program vulnerabilities. The litmus test for policy modifications is their effect in correcting the problem that prompted the modification.

This strategy introduces policy requirements intended to avoid firefighter fatalities, resulting from extended attack operations, and mitigate the risks that surround long-duration fire-use events. An implementation direction flowchart has been developed that emphasizes key policy enhancements to improve firefighter safety and reduce social, political, and legal vulnerabilities with regard to fire use.

This strategy establishes a unified approach to implementation of the federal wildland fire management policy and includes state involvement. It includes specific policy objectives, policy requirements, and decision criteria that direct fire operations in a unified manner among the five federal agencies having wildland fire management responsibilities.

A firefighter looks on as a wildfire south of Jackson, Wyoming, advances along the bank of the Snake River (August 2003).

Introduction

The smoke column from the Robert Fire near West Glacier, Montana could be seen for miles (August 2003).

This effort, chartered by the National Wildfire Coordinating Group, includes State perspectives and participation. The Wildland Fire Policy Implementation Task Group who prepared this report was facilitated by Brookings Institution and had representation from the five federal wildland fire agencies and the National Association of State Foresters (NASF). The task group included a mix of national, state/regional and field office personnel including agency administrators and fire personnel (Appendix F). The report has Wildland Fire Leadership Council approval.

Purpose

Difference in mission, enabling legislation and laws among federal, state and tribal entities encouraged unilateral development of agency-specific operational fire policy. This practice was amplified by a proliferation of independent agency reviews, reports, audits, their findings and recommendations and subsequent action plans.

The purpose of this report is to clarify information in the report *Review and Update of the 1995 Federal Wildland Fire Management Policy* (January 2001) and set forth direction for consistent implementation of policy at the operational level. This direction is intended to be simple, straightforward, and free of ambiguity. This report also outlines a course of action that will improve plans, procedures, decisions, and actions in the high-risk, high-consequence, and, often, uncertain environment that surrounds fire suppression and fire use operations. The intended result is for safer operations that are cost-effective and responsive to the ecological dynamics that influence the health and resilience of this country's fire-adapted wildlands.

This report contains wildland fire policy information including the resolution of previous policy action items, implementation recommendations, the policy implementation flowchart, and a glossary of critical terms. This is followed by a series of appendices that review the 2001 guiding principles, establish objectives and measures for the 2001 policy statements, and provide a broader background paper on the history and purpose of the fire policy.

Operational Clarification for Consistent Implementation

Several specific operational differences existed among the federal wildland fire management agencies. Consensus has been reached on the following:

1. Only one management objective will be applied to a wildland fire. Wildland fires will either be managed for resource benefits or suppressed. A wildland fire cannot be managed for both objectives concurrently. If two wildland fires converge, they will be managed as a single wildland fire.

2. Human caused wildland fires will be suppressed in every instance and will not be managed for resource benefits.

3. Once a wildland fire has been managed for suppression objectives, it may never be managed for resource benefit objectives.

A member of the Redmond Hotshot crew ignites a prescribed fire near Lakeview, Oregon.

4. The Appropriate Management Response (AMR) is any specific action suitable to meet Fire Management Unit (FMU) objectives. Typically, the AMR ranges across a spectrum of tactical options (from monitoring to intensive management actions). The AMR is developed by using FMU strategies and objectives identified in the Fire Management Plan.

5. The Wildland Fire Situation Analysis process is used to determine and document the suppression strategy from the full range of responses available for suppression operations. Suppression strategies are designed to meet the policy objectives of suppression.

6. Wildland fire use is the result of a natural event. The Land/Resource Management Plan, or the Fire Management Plan, will identify areas where the strategy of wildland fire use is suitable. The Wildland Fire Implementation Plan (WFIP) is the tool that examines the available response strategies to determine if a fire is being considered for wildland fire use.

7. When a prescribed fire or a fire designated for wildland fire is no longer achieving the intended resource management objectives and contingency or mitigation actions have failed, the fire will be declared a wildfire. Once a wildfire, it cannot be returned to a prescribed fire or wildland fire use status

In addition, clarifying comments, management intent, policy objectives, and measures are detailed for each of the seventeen policy statements in Appendix B to provide consistent interpretation for each policy statement. These definitions have been agreed to by all five federal wildland fire management agencies.

Action Items from Previous Fire Policy Reviews Are Completed

Action items from previous policy revisions and implementation plans have been incorporated into normal business operations. Of the 106 items from those documents, 6 have been dropped, 11 have been assigned for completion and will be completed by specific work groups or individuals, 32 have been institutionalized into normal fire management operations (as required by the action item), and 57 have been completed.

Implementation Recommendations

The following actions should be taken to begin implementation of the fire policy by the federal wildland fire management agencies. The involvement of the federal fire directors is critical to ensure the appropriate specialists are assigned, the recommendations are undertaken in the correct sequence and realistic time frames and benchmarks are established for monitoring, evaluation, and completion.

Undertaking these recommendations will be a staged process as some recommendations are dependent upon others. Some actions can be taken concurrently, and others can stand alone. They are so noted.

First stage, concurrent actions:

1. **TASK**: Establish common terms and definitions where inconsistencies exist.

SCOPE: The National Wildfire Coordinating Group's Incident Operations Standards Working Team (IOSWT) is charged with the responsibility for maintaining the interagency glossary of terms for wildland fire management. This working team currently has an ongoing project to update the glossary and should be tasked with including those terms associated with the latest policy and implementation direction into their glossary. The glossary contained within this report should be included as presented.

2. **TASK**: Develop consistent interagency language that describes how to implement each of the wildland fire policy statements.

SCOPE: Assign an interagency work group to review existing federal wildland fire management agencies' directives and test them against the information contained in Appendix B, Policy Clarification, Objectives, Management Intent and Measures, to determine the scope of changes required to develop interagency implementation language. The group should have one representative from each federal wildland fire agency, a representative from the Office of the Wildland Fire Coordinator (OWFC) and extend an invitation to NASF to participate.

Second stage, concurrent actions:

3. **TASK**: Revise department level and agency specific manuals, handbooks, guidebooks and other documentation as appropriate.

SCOPE: Each department and federal wildland fire management agency is responsible for revising their respective directives system. The products from TASK 1 and 2 should be used to complete the work.

4. **TASK**: Revise interagency fire management handbooks, guidebooks and other interagency documents as appropriate.

SCOPE: Those interagency work groups that were established to develop and maintain the interagency documents should be assigned the revision task. The products from TASK 1 and 2 should be used to complete the work. The following are examples of the types of interagency documents to be revised. The fire directors should verify a complete list of revision needs.

- The Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide
- Interagency Standards for Fire and Aviation Operations
- Interagency Fire Management Planning Template

5. **TASK**: Revise National Wildfire Coordinating Group (NWCG) and federal wildland fire management agency fire and fuel management training courses.

SCOPE: Assign the NWCG's Training Working Team and federal wildland fire management agencies fire and fuels management training specialists to ensure

A firefighter battles the flames on the Clark Fire near Lowell, Oregon (July 2003).

Concerned citizens attend a public meeting about the Wedge Canyon Fire near Eureka, Montana (August 2003).

consistency with the interagency implementation language where appropriate. The products from TASK 1 and 2 should be used to complete the work

6. **TASK**: Revise federal wildland fire management agency and interagency national and field level agreements to reflect fire policy and implementation language changes.

   SCOPE: Establish interagency work groups to review and revise agreements as appropriate. Develop national level master agreements that may be utilized to revise field unit agreements. The products from TASK 1 and 2 should be used to complete the work

Self standing action, concurrent with all others:

7. **TASK**: Develop a periodic, internal review process(es) that will identify how well the federal wildland fire management agencies are implementing the 17 fire policy statements, objectives and management intent.

   SCOPE: Establish an interagency group to assess existing review processes capability to measure implementation success including processes that: identify trends which indicate a change is required in implementation direction or actual policy language; maintain an iterative process for implementation and policy language; alleviate the reactionary nature of policy review and change; address policy change on a positive note rather reactionary.

8. **TASK**: Develop a communications plan that will aid and assist internal and external understanding of the terminology and the implementation process.

   SCOPE: Assign this project to one agency's communication specialists with direction to coordinate with other agencies.

A grizzly bear takes a break near the East Fire in Yellowstone National Park (August 2003).

Policy Implementation Flowchart

Firefighters conduct burnout operations on the East Fire in Yellowstone National Park (July 2003).

The Policy Implementation Flowchart is intended to deal specifically with the fire program's most significant vulnerabilities, as reflected in the very tragedies and accidents that prompted the modification of the existing policy (i.e. extended attack and long-duration fire operations, and large fire costs). It is aimed at the field level and is simple, straightforward, and without ambiguity.

The Policy Implementation Flowchart (Page 16) provides a visualization of the wildland fire management decision process (the diamonds on the flowchart). The flowchart is useful in providing visualization of policy direction for all federal wildland fire management agencies and cooperators, as well as assisting all agencies ensure consistent policy direction and standardizing terminology. Decisions are affected by three influences: planning direction that guides decisions, actions which are planned to occur given an ignition and actions that are based upon the situation that exists at the time. All elements of the flowchart are discussed below.

The Implementation Direction Flowchart emphasizes developing quality plans to facilitate effective decision making in operational activities.

Land/Resource Management Plan (L/RMP) Document

Overall direction is provided to the wildland fire management program by land and resource management plans. The L/RMP references the seventeen wildland fire policy statements. The paramount policy is firefighter safety. Fire regime dynamics must also influence land and resource management objective development in the L/RMP. The L/RMPs desired future condition will incorporate the desired mix of Condition Classes by fire regime.

Fire Management Plan (FMP) Document

All burnable acres will have Fire Management Plan. The FMP is the cornerstone plan for managing the wildland fire program and should flow directly from the L/RMP. FMPs are developed for a Fire Planning Unit (FPU). Where the wildland fire management program crosses jurisdictional boundaries, or where program coordination is essential, the FMP will require interagency coordination. Most FMPs are anticipated to fall into this category. One of the major findings of recent policy reviews and studies has been that there is a regional dimension to FMPs that must be considered for effective wildland fire management program implementation.

Wildland Fire - Prescribed Fire Decision

All prescribed fires require, by existing policy, a Prescribed Fire Burn Plan (RxBP), which is a specific type of Implementation Plan, completed and approved prior to ignition.

A firefighter directs a helicopter bucket drop on the East Table Fire near the Snake River south of Jackson, Wyoming (July 2003).

Contingency Actions Process

The Prescribed Fire Burn Plan is continually evaluated and tested to assure objectives are being met. If the objectives are not being met the Contingency Plan, a required component of the Prescribed Fire Burn Plan, is implemented. If the Contingency Plan is successful at bringing the project back within the scope of the Prescribed Fire Burn Plan the project continues. If contingency objectives are not met the prescribed fire is converted to a wildfire and Extended Attack is undertaken

Wildland Fire - Appropriate Management Response (AMR) Decision

A wildland fire that is not a prescribed fire requires an Appropriate Management Response (AMR). The AMR, which can range from aggressively suppressing the incident as wildfire to managing the incident as a wildland fire use event, is guided by the strategies and objectives outlined in the development of the L/RMP, reflecting land and resource values and objectives. The FMP outlines fire management activities and procedures to accomplish those objectives. The objective of a wildland fire use project is to obtain resource benefits whereas a wildfire is to be extinguished at minimum cost (see Appendix B).

Wildland Fire Use

Wildland fire use requires the development of a Wildland Fire Implementation Plan (WFIP). The WFIP is a situational plan that guides the management of the natural ignition.

Mitigating Actions Process

The WFIP is continually evaluated and tested to assure objectives are being met. If the objectives are not being met, mitigation actions identified in the WFIP are implemented. Mitigation actions are not presented formally as a distinct plan, but are integrated throughout the short-term (WFIP Stage II) and long-term implementation actions (WFIP Stage III). If the combined set of mitigation actions is not meeting the objectives, the wildland fire use event is converted to a wildfire and extended attack is taken. If the mitigation actions are successful in keeping the wildland fire use event within the parameters of the WFIP, that wildland fire use continues.

Initial Action Process

The AMR for a wildfire is initial action. Initial action is a planned response to a wildfire given the wildfire's potential fire behavior. The objective of initial action is to stop the spread of the fire and put it out at least cost.

Extended Attack | Process

If initial action does not meet its objectives, or a mitigation actions or contingency actions fail, extended attack is undertaken. Extended attack is situational in nature and preplanned responses are not always available. The Extended Attack Incident Commander implements extended attack protocols.

The Incident Commander (IC) is responsible for developing an Incident Action Plan (IAP), which is designed to continue effective and safe firefighting given the situation at hand. The IAP will establish an operational objective for extended attack and communicate it to the firefighters. The agency administrator responsible must ensure that the command function is commensurate with the complexity of the incident being managed.

Extended attack continues until the fire is stopped (contained), or in the alternative, when the wildfire suppression effort is transitioned to the implementation of the Wildland Fire Situation Analysis (WFSA).

Wildland Fire Situation Analysis (WFSA) | Process

The WFSA is designed to involve the responsible agency administrator in the wildfire suppression strategy setting process to assure that land management and strategic objectives are considered in the design and execution of the suppression effort. The WFSA is prepared concurrently while Extended Attack is on going. This accommodates the continuation of wildfire suppression actions while simultaneously completing the WFSA.

This is done in anticipation of needing an alternative suppression strategy. If Extended Attack stops the fire, the WFSAs selected suppression strategy is not implemented. If the WFSA alternative is implemented but not successful then the WFSA is revised and the new version is implemented. This process is iterative until the wildfire is suppressed.

After Action Review – Program Goal Assessment | Process

After action reviews and program goal assessments provide critical and important feedback which can modify and improve policy. Each incident will have an after action review. Each major incident, or the combination of all incidents for a season, will be assessed for necessary changes to policy. The policy process is designed to be iterative and adaptive. In the past much of the lessons learned have been lost. This policy will capture those lessons learned and modify all agencies', manuals, directives, guidebooks, and plans to accommodate improvements.

Crews cut handline through thick brush on the Wedge Canyon Fire in Montana (August 2003)

Implementation Direction Flowchart for the Federal Wildland Fire Management Policy

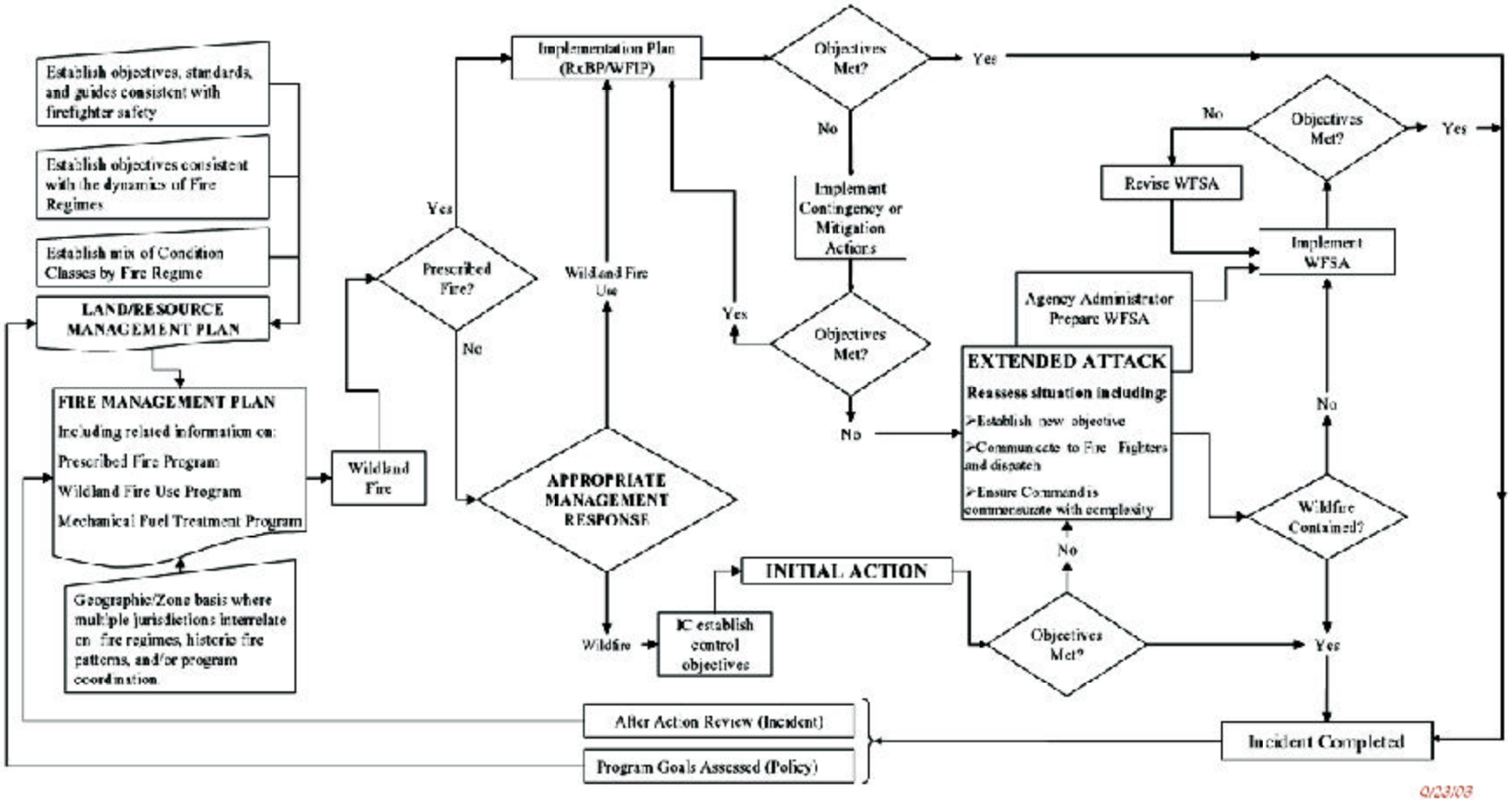


Figure 1 - Implementation Direction Flowchart

Conclusion

This implementation strategy addresses the factors that prompted federal wildland fire management policy revisions in 1995 and, again, in 2001 (e.g. South Canyon Fire, 1994 and Cerro Grande incident, 2000). This implementation strategy introduces extended attack protocols for transition wildfires like South Canyon and requires fire management planning across jurisdictional boundaries for landscape-scale fuel treatment projects, such as Cerro Grande.
The implementation strategy also requires that wildland fire management plans and procedures be tied to approved Land/Resource Management Plans and that on-going evaluation is a part of an iterative, improved policy.

A firefighter evaluates the situation on the Wedge Canyon Fire in Montana (August 2003).

Despite these improvements, the wildland fire policy remains "conservative," in the words of reviewers. Although this, and other, policy implementation strategies since 1972 provide for fire protection and fire use, significant future events will continue to shape fire policy. Fundamentally, however, wildland fire policy improvements are attempting to marginalize a much deeper, much more systemic, and more problematic public lands policy dilemma. Until larger, overarching land/resource policy issues are reconciled, wildland fire policy evolution can only inch forward on the heels of undesirable outcomes in firefighting and fire use.

In the context of public expectations for fire protection, legal mandates for clean air, clean water, and endangered species habitat, America's fire-dependent wildlands need to be managed to meet public needs within the limits of social, economic, and ecological acceptability. The dynamics of these fire-prone ecosystems need to be factored into managing public lands where there is a risk to communities and the environment.

The policy debate before the American public can no longer be confined to wildland fire management plans, activities, and actions alone. Record-setting wildfires beg the need to explore the extent to which land/resource management objectives, development patterns, regulatory controls, and intolerance for action continue to "fuel" – however inadvertently - unacceptably high suppression costs, resource losses, and disruption to local economies.

The East Fire in Yellowstone National Park (August 2003).

Appendix

Appendix A: Glossary

Appendix B: Variation in Terminology (Source Comparisons**)**

Appendix C: 2001 Guiding Policy Principles and Statements

Appendix D: Policy Clarification, Objectives, Management Intent and Measures

Appendix E: Historical Background

Appendix F: Legal Basis for Policy

Appendix G: Reference Documents

Appendix H: Review Process and Reviewers

Appendix I: Task Group Members

A firefighter walks the fire line on the Robert Fire near West Glacier, Montana (August 2003).

Appendix A: Glossary

After Action Review – A professional discussion of an event, focused on performance standards, that enables Agency Administrators and firefighters to discover for themselves what happened, why it happened, and how to sustain strengths and improve on weaknesses.

Appropriate Management Response (AMR) – The Appropriate Management Response (AMR) is any specific action suitable to meet Fire Management Unit (FMU) objectives. Typically, the AMR ranges across a spectrum of tactical options (from monitoring to intensive management actions). The AMR is developed by using FMU strategies and objectives identified in the Fire Management Plan.

Condition Class – Depiction of the degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components. These classes categorize and describe vegetation composition and structure conditions that currently exist inside the Fire Regime Groups. Based on the coarse-scale national data, they serve as generalized wildfire risk rankings. The risk of loss of key ecosystem components from wildfires increases from Condition Class 1 (lowest risk) to Condition Class 3 (highest risk).

Contained/Containment – The status of a wildfire suppression action signifying that a control line has been completed around the fire, and any associated spot fires, which can reasonably be expected to stop the fire's spread.

Contingency Actions – A back-up plan of action when actions described in the primary plan are no longer appropriate. Contingency actions are required to be taken when the project exceeds its intent. Actions are taken to return the project to its intended design.

Ecosystem Sustainability – A concept that promotes the use of natural resources to benefit humans while conserving and wisely managing natural ecosystems for the future.

Emergency Stabilization – Planned actions to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources.

Extended Attack – Suppression activity for a wildfire that has not been contained or controlled by initial action or contingency forces and for which more firefighting resources are arriving, en route, or being ordered by the initial attack incident commander

Fire Management Plan (FMP) – A plan which identifies and integrates all wildland fire management and related activities within the context of approved land/resource management plans. It defines a program to manage wildland fires (wildfire, prescribed fire, and wildland fire use). The plan is supplemented by operational plans, including but

limited to preparedness plans, preplanned dispatch plans, prescribed fire burn plans and prevention plans. Fire Management Plan's assure that wildland fire management goals and components are coordinated.

Fire Management Unit (FMU) – An FMU is any land management area definable by objectives, management constraints, topographic features, access, values to be protected, political boundaries, fuel types, major fire regime groups, and so on, that set it apart from the management characteristics of an adjacent FMU. The FMUs may have dominant management objectives and pre-selected strategies assigned to accomplish these objectives.

Fire Planning Unit (FPU) – A Fire Planning Unit consists of one or more Fire Management Units. Fire Planning Units are the geographic scope of the landscape defined for the fire management analysis. Fire Planning Units may relate to a single administrative unit, a sub-unit, or any combination of units and sub-units. Fire Planning Units are scalable, and may be contiguous or non-contiguous. Fire Planning Units are not predefined by Agency administrative unit boundaries, and may relate to one or more agencies. They may be described spatially.

Fire Regime – Describes the patterns of fire occurrence, frequency, size, and severity - and sometimes, vegetation and fire effects as well - in a given area or ecosystem. A fire regime is a generalization based on fire histories at individual sites. Fire regimes can often be described as cycles because some parts of the histories usually get repeated, and the repetitions can be counted and measured, such as fire return interval.

Implementation Plan – The design and definition of all the activities, resources, limitations, and contingencies required for successful wildland fire management.

Initial Action – The actions taken by the first resources to arrive at a wildfire.

Initial Attack – An aggressive suppression action consistent with firefighter and public safety and values to be protected.

Land/Resource Management Plan (L/RMP) – A document prepared with public participation and approved by an agency administrator that provides general guidance and direction for land and resource management activities for an administrative area. The L/RMP identifies the need for fire's role in a particular area and for a specific benefit. The objectives in the L/RMP provide the basis for the development of fire management objective and the fire management program in the designated area.

Maximum Management Area – The maximum geographic limits of spread within which a wildland fire use fire is allowed to spread.

Mitigation Actions – On-the-ground actions that will serve to increase the defensibility of the maximum management area (MMA); check, direct, or delay the spread of fire; and minimize threats to life, property, and resources. Mitigation actions may include

mechanical and physical non-fire tasks, specific fire applications, and limited suppression actions. These actions will be used to construct firelines, reduce excessive fuel concentrations, reduce vertical fuel continuity, create fuel breaks or barriers around critical or sensitive sites or resources, create "blacklines" through controlled burnouts, and to limit fire spread and behavior.

Preparedness Level – Increments of planning and organizational readiness commensurate with increasing fire danger.

Prescribed Fire – See Wildland Fire.

Prescribed Fire Burn Plan – a plan required for each fire application ignited by management (See Implementation Plan).

Project Objectives –The specific results expected from completing a project.

Rehabilitation – Efforts undertaken with three years of a wildland fire to repair or improve fire damaged lands unlikely to recover to a management approved conditions, or to repair or replace minor facilities damaged by fire.

Restoration – The continuation of rehabilitation beyond the initial three years or the repair or replacement of major facilities damaged by the fire.

Strength of Force – Total firefighting resources available, during a specified period, to conduct and support firefighting operations.

Wildfire – See Wildland Fire.

Wildfire Suppression – an Appropriate Management Response to wildfire (or an escaped wildland fire use or prescribed fire) that results in curtailment of fire spread and eliminates all identified threats from the particular fire.

Wildland Fire – Any non-structure fire that occurs in the wildland. Three distinct types of wildland fire have been defined and include wildfire, wildland fire use, and prescribed fire.

> **Wildfire** – An unplanned and unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.
>
> **Wildland Fire Use** – The application of the Appropriate Management Response to naturally-ignited wildland fires to accomplish specific resource management objectives in predefined designated areas outlined in Fire Management Plans. Operational management is described in the Implementation Plan (Wildland Fire Implementation Plan (WFIP)).

Prescribed Fire – Any fire ignited by management actions to meet specific objectives.

Wildland Fire Implementation Plan (WFIP) – A progressively developed assessment and operational management plan that documents the analysis and describes the appropriate management response for a wildland fire (See Implementation Plan).

Wildland Fire Situation Analysis (WFSA) – A decision-making process that evaluates alternative wildfire suppression strategies against selected environmental, social, political, and economic criteria, and provides a record of those decisions.

Wildland Fire Use – See Wildland Fire

Wildland Urban Interface (WUI) – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels.

Appendix B: Variation in Terminology (Source Comparisons)

The source comparisons attempt to trace the origin of various definitions and concepts used in wildland fire terminology. It is intended to be a basis for the task group in resolving terminology inconsistencies (See Task 1, Implementation Recommendations). The elements in the table are not meant to be all inclusive but rather examples of the terminology problem.

TERM	DEFINITION	SOURCE
Appropriate Management Response	The response to a wildland fire based on an evaluation of risks to firefighter and public safety, the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities, and values to be protected.	2
Appropriate Management Response	Specific actions taken in response to a wildland fire to implement protection and fire use objectives.	3
Appropriate Management Response	The Appropriate Management Response (AMR) is any specific action suitable to meet Fire Management Unit (FMU) objectives. Typically, the AMR ranges across a spectrum of tactical options (from monitoring to intensive management actions). The AMR is developed by using FMU strategies and objectives identified in the Fire Management Plan.	6
Extended Attack	A wildland fire that has not been contained or controlled by initial attack forces and for which more firefighting resources are arriving, en route, or being ordered by the initial attack incident commander.	1
Extended Attack	A wildfire that has not been contained or controlled by initial attack, or project contingency plan or mitigation actions, and for which more firefighting resources are arriving, en route, or being ordered by the initial attack incident commander	6
Extended Attack	An extended attack incident is a wildfire that has not been contained/controlled by the Initial Attack.	7
Initial Attack	The actions taken by the first resources to arrive at a wildfire to protect lives and property, and prevent further extension of the fire.	1
Initial Attack	An aggressive suppression action consistent with firefighter and public safety and values to be protected.	3,6
Initial Attack	The action taken by resources that are first to arrive at an incident.	7
Wildland Fire	Any fire occurring on the wildlands, regardless of ignition source, damages or benefits	1
Wildland Fire	A nonstructural fire that occurs **on** wildland.	2
Wildland Fire	Any nonstructural fire, other than prescribed fire, that occurs **in** the wildland.	3,6
Wildland Fire	Any fire burning in wildland fuels that is not a prescribed fire.	4

Unwanted wildland fire	Any wildland fire in an undesirable location or season, or burning at n undesirable intensity, spread rate or direction.	4
Unplanned and unwanted wildland fire	…one that is burning outside the parameters as defined in land use plans and fire management plans for that location under current and expected conditions….Unplanned is not the same as unscheduled…	5
Wildfire	A fire occurring on wildland that is not meeting management objectives and thus requires a suppression response.	1
Wildfire	An unwanted wildland fire.	3
Wildfire	An unplanned and unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use and prescribed fire projects, and all other wildland fires where the objective is to put the fire out.	6
Wildland/Urban Interface	The line, area, or zone where structures and other human development Meet or intermingle with undeveloped wildland or vegetative fuels. (Synonym: I-ZONE, WILDLAND/URBAN INTERFACE)	1
Wildland/Urban Interface	The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (Glossary of Wildland Fire Terminology, 1996).	5,6
Wildland Fire Use	The management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in Fire Management Plans.	3,4,5
Wildland Fire Use	The application of the Appropriate Management Response to naturally-ignited wildland fires to accomplish specific resource management objectives in predefined designated areas outlined in Fire Management Plans. Operational management is described in the Project Implementation Plan (Wildland Fire Implementation Plan (WFIP)).	6

SOURCE	**REFERENCE DOCUMENT**
1	NWCG Glossary of Wildland Fire Terminology (1996)
2	Review and Update of the 1995 Federal Wildland Fire Management Policy (2001)
3	Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide (1998)
4	Cohesive Fuel Treatment Strategy (2/4/03 draft)
5	A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment – Implementation Plan (2002)
6	Interagency Direction For the Implementation of Federal Wildland Fire Management Policy
7	Thirtymile Fire Investigation Report

Appendix C: 2001 Guiding Principles and Statements

(Quoted from the Review and Update of the 1995 Federal Wildland Fire Management Policy, January 2001.)

GUIDING PRINCIPLES

The following Guiding Principles are fundamental to the successful implementation of the 2001 Federal Fire Policy:

1. Firefighter and public safety is the first priority in every fire management activity.

2. The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process. Federal agency land and resource management plans set the objectives for the use and desired future condition of the various public lands.

3. Fire Management Plans, programs, and activities support land and resource management plans and their implementation.

4. Sound risk management is a foundation for all fire management activities. Risks and uncertainties relating to fire management activities must be understood, analyzed, communicated, and managed as they relate to the cost of either doing or not doing an activity. Net gains to the public benefit will be an important component of decisions.

5. Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives. Federal agency administrators are adjusting and reorganizing programs to reduce costs and increase efficiencies. As part of this process, investments in fire management activities must be evaluated against other agency programs in order to effectively accomplish the overall mission, set short- and long-term priorities, and clarify management accountability.

6. Fire Management Plans and activities are based upon the best available science. Knowledge and experience are developed among all federal wildland fire management agencies. An active fire research program combined with interagency collaboration provides the means to make these tools available to all fire managers.

7. Fire Management Plans and activities incorporate public health and environmental quality considerations.

8. Federal, State, tribal, local, interagency, and international coordination and cooperation are essential. Increasing costs and smaller work forces require that public agencies pool their human resources to successfully deal with the ever-increasing and more complex fire management tasks. Full collaboration among federal wildland fire management agencies and between the federal wildland fire management agencies and international,

State, tribal, and local governments and private entities result in a mobile fire management work force available for the full range of public needs.

9. Standardization of policies and procedures among federal wildland fire management agencies is an ongoing objective. Consistency of plans and operations provides the fundamental platform upon which federal wildland fire management agencies can cooperate, integrate fire activities across agency boundaries, and provide leadership for cooperation with State, tribal, and local fire management organizations.

Appendix D: Policy Clarification, Objectives, Management Intent and Measures

This appendix keeps the original order of the seventeen 2001 Guiding Principles and Statements but creates categories for clarification of relationships among the policies (Table 1).

The Predicate policies serve as the foundation to all wildland fire management work, in a similar manner as the Guiding Principles (Appendix A). Supportive Processes are those policies that *support* the main wildland fire management processes that lead directly to results. The Main Processes directly affect the Results policies, which clearly highlight the outcomes required by the implementation of all seventeen policy statements. Evaluation policies are then used to modify policy and plans by learning from the implementation of the policy and the execution of the activities.

Table 1 – Policy Components

POLICY COMPONENTS				
PREDICATES	*SUPPORTIVE PROCESSES*	*MAIN PROCESSES*	*RESULTS (OUTCOMES)*	*EVALUATION*
	Standardization			
	Science			
Interagency Cooperation	Prevention	Use of Wildland Fire (Including Prescribed Fire)	Fire Management and Ecosystem Sustainability	
Safety	Planning		Wildland/Urban Interface	Evaluation
	Preparedness	Suppression	Rehabilitation and Restoration	
	Agency Administrator and Employee Roles			
	Protection Priorities			
	Communication and Education			
	Response to Wildland Fire			

Each of the seventeen policy areas are assessed in depth in the following table (Table 2. The policy area's guiding principle is restated first. Clarifying comments follow that show more generally what the goal and concern behind it are. The third column details the Objectives and Management Intent to clearly state what should be done. Finally either a results or process metric is specified for evaluation purposes.

Table 2 – Policy Clarification, Objectives, Management Intent, and Measures

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
1. Safety			**Accident Frequency Rate**
Firefighter and public safety is the first priority. All Fire Management Plans and activities must reflect this commitment.	No natural resource, home, or item of property is worth a human life. Zero tolerance. As a result of the Thirtymile Fire of 2001, protocols are being developed for the transition phase from initial action to extended attack and from extended action to large fire management	Manual direction will direct Agency administrators to develop and establish L/RMP objectives that address firefighter and public safety. Agency administrators develop and establish FMPs Initial Action objectives that ensure firefighter and public safety. Incident Commanders develop and establish initial action objectives for incidents that ensure firefighter and public safety. Zero accidents is the goal.	Fatality Rate and Lost Time Accident Rate Per 100,000 work hours for: ❑ Federal Firefighters ❑ Contractors *(10-year Comprehensive Strategy Implementation Plan Goal 1, page 10, A.)* Annual Fatality and Injury Rate for citizens due to Wildfire
2. Fire Management and Ecosystem Sustainability			**Reduction in Acres at Risk**
The full range of fire management activities will be used to achieve ecosystem sustainability including its interrelated ecological, economic, and social components	Not intended to force the use of the full range of activities at all levels. The appropriate activities are identified through the planning process for any given designated area. Economic intent – sustainable supply of goods, services, and social values. Full range may include any vegetative manipulation. Ecosystem sustainability provides a supply of goods, services, social values, and natural processes.	Identify appropriate fire management direction in the L/RMP process. L/RMPs will be consistent with ecological conditions, fire regime and dynamics. Exploit the fullest range of fire management options possible to sustain healthy ecosystems within acceptable risk levels as identified in the FMP. Land/Resource Management Plans will consider the long term effects associated with the default option of taking no management action Where this option is selected in fire-dependant ecosystems, conflagration planning should be addressed in the context of long-term effects.	Number of acres in fire regimes 1, 2, or 3 moved to a better condition class -As percentage of total acres treated Number of acres moved to a better condition class per million dollars of gross investment in Fuels reduction & treatment budget. Percent of acres degraded by wildland fire with post-fire rehabilitation treatments underway, completed, and monitored. *(10-year Comprehensive Strategy Implementation Plan, Goal 3)*

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
3. Response to Wildland Fire			**Trend Analyses**
Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. Response to wildland fires is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and, values to be protected, dictate the appropriate response to the fire.	Agency mission will influence the response to wildland fire. In sum total, fire is a critical natural process, even though at smaller scales fire may not be a critical natural process. The L/RMP will define and identify fire's role in the ecosystem. The corresponding response to an ignition (Appropriate Management Response) is guided by the strategies and objectives outlined for FMU's in the FMP. Values are defined in the FMP. Initial attack is planned and specified in FMPs.	FMPs guide the Appropriate Management Response by developing strategies and objectives in designated FMUs. Fire considerations have to be at the scale of the fire regime, or a fire's potential area of influence. Coordination across jurisdictional boundaries is required. Completion of all Fire Management Plans by 2004 and 100% of burnable acres will be covered using the Interagency Fire Management Plan Template.	Acres burned that achieve resource management objectives in approved fire use plans. Percentage of FMPs completed by FY04 using the Interagency Fire Management Plan Template. Timetable for revision of L/RMPs. FMPs coordinated within fire regimes Percent of FMPs developed on an interagency or intergovernmental basis Percent of burnable acres covered in federal fire management plans in compliance with Federal Wildland Fire Policy *(10-year Comprehensive Strategy Implementation Plan, Goal 1)* Trend in large fire suppression costs
4. Use of Wildland Fire			
Wildland fire will be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire will be based on approved Fire Management Plans and will follow specific prescriptions contained in operational plans.	Natural ecological role has to be considered in context of the agency mission. It is recognized that there are a variety of agency planning approaches to determine the response to fire. The Fire Management Plan (FMP) will determine response. Wildland fire use and prescribed fire are included.	Implementation Plans exist for prescribed fire and wildland fire use. Wildland fire use and prescribed fires are designed to be consistent with fire behavior of the fire regime. E.g. Some areas may require pre-treatments in order to allow fire to be consistent with the fire regime	Acres burned that achieve resource management objectives in approved fire use plans.
5. Rehabilitation and Restoration (Currently, Emergency Stabilization and Rehabilitation)			**Status of Effort**
Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health, safety, and to help communities protect infrastructure **Note:** The agencies have developed an interagency Emergency Stabilization and Rehabilitation Guide to cover this policy. The new guide changes terminology and makes it consistent among all agencies.	This policy has to be considered along with other resource management responsibilities within the agency. It is intended to be an interdisciplinary policy rather than simply limited to fire. To that end the Wildland Fire Leadership Council has assigned a group to resolve all issues associated with this policy.	Rehabilitate burned areas such that no further harm is done. Emergency Stabilization and Rehabilitation activities will be tailored to the next fire event. Develop common data base for ES&R information	Percent of acres degraded by wildland fire with post-fire rehabilitation treatments underway, completed, and monitored. *(10-year Comprehensive Strategy Implementation Plan, Goal 3)*

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
6. Protection Priorities			
The protection of human life is the single, overriding suppression priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.	Criteria for priority setting are determined in the L/RMPs and their application is specified in the FMP. The National Mobilization Guide established broad protection priorities for human life and community protection. Natural resource protection priorities are conveyed by the agency administer, established in the L/RMP and reflected in the FMP.	L/RMPs determine priority criteria for resource protection. Geographic and local area coordination groups will have a process to set protection priorities based on the L/RMPs and FMPs relying on the Incident Status Summary (ICS-209) process.	Protection priorities are set in FMPs by FY2004.
7. Wildland Urban Interface			**Trend Analyses**
The operational role of federal and state agencies as partners in the Wildland Urban Interface are wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, state, or local governments. Federal agencies may assist with exterior structural protection activities under formal Fire Protection Agreements that specify the mutual responsibilities of the partners, including funding. (Some federal agencies have full structural protection authority for their facilities on lands they administer and may also enter into formal agreements to assist state and local governments with full structural protection.)	The Federal Government is NOT backing away from assisting states in the Wildland Urban Interface. The National Fire Plan clearly focused Federal efforts in assisting in the Wildland Urban Interface. It is the federal intent to continue that emphasis. FIREWISE is federally supported by funding and through activities. The primary responsibility for protecting private property and rural communities lies with individual property owners and local governments. Many States have wildland fire responsibility while rural fire districts have structural responsibility.	Prevent the movement of wildfires from the wildlands into the WUI area, out of the WUI area into the wildlands, and improve efficiency of wildfire suppression in WUI situations. Assist responsible jurisdiction in protection. Agreements need to clarify jurisdictional inter-relationships. Accelerate and expand ongoing efforts with federal participation and authorities It is in the best interests of federal government to reconcile protection responsibilities in the urban interface areas. The Federal wildland agencies will facilitate, on a state by state basis, the development of a protection matrix that defines roles and responsibilities among local, state, tribal, and federal fire protection entities, based on each organization's enabling protection authorities. This matrix will serve as a basis to identify and reconcile gaps in protection responsibility.	Number of "FIREWISE" programs implemented Number of communities receiving federal assistance Number of States with authorities matrix completed

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
8. Planning			**Trend Analyses for Quantities**
Every area with burnable vegetation must have an approved Fire Management Plan. Fire Management Plans are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved land management plan. Fire management plans must provide for firefighter and public safety, include fire management strategies, tactics, and alternatives; address values to be protected and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations.	Administratively, this policy is intended to promote interagency and inter-governmental planning, including full consideration of state needs. Geographically, and ecologically, this policy is meant to include the consideration of landscape scale planning. Sequencing of treatments geographically, and across jurisdictional boundaries, is a critical component of risk management and planning. FMP completion is mandated by appropriations law. Outside influences frequently affect policy implementation See Interagency Cooperation for further discussion.	Fire management is connected to L/RMPs Fire management activities are spatially sequenced to mitigate risk and improve efficiency. Plans are iterative and adaptable to outcomes. Develop a fire management plan that strategically meets the fire management guidance of the L/RMP and applicable environmental laws and regulations. The FMP should be interagency or intergovernmental in scope and landscape scale, which mitigates risk by carefully considering the consequences of actions. Develop FMPs on by FPU where multiple jurisdictions interrelate with respect to fire regimes, historic fire patterns, and/or program coordination (mutual aid, assistance agreements, etc.). Fire Management Plans will be updated to 2001 Fire policy standards by FY2004 using the Interagency Fire Management Plan Template. 100 % of burnable acres will be covered by FMPs. L/RMP updates will be followed by an updating of FMPs**.**	Percentage of FMPs completed by FY04 Updated FMPs follow timetable for revision of L/RMPs. FMPs coordinated within fire regimes Percent of FMPs developed on an interagency or intergovernmental basis Percent of burnable acres covered in federal fire management plans in compliance with Federal Wildland Fire Policy *(10-year Comprehensive Strategy Implementation Plan, Goal 1)*

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
9. Science			**R & D Investment in projects the assist management**
Fire management plans and programs will be based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results must be made available to managers in a timely manner and must be used in the development of land management plans, fire management plans, and implementation plans.	This policy is intended to increase the body of scientific knowledge and understanding about fire management programs. Further, development of management tools and the transfer to management for use are included. The word "support" means increase in scientific knowledge. Social sciences are a part of the research need. Applied science is to be made available to managers. L/RMPS and FMPs are based on a foundation of sound science. The Joint Fire Sciences Plan, U.S.G.S., Forest Service Fire Research, and National Fire Plan Research Program are included for consideration here.	Increase knowledge and incorporate in plans Include social sciences Emphasis on applied science; e.g., technical assistance for small diameter materials Establish coordinated, common databases to be used for trend analysis. Coordinated process, overview of fire-related research. Intent is to use science programs to include fire and fuels, physics, social science, and operations research areas to improve program capability. Develop methodology for tracking the "Annual Condition of Wildlands"	Conduct annual research activities that expand the overall body of wildland fire management scientific knowledge (includes such things as the JFSP Annual Report, USFS Annual Report, NFP Research Annual Report, USGS Annual Research Report to determine how much research was conducted) (measure that research is being done). Ensure that wildland fire management research activities are continually focused on areas of highest priority and greatest needs (includes consideration of such things as the JFSP Announcements for Proposals, projects funded within those AFPs, USFS Research priorities, USGS Research Priorities) **(measure that the correct kind of research is being done).** Make available up-to-date research results to field practitioners, managers, and others and incorporate into Fire management plans, and implementation plans to increase wildland fire program effectiveness (includes numbers of new training courses, conferences, workshops, software packages, CR-ROM's programs, Users' Manuals, Demonstration Sites, etc.) **(Measure that technology transfer is making research results available in support of program efficiency).**

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
10. Preparedness			**Trend Analyses**
Agencies will ensure their capability to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight.	It is recognized that external influences will affect capability and capacity, particularly budgets. Duplication is reduced by effective preparedness planning on an interagency basis. Preseason agreements are an integral part of preparedness. Federal agencies need assistance in meeting needed capacity (demand) for resources. The FPA Preparedness Module will be the basis of analysis for this policy.	Establish a safe and cost effective fire management program that meets the fire management guidance identified in the L/RMP. Coordinate preparedness, and preparedness planning, among affected agencies. The coordination system will develop predictive services, which support pre-positioning resources in the most effective manner. Identify the level of management oversight and the management level(s) that will be required to provide oversight, based on Preparedness level. Identify the skill level necessary for providing management oversight at various incident complexity levels. Develop a process that provides the necessary oversight. Identify the staffing levels (qualifications) and equipment mixes required for both average and peak fire management workload. Implement training program to meet staffing levels (qualification requirements).	Outcome predicted by FPA plotted against actual outcome (outcome = weighted acres protected). Number of management positions predicted to be needed by FPA plotted against the actual number of filled positions. Percentage of required staffing provided annually by agency administrators for both preparedness (fire budget) and management oversight (agency administrators).

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
11. Suppression			**Cost-Effectiveness Measure - Trend Analysis of Cost**
Fires are suppressed at minimum cost, considering firefighter and public safety, and all values to be protected, consistent with resource objectives	See Safety for overriding considerations. In fire suppression time is of the essence in minimizing cost and reducing exposure to safety hazards. Decreasing time to achieve objectives increases aggressiveness necessary. Suppression considerations will be addressed in FMPs. Fire fighting should be done when productivity is best, including during the night. Pre-positioning and preparedness will enhance ability to reduce time and thereby reduce cost. Cost is defined as the sum of the cost of implementing suppression action, the expected cost of the selected alternative, the amount of resource loss expected, and the emergency stabilization and rehabilitation expense.	WFSAs will consider a reasonable range of alternatives considering cost. Fight fire aggressively but provide for safety first. The Implementation Direction Flowchart will be used to guide decisions. WFSA revised and used.	Average gross costs per acre for suppression and emergency stabilization and rehabilitation by size class and fire regime for fires (i) contained within initial attack, (ii) escaping initial attack, (iii) within wildland/urban interface areas, (iv) outside wildland-urban interface areas, (v) in areas with compliant fire management plans and (vi) in areas without compliant fire management plans. Percent of wildfires controlled during initial attack. *(10-year Comprehensive Strategy Implementation Plan, Goal 1)* Ten year moving average of total wildfire suppression cost/acre burned.
12. Prevention			
Agencies will work together and with their partners and other affected groups and individuals to prevent unauthorized ignition of wildland fires.	Prevention is extended to include the comments in Item 5, Wildland Urban Interface. Prevention focuses on the human caused wildfires.	Reduce the frequency and severity of wildfires due to unplanned and unwanted ignition by working with all partners	Percent of communities at risk with fire prevention programs in place and being implemented. Number of "FIREWISE" programs implemented.

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
13. Standardization			
Agencies will use compatible planning processes, funding mechanisms, training and qualification requirements, operational procedures, values-to-be-protected methodologies, and public education programs for all fire management activities.	Many examples exist (ICQS, FPA, ROSS, FMP Template, Interagency Standards for Fire and Fire Aviation Operations, S- Courses, NWCG Working Teams, NWCG Fire Education Working Team, etc.).	Wildland fire management agencies will use common standards in all aspects of their fire management programs to the extent possible so that planning, budgeting, and field operational procedures and methodologies applied in one will provide the same results in any other given similar circumstances. Federal processes will be compatible with State processes and common where ever feasible. Develop common operational field guidance to deal with all aspects of fire management operations. Develop a common process for determining budget needs and cost sharing for all aspects of fire management operations. Develop a common approach and process for educational programs for internal and external audiences. Reconcile interagency transfer of funds to reduce fiscal inconsistencies.	A common set of training and qualification standards apply to 100% of firefighters. Standard budget for federal agencies by 10/1/03. All Federal agencies adopt this implementation strategy. A single glossary of terms exists by June 30, 2004.
14. Interagency Cooperation			
Fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners.	Interagency includes all participating agencies, federal, state, and local, and tribal. Geographic Area Coordination Centers (GACC's) and the Multi-Agency Coordination Group (MAC) provide the means to deliver and strengthen this policy.	All appropriate elements within the fire management program will be conducted in an interagency setting to ensure that consequences of actions receive review by cooperators and affected partners GACC's in each geographic area will be functional and operate effectively. Clarify roles and responsibilities among agency administrators, GACC's, and MAC's	Percent of state, tribal and federal fire management programs that have elements that receive interagency review. Preparedness Plans for each geographic area have been created and operate effectively. Percentage of FMPs completed by FY04.

Policy Clarification, Objectives, Management Intent, and Measures			
Policy Area	**Clarifying Comments**	**Objectives and Management Intent**	**Measures**
15. Communication and Education			
Agencies will enhance knowledge and understanding of wildland fire management policies and practices through internal and external communication and education programs. These programs will be continuously improved through the timely and effective exchange of information among all affected agencies and organizations.	Communication and Outreach is both an internal and external process. Agencies must be able to reach all personnel in the field, across agencies. Agencies must have a consistent and shared message for the public.	Develop a consistent and uniform message on importance and role of fire in natural resource management. Complete a program review of National Interagency Fire Center (NIFC) external affairs and other agencies for inclusion (involve subject matter experts; e.g., NPS) Establish an interagency coordinator position (NIFC) for coordination of communications and education programs. Develop a memorandum of understanding among Federal wildland fire agencies and the National Association of State Foresters for promoting FIREWISE programs to more wildland urban interface communities. *(Goal 4, p. 16, , 10-year Comprehensive Strategy Implementation Plan* Reconcile multiple glossaries into single glossary- Common terminology in a single glossary exists	Communications plan that will aid and assist internal and external understanding of the terminology and the implementation process is implemented by 10/1/03. A single glossary of terms exists by June 30, 2004.
16. Agency Administrator and Employee Roles			**Reporting on strength of force**
Agency administrators will ensure that their employees are trained, certified and made available to participate in the wildland fire program locally, regionally, and nationally as the situation demands. Employees with operational, administrative, or other skills will support the wildland fire program as necessary. Agency administrators are responsible and will be held accountable for making employees available.	Not intended to cover every single employee. A general statement. Currently, the only time the agency administrator is aware of a need is under National Preparedness Level 4. Responsibility should extend beyond suppression – to include fuels, aviation, other integral parts of fire management.	Develop strength-of-force needs by Preparedness Level (PL), by geographic area. Allocate strength-of-force needs to geographic areas. Agency administrators will train, qualify, and certify available personnel for local fire needs and strength-of-force requirements for GACC's. Create mechanisms that ensure availability; e.g., position description requirements, condition of hire standards. Allow target relief by PL, by geographic area.	Percent of workforce trained and available to support fire at PL 4 and above.
17. Evaluation			
Agencies will develop and implement a systematic method of evaluation to determine effectiveness of projects through implementation of the 2001 Federal Wildland Fire Management Policy. The evaluation will assure accountability, facilitate resolution of areas of conflict, and identify resource shortages and agency priorities.	Decision flowchart provides for ongoing monitoring and evaluation of wildland fire management. A formal review process will be established to monitor and evaluate performance, suggest revisions, and make necessary adaptations to the policy at all levels on a regular basis. After Action Reviews will be used to modify FMPs as needed. Program goal assessments will be used to modify L/RMP planning processes and policy where appropriate.	Develop protocols and conduct a periodic, interagency, internal review of the entire fire program (all agencies) for: • policy implementation • effectiveness working together • sustainable ecosystems (movement from condition class) • large fire cost • safety Evaluations will be complimentary of, and consistent with, GPRA and agency Strategic Plans.	Results Objectives: Use baselines for each measure – report impacts as measured Process Objectives - Status and progress on attaining each item using measures herein. "Annual Conditions of the Wildlands" report. All agencies will have completed manuals and directives and guidebooks in accordance with this implementation strategy.

Appendix E: Historical Background

Introduction and Background

Within the past decade, three major fire events causing loss of life and property have rocked the federal wildland fire management services. Each precipitated the need to re-examine wildland fire policies.

- On July 6, 1994, fourteen firefighters died during extended attack operations on the South Canyon Fire near Glenwood Springs, Colorado. The South Canyon tragedy resulted in a revision of the federal wildland fire policy that was approved by the Secretaries of Agriculture and Interior in December 1995 and published in the Federal Register on February 14, 1996

- Six years later, on May 4, 2000, 235 homes and structures were destroyed following the escape of a landscape-scale prescribed fire that burned into Los Alamos, New Mexico. The subsequent Cerro Grande incident prompted further modification of the policy, which was approved by the Secretaries of Agriculture and Interior on January 19, 2001. 2000 was also a "century fire year" for public lands. Mega-fires in the Northern Rockies prompted swift congressional and presidential response in the form of new allocations of funding for federal fire agencies and the states under the National Fire Plan of 2000.

- On July 11, 2001, four firefighters died on the Thirty-Mile Fire in west-central Washington State, again during extended attack operations. This tragedy exposes the vulnerabilities of fire fighting forces in the transition form initial attack to extended attack phase and prompted a series of actions designed to protect the workforce.

Reaction to wildland fire losses at the highest level of government is nothing new. Federal wildland fire management policy revisions have always been spawned by tragedy or catastrophe (Table 1 – Chronology of Policy Change Events). The genesis of federal wildland fire policy traces from the late 1800s, when forest reserves were set aside to protect and conserve natural resources. Deadly and dramatic fires of the day reinforced the public perception of wildland fire as dangerous and destructive. The Peshtigo Fire (1871) is estimated to have killed some 1,500 people. The Great Burn (1910) made headlines around the world for its ferocity and the destruction that it left in its wake. Early wildland fire policies emphasized fire protection or, more accurately, fire exclusion. This country's first land management agencies emphasized fire control as a primary mission area and, in fact, were formed to organize against the threat of wildland fires. Fire protection was built on early detection, rapid attack, and full suppression. By 1935, the Forest Service adopted the so-called "10 A.M. Policy." The policy required that all new fires reported be controlled at less than 10 acres by no later than 10 a.m. the following day. Other agencies, up until the seventies, also had policies that focused on wildfire control.

As a result of surplus equipment after the war years, fire suppression programs capitalized on new aerial attack tools, radio systems, and powerful mechanized tools. Fire exclusion efforts were intensified through the 1950s.

Some, however, were observing the adverse effects of fire exclusion on ecology and forest health as early as the 1920s. Men like Aldo Leopold in the Southwest, Harold Weaver in central Oregon, and H. L. Stoddard in the South were pioneers in questioning a fire policy based on fire exclusion. Despite their warnings, however, federal policy remained centered on putting fires out for the next several decades.

By the 1960s, the policy began to come under more scrutiny, as fire as a natural process with ecological benefits started to be more widely recognized. The 1964 Wilderness Act called for allowing natural processes to occur, unencumbered by the hand of man. In the southern United States, prescribed burning expanded and became the dominant forest management practice. In the West, however, the use of fire as a management tool had few champions and little backing. Contrary to conventional practices elsewhere, the National Park Service adopted a progressive fire management policy that allowed for managing natural ignitions. The policy closely related to the agency's overall mission of natural resource preservation.

In the late seventies the land management agencies began to shift to a more rational decision making process to deal with wildfires and, concurrently, put into place a more visible fire use program. Although federal policies now allowed for a more balanced, more cost-effective, and more ecologically appropriate approach to managing wildland fire, the fire budgets of most of the federal agencies responsible for wildland fire management remained biased to suppression. What was allowed in policy was discouraged by the limited availability of dollars for fire use. Most burning was limited to that needed for slash disposal following timber sales and was paid for under provisions of the sale.

However, the prescribed fire program grew, and as it did, so do the number of "escapes", or prescribed fires burning out of control. Early on, the scrutiny that accompanied escaped prescribed fires was largely internal. However, the 1988 Yellowstone Fires gained national attention and called into question the fire use programs of the federal agencies. Subsequent investigations found that the fire use policy was fundamentally sound, but that the means to implement the policy needed to be strengthened by improved planning and operational guidance.

Table 1 – Chronology of Policy Change Events

1871	The Peshtigo Fire (estimated to have killed some 1,500 people)
1910	The Great Burn
1935	Forest Service adopted the so-called "10 A.M. Policy."
1964	The Wilderness Act called for allowing natural processes to occur, unencumbered by the hand of man.
1978	Land management agencies shift from fire control polices to a more rational decision making process to deal with wildfires and, concurrently, put into place a more visible fire use programs.
1988	Yellowstone Fires gained national attention and called into question the fire use programs of the federal agencies
1994	South Canyon tragedy resulted in a revision of the federal wildland fire policy that was approved by the Secretaries of Agriculture and Interior in December 1995
1998	GAO Report – Need for Cohesive Fuels Strategy
2000	Escape of a landscape-scale prescribed fire that burned into Los Alamos, New Mexico. The subsequent Cerro Grande incident prompted further modification of the policy,
2000	National Fire Plan
2001	Thirty-Mile Fire tragedy in west-central Washington State, again during extended attack operations.

The State of Federal Fire Policy

Fire Policy over the past decade has been shaped largely by two factors: first, the recognition that many of America's wildlands are fire-dependent and that decades of suppression has upset a natural cycle; and second, that the rapid development of formerly wild and rural areas has created an enormous potential loss of private property and lives in what is known as the "wildland/urban interface". Vegetation characterized as "fire-dependent" requires a measure of fire in order to maintain a healthy, resilient condition. Within fire-dependent ecosystems, certain kinds of fire are beneficial, and the health of the ecosystem declines during long periods without fire (Miller 2000). Without fire, wildlands become overgrown, stressed and vulnerable to drought, insects and disease. This overgrowth of vegetation also means there is more fuel to burn in any fire that may occur.

Unconstrained growth into formerly rural and wild areas means that in addition to the loss of natural resources and the threat to firefighter safety, a wildland conflagration almost always means a serious threat to private property and lives. The combination of the rapid growth of the wildland/urban interface and the accumulation of fuels in the wildlands has focused attention on the need for a policy that addresses the need to restore ecosystem resiliency at the same time as protecting private property.

Today, after a century of attempted fire exclusion, extensive areas of the country are at risk from intense, severe wildfires that threaten nearby communities, burn well beyond the adaptive limits of the wildlands, and cause significant damage to key ecological components. The most dangerous, most damaging, and most costly wildfires in recent history are often in fire-dependent wildlands where conditions are altered because several fire cycles have been missed.

Throughout the 1990s severe drought predisposed wildlands to spectacular wildfires. Despite significant advances in firefighting capability, private property losses and wildland acreage losses became enormous. The magnitude of loss began to make national headlines every summer, approaching those not seen since 1910. Although fire researchers and fire managers had embraced the need for re-introducing fire as a means of reducing fuel loads and flammability potential, it was not until the 1990s that the problem became a wider public policy issue.

In 1998, Congress directed the General Accounting Office to look into the causal factors surrounding the disastrous wildfires that were impacting the west. In April 1999, the GAO issued their report, "Western National Forests – A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats." The report found that "*the most extensive and serious problem related to the health of national forests in the interior West is the over-accumulation of vegetation, which has caused an increasing number of large, intense, uncontrollable, and catastrophically destructive wildfires.*" Congress answered with increased fuels funding and delivered an expectation that the problem would be fixed.

Then following the massive fire season of 2000, the National Fire Plan was established allocating major new levels of funding to deal with fire preparedness and program needs. In turn, the Western Governor's Association issued its own guidance in "A Collaborative Approach for Reducing Wildland Fire risks to Communities and the Environment – 10 Year Comprehensive Strategy Implementation Plan" to compliment the implementation of both federal fire policy and the National Fire Plan.

But new policy, additional funding and the new attention to fire issues on the part of the larger wildland fire community – i.e. the states is only part of the solution. There remain management dilemmas and interagency mission differences that also must be resolved if implementation is to be achieved.

The Management Dilemma

Fire exclusion policies over the past century have helped to create vast acreage where ecosystem sustainability is threatened. Simply re-introducing fire is often no longer an option in the areas that need restoration treatments the most. The overcrowded condition of millions of acres of fire-prone wildlands precludes using fire at ecologically appropriate intensities, without, first, some form of pre-fire treatment, such as thinning. However, the mechanical treatments that are required to reduce fuel loads and take some heat out of the equation are often viewed by the public as a surrogate for logging and thus resisted.

The increasing number of people living in the wildland/urban interface has eroded public tolerance for some treatments. Public intolerance for smoke has constrained the use of prescribed fire. In fact, any move to reduce vegetation or remove trees is frequently met with great resistance from homeowners in the interface, as they place great value on the trees themselves, the overall environment and wildlife habitat, and the privacy and seclusion that wildland surroundings afford. Yet avoiding the risks of fire use and mechanical treatments has only exacerbated the fuel accumulation problem and increased the severity of subsequent wildfires that pose a much greater threat to homeowners and their environs.

Different Agencies, Different Missions

At the federal level, the legislation that defines the land management agencies missions has influenced their fire management practices. A recent report by the National Academy of Public Administration summarized the diverse mission of the five federal agencies in a report issued in December 2001 (Table 2 – Varying Federal Agency Missions).

Table 2 – Varying Federal Agency Missions

AGENCY	**MISSION**
Forest Service	Sustainable, multi-use land management to meet diverse needs
Bureau of Land Management	Sustain health, diversity, and productivity of public lands
National Park Service	Preserve natural and cultural resources, allow for public education and enjoyment
Fish and Wildlife Service	Conserve, protect, and enhance wildlife habitat
Bureau of Indian Affairs	Enhance Indian quality of life and promote economic opportunity

From: Managing Wildland Fire – Enhancing Capacity to Implement the Federal Interagency Policy, December 2001, National Academy of Public Administration, page 20.

The report observed, "The Forest Service and Bureau of Land Management have multiple-use missions, whereas the National Park Service and Fish & Wildlife Service

have dominant-use missions. And the Bureau of Indian Affairs is different from all of the others; it has to deal with multiple sovereigns because the tribes are recognized in law and treaties as separate sovereign governments." And behind these missions are different laws and legal mandates. Appendix F to this strategy lists some of the key statutes and legal authorities that govern federal wildfire policy and as is evident, different laws complicate the creation of one unified federal fire policy.

Further complicating matters, at the State level, states are often responsible for wildland fire suppression on fires that occur on private lands. Where private and federal lands meet in the wildland/urban interface, a complex mesh of fire protection needs is created. The interface is often populated with homes requiring structure protection by municipal, rural, or volunteer fire districts. Sometimes no fire protection is in place to protect privately owned homes. Federal, state, and local fire protection responsibilities and limits of responsibilities all come together in the wildland/urban interface. Protection policies in the interface are perplexing and confusing. They challenge cooperators to interact in both planning and operations. A coherent set of policies to cope with these challenges continues to take shape.

That said, at the program level, the Review and Update of the 1995 Federal Wildland Fire Management Policy (January 19, 2001) aims to protect people and community values from the damages of fire at the wildland urban interface while sustaining the natural resources that depend on the benefits of fire. The purpose of the policy is to restore and maintain fire-dependent wildlands as the means of better ensuring safer, healthier, more resilient conditions and better protecting people and community values. The policy's premise holds that naturally functioning fire-adapted ecosystems are more resilient, more diverse, more productive, and safer than those where fire, as the principal ecological process, is excluded over prolonged periods.

Principles and Purpose

Nine principles and seventeen policy statements broadly guide federal wildland fire management operations (Appendix C). As a whole, these principles and statements frame the philosophy, direction, and implementation of fire management planning, decisions, and activities on federal lands. This strategy builds on the principles and policy statements to deliver a uniform means of implementing the policy at the operational level, including consistent direction, a single decision flow chart, common language, and standardized procedures as reflected in applicable directives, manuals, handbooks, and guides.

In this context, this strategy emphasizes policy principles and statements at the planning and operational phases where plan objectives and procedural direction most significantly influence outcomes. Critical plans include:

- Land/ Resource Management Plans
- Fire Management Plans
- Operational Plans

Finally, the operational guidance is iterative; it is designed to be modified as lessons are learned or conditions and outcomes warrant.

The Complexity of Wildland Fire Policy

In broad terms, the 1995 update of the Federal Wildland Fire Management Policy's Working Group recommended *"that federal fire management activities and programs are to provide for firefighter and public safety, protect and enhance land management objectives and human welfare, integrate programs and disciplines, require interagency collaboration, emphasize the natural ecological role of fire, and contribute to ecosystem sustainability."*

The Federal Wildland Fire Management Policy aims to protect wildland/urban interface communities and to sustain healthy wildlands. The policy establishes that fire suppression, wildland fire use, and prescribed fire programs be implemented equally, consistently, and concurrently, as the means to avoid wildland fire risks. It balances the need to respond to immediate wildland fire threats by aggressively fighting fire, while mitigating future and compounding threats by just as aggressively exploiting opportunities to reduce fuel hazards and use the ecologically appropriate kind of fire.

The policy emphasizes firefighter safety as a consideration in planning and a priority in operations. It requires that management strategies and operations decisions be cost-effective. The policy requires that land/resource management plans and fire management operations be responsive to the discrete ecological requirements of fire-dependent wildlands, as the fundamental means of protecting wildland communities and sustaining healthy ecosystems.[1]

The complexities of today's wildland fire management programs suggest that, at the operational level, fire management program direction needs to be tailored to dominant land and resource management themes. Policy evolution (Table 1 – Chronology of Policy Change Events) and implementation of modern fire policy must recognize the discrete differences among resource objectives in the wildlands and the public

[1] Ecological requirements of fire-dependent wildlands are defined within specific fire regimes and are measured by fire intensities, fire-return intervals, and season of burning.

expectations in the wildland/urban interface. However, these differences are not always spatially specific or easily discernable at the landscape scale that defines the fire regime for the area. Examples of dominant themes, and their respective management intent, follow:

- **Wilderness or wild-oriented areas**

Permit fires to play, as nearly as possible, their natural ecological role within wilderness.

Reduce, to a reasonable level, the risks of wilderness fires escaping onto high-value areas where unacceptable damage would result.

- **General Wildlands**

Restore and sustain fire-dependent wildlands for a variety of resource benefits.

- **Wildland-Urban Interface**

Prevent wildland fires from impinging into interface or intermix communities and visa-versa.

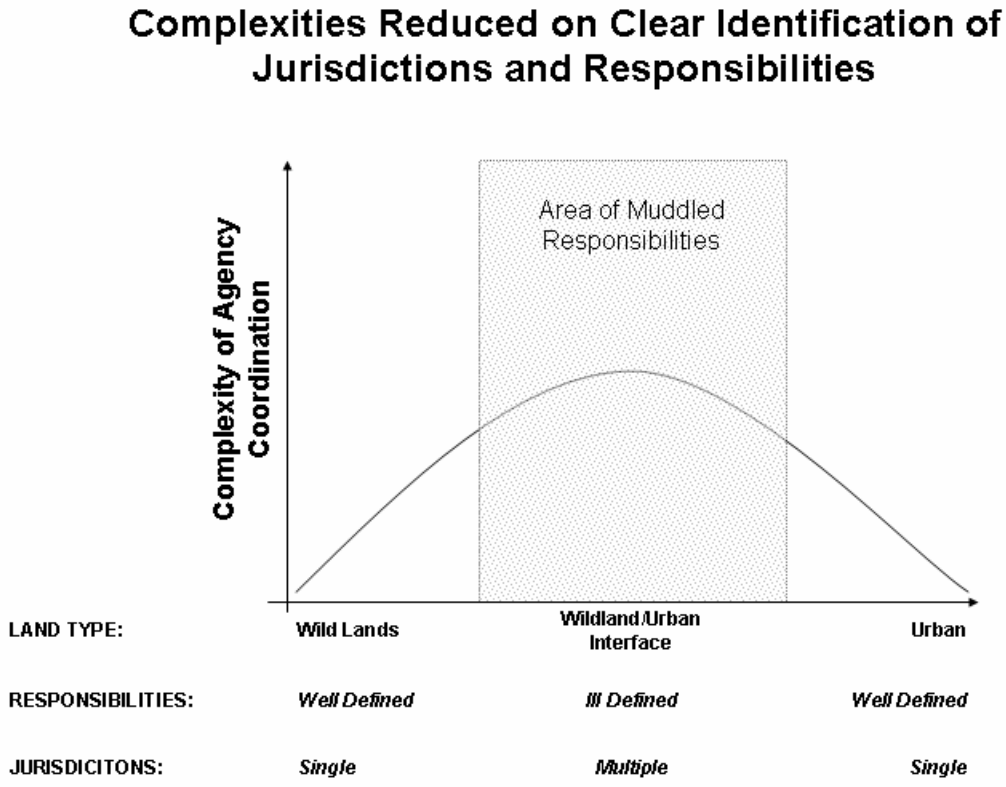
Protect watersheds and other community values that interface or intermix areas depend on.

Reconcile jurisdictional issues and assist responsible parties, including homeowners.

Interagency Responsibility and Authority

Although the focus here is on wildland fire management policies, the problem that the policy attempts to confront may be as much a jurisdictional responsibility problem or an ordinance problem as it is a fire management policy problem (Figure 1 - Complexities of Jurisdictions). Clearly, however, it is in the best interests of fire managers at federal, state, and local levels of government and the American public to reconcile these jurisdictional issues.

Figure 1 - Complexities of Jurisdictions



Various authorities exist which define fire protection responsibilities of agencies and individuals. Authorities exist at National, State, county/township and city levels. Authorities vary widely across all federal agencies, states, and cities. Because authorities vary widely from state to state and community to community there is often confusion among the protecting agencies when jurisdictions are contiguous or are mixed. While authorities and responsibilities are clearly defined and understood in some states, in others they are not. Each state has its own unique set of authorities and responsibilities, complicating the situation even further. In many cases authorities and responsibilities are undefined for many agencies leading to muddled responsibility in some areas. Uncertainties and confusion over responsibilities often leads to inefficient, ineffective protection efforts resulting in duplication of efforts, failure to act, unreasonable expenditure of funds, or even unauthorized activity.

There is a need to clarify existing authorities for all ownerships, to identify where authorities may conflict, identify areas where responsibility is not clearly established, and where established authorities and responsibilities are not being met.

A coordinated effort to clarify authorities at all levels and for all lands will help all agencies and property owners appropriately address their responsibilities in the wildland /urban interface individually or through coordination with their partners. Shortfalls may

need to be addressed through additional statutes, agreements or operating plans as deemed appropriate.

The following Comparison of Responsibilities and Authorities table (Page 44) illustrates the range of authorities and responsibilities that can influence wildland fire management. The column headings show a continuum of land classifications from wilderness to urban, with various steps in between. The first column lists the entities responsible for fire protection. The intersection of each entity and land classification presents a unique set of authorities and responsibilities for wildland protection and suppression, structural fire protection, and structural fire suppression. Each state in the union has a separate table because each state has unique authorities and responsibilities, although many are quite similar.

Table 3 – Comparison of Responsibilities and Authorities

Protection Agency	Land Type					
	Wilderness	Federal Wildlands	Non-Federal Wildlands	Wildland/Urban Interface	Rural	Urban
Federal	Clear	Clear	Clear	Muddled	Muddled	Clear
Tribal	Clear	Clear	Clear	Muddled	Muddled	Clear
State	Clear	Clear	Clear	Muddled	Clear	Clear
Rural	Clear	Clear	Clear	Muddled	Clear	Clear
Urban FD	Clear	Clear	Clear	Muddled	Clear	Clear
Individual Land Owner	Clear	Clear	Clear	Muddled	Clear	Clear

Key

	Mandated Authority and Responsibility
	Formal Cooperative Relationships Clarify Authority and Responsibility
	Uncertainty of Authority and Responsibility
	No Authority or Responsibility

Consistencies among Agencies

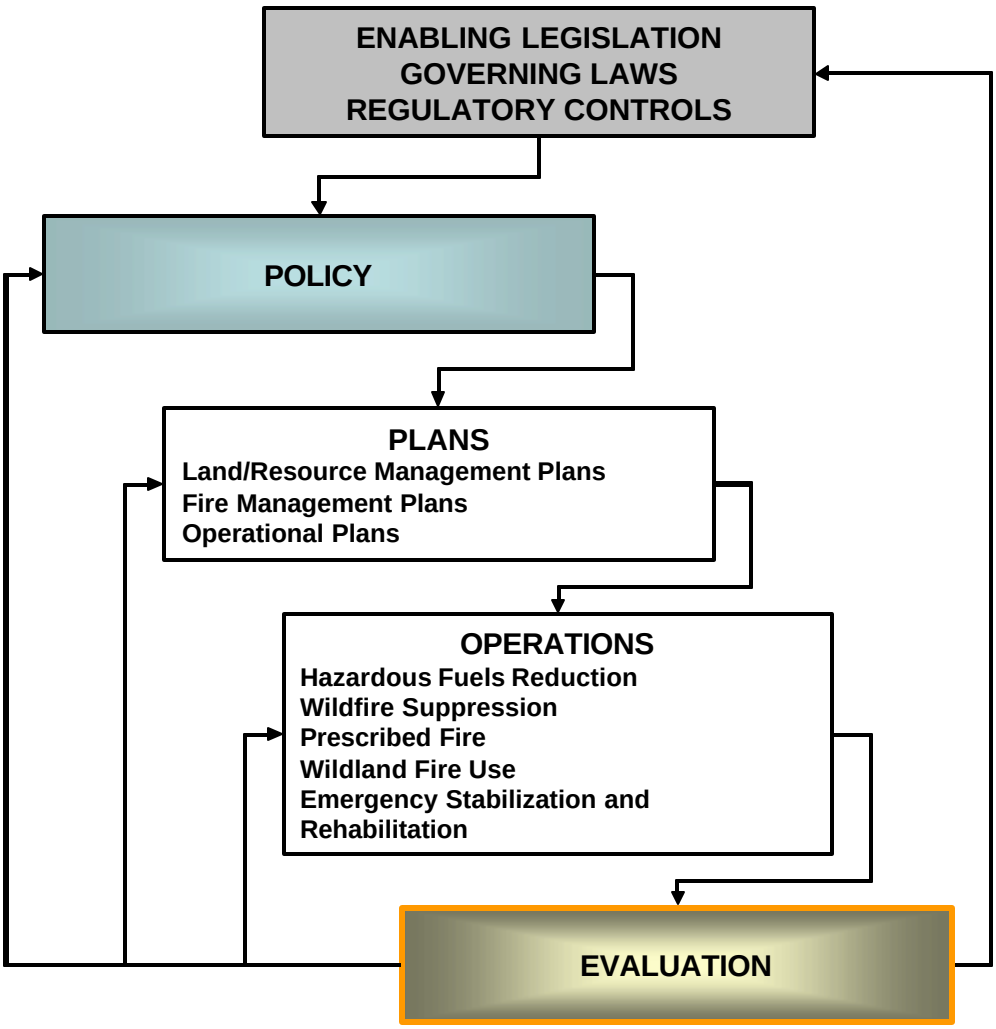
All federal agencies have agreed to use the Hierarchy for Fire Related Plans, Activities, and Programs as a tool to help implement fire policy.

Wildland Fire Policy Hierarchy and Implementation Direction

Federal wildland fire policy is implemented in relation to the plans and actions that surround fire management activities. This hierarchy is described in Figure 2 - Hierarchy for Fire Related Plans, Activities, and Programs. The hierarchy makes clear that policies fall from the enabling legislation, governing laws, and regulatory controls which define policy intent. In relation to fire management activities, the Land/Resource Management

Plans establish the basis for Fire Management Plan direction. This direction, in turn, provides the basis for the operational activities that follow.

Figure 2 - Hierarchy for Fire Related Plans, Activities, and Programs



The hierarchy illustrates the relationship between fire management activities and the laws, regulations and plans that direct them. Land/Resource Management Plan objectives provide the parameters for fire management. Although subtle, these objectives have an enormous influence on firefighter safety, cost-effective operations, and risk/consequence considerations. Wildland fire management policy implementation, therefore, is closely tied to the direction in Land/Resource Management Plans express.

Policy implementation, as designed here, takes "lessons learned" and brings them to bear in all appropriate locations of the hierarchy. Generally, effort applied at higher levels will result in greater gains in effective and efficient implementation. Effort given to designing meaningful law and regulatory controls will have a greater effect on fire management activities than effort applied at a lower level, such as in a fire management plan. Likewise, effort to design and implement a well understood policy would have a greater effect than influences on planning or operational activities.

The following provides an overview and general definition of each layer in the hierarchy.

Enabling Legislation, Governing Laws and Regulatory Controls

Each Federal agency has a set of enabling legislation which authorizes the agency's mission and influences the methods by which it conducts it business. Many laws have been passed over the years which expand and broaden each agency's scope. Regulatory controls have also been enacted through legislation which affect the agencies' work. Appendix D lists numerous laws which affect the Federal land management agencies directly or indirectly.

Not only have many laws been passed, many interpretations of these laws have been provided by the courts. Frequently, the courts will rule differently for each agency the same law. Further, regulatory agencies, such as EPA, OSHA, CEQ, and others, treat agencies differently by varying their official opinions and rules based upon the agency. One agency, the Fish and Wildlife Service, has both a regulatory arm and a land management arm (refuges) within its own scope.

Policy

There are many policies that affect land managemt agencies. Each agency operates within the Federal government. The Federal government has a complete set of policies and regulations that affect government-wide decisions. Each agency operates within a Department and each Department also has a set of policies affecting all the agencies within it. The Department of Interior with its four land managmeent agencies, and the Department of Agriculture, with its one agency, both have differeing Departmental policies.

Within agency policy are policies for each agency program, such as wildlife, human resources, wilderness, administration, wildland fire management, ecosytem mangement, cooperative relations, and many others. Many of these policies directly effect wildland fire management programs.

The five federal agencies have agreed on consistent interpretations of wildland fire management policy. These interpretations are presented in Appendix D – Policy Clarification, Objectives, Management Intent and Measures. Each of the 17 policy statements have been reviewed and discussed for consistent interpretation. Clarification of the management intent and management objectives is presented for each policy statement. Measures are also stipulated where appropriate. Appendix D represents a major portion of this strategy and is relegated to the Appendix only for brevity. Appendix D is intended as a major step forward to unified and consistent implementation of wildland fire management policy among the federal agencies.

Finally, as mentioned- The Western Governor's Association document entitled "A Collaborative Approach for Reducing Wildland Fire risks to Communities and the Environment – 10 Year Comprehensive Strategy Implementation Plan" was used in the development of clarifying comments, objectives and measures where possible in order to

avoid duplication and to compliment the implementation of both fire policy and the National Fire Plan.

Plans

Land/Resource Management Plans

The success of wildland fire policy implementation will be contingent upon success in developing and implementing comprehensive Resource Management Plans (L/RMPs), as the policy requires. Comprehensive Resource Management Plans that address wildland fire management considerations are absolutely essential in guiding policy implementation.

Restoring Fire-Adapted Ecosystems On Federal Lands - A Cohesive Fuel Treatment Strategy For Protecting People And Sustaining Natural Resources, and the document, A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment - 10-Year Comprehensive Strategy also specify considerations for developing and evaluating fire management considerations and decisions and the resource management planning level, as well as operational level activities.

Specific wildland fire management policies applicable to Land/Resource Management Plans, along with clarifying comments, objectives and management intent, and proposed measures are shown in Appendix D.

Fire Management Plans

The success of wildland fire policy implementation will be contingent upon success in developing and implementing comprehensive Fire Management Plans (FMPs) which reflect the decisions and direction developed and specified in Resource Management Plans.

The agencies have developed a template for Fire Management Plans, which include:

1. The Fire Management Plan (FMP) formally documents the fire program based on the Resource Management Plan (L/RMP). It is the fire manager's tool for implementing fire-related direction on the ground.

2. The FMP expands strategic direction into specific fire management direction for each fire management unit delineated in the FMP.

3. The FMP provides specific details of the fire program that most efficiently meets fire management direction for the planning period, including: organization, facilities, equipment, activities, timing, locations, and related costs.

4. Each year, adjustments needed in the FMP are made to reflect necessary changes to implement the fire management program.

5. The FMP does not prescribe decisions; rather it provides the operational parameters a fire manager needs to implement the L/RMP and other NEPA decisions.

6. The agency administrator shall review and approve the FMP and it will be updated *annually*.

Operational Plans

Operations

Policy implementation meets reality during operational activities in wildland fire management. Safety, land management effectiveness, and project success are obtained through operations. The changes in policy have been promulgated largely to improve operational safety. Therefore operations are the test for successful policy, and policy implementation.

The Implementation Direction Flowchart, presented earlier, is part of operational policy and guidance. This new flowchart is intended to clarify and simplify the understanding of operational wildland fire management policy.

Evaluation

No management process is complete without consideration of lessons learned and appropriate policy and guidance changes resulting from those lessons. Evaluation is a critical step in changing policy and operational guidance for future improvement. To that end, the activity of evaluation becomes part of policy, as do the changes resulting from that evaluation. This makes the federal wildland fire management policy iterative and adaptable to future events.

The major component of evaluation centers on the concept of an internal fire review. This review is recurrent (approximately every four years) and is designed to include full review and consideration of ideas at all organizational level in order to make appropriate changes to improve effectiveness of wildland fire management operations, practices, guidance and policies. All five federal agencies would be integral to the evaluation process and it would represent the first truly interagency wildland fire management review for the nation.

Specific wildland fire management policy applicable to the above evaluation, along with clarifying comments, objectives and management intent, and proposed measures are shown in Appendix D.

Appendix F: Legal Basis for Policy

Authority**:** The statutes cited herein authorize and provide the means for managing wildland fire on lands or threatening lands under the jurisdiction of the Department of the Interior and the USDA Forest Service.

- Organic Administration Act, Act of June 4, 1897 (16 USC 551)
- Weeks Law, Act of March 1, 1911 (16 USC 563)
- Protection Act of September 20, 1922 (42 Stat. 857; 16 USC 594)
- Clark-McNary Act of 1928 (45 Stat. 221; 16 USC 487)
- McSweeny-McNary Act of 1928 (45 Stat. 221; 16 USC 487)
- Economy Act of 1932, Act of June 30, 1932 (47 Stat. 417; 31 USC 1535**,** 41 USC 686).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; 43 USC 315)
- O. and C. Act of August 28, 1937 (50 Stat. 875; 43 USC 1181e)
- Bankhead-Jones Farm Tenant Act, Act of July 22, 1937 (7 USC 1010, 1011).
- National Park Service Acts as amended (67 Stat. 495; 16 USC 1b)
- Federal Property and Administrative Service Act of 1949 (40 USC 471; et seq.)
- Granger-Thye Act, Act of April 24, 1950 (16 USC 572).
- Reciprocal Fire Protection Act, Act of May 27, 1955 (69 Stat. 66; 42 USC 1856a **,** 42 USC 1856)
- Act of July 14, 1955, Clean Air Act, as amended (42 USC 7401 et seq.)
- Multiple-Use Sustained-Yield Act of 1960 (16 USC 528))
- Wilderness Act, Act of September 3, 1964 (16 USC 1131, 1132).
- National Wildlife Refuge System Administration Act of 1966 as amended (80 Stat. 927; 16 USC 668dd through 668ee)
- National Environmental Policy Act of 1969 (42 USC 4321)
- Alaska Native Claims Settlement Act of December 18, 1971 (85 Stat. 688; 43 USC 1601)

- Endangered Species Act of 1973 (16 USC 1531)
- Disaster Relief Act of May 22, 1974 (88 Stat. 143; 42 USC 5121)
- Federal Fire Prevention and Control Act of October 29, 1974 (88 Stat. 1535; 15 USC 2201)
- National Forest Management Act, Act of October 22, 1976 (16 USC 1600 et seq.).
- Federal Land Policy and Management Act of 1976 (90 Stat. 2743)
- Federal Grant and Cooperative Agreement Act of 1977 (PL 950224, as amended by PL 97-258, September 13, 1982 (96 Stat. 1003; 31 USC 6301 thru 6308)
- Alaska National Interest Lands Conservation Act of December 2, 1980 (94 Stat. 2371)
- Supplemental Appropriation Act of September 10, 1982 (96 Stat. 837)
- Wildfire Suppression Assistance Act, Act of April 7, 1989 (PL 100-428, as amended by PL 101-11, April 7, 1989, 42 USC 1856).
- Indian Self-Determination and Education Assistance Act (PL 93-638) as amended
- National Indian Forest Resources Management Act (P. L. 101-630 November 28, 1990)
- Tribal Self-Governance Act of 1994 (PL 103-413)
- Department of the Interior and Related Agencies Appropriations Act (PL 103-32)

In addition, these acts are codified (as referenced) in the United States Code which can be accessed at http://www4.law.cornell.edu/uscode

Appendix G: Reference Documents

POLICY DOCUMENTS (http://www.fs.fed.us/fire/)

Federal Wildland Fire Management Policy and Program Review, December 18, 1995, USDI and USDA Final Report.

Federal Wildland Fire Management Policy and Program Review, March 23, 1996, USDI and USDA Implementation Action Plan

Review and Update of the 1995 Federal Wildland Fire Management Policy, January, 2001, USDI, USDA, DoE, DoD, DoC, EPA, FEMA, and NASF.

Restoring Fire-Adapted Ecosystems on Federal Lands - A Cohesive Fuel Treatment Strategy for Protecting People and Sustaining Natural Resources. USDA Forest Service, Bureau of Indian Affairs · Bureau of Land Management, Bureau of Reclamation · National Park Service,
U.S. Fish and Wildlife Service · U.S. Geological Survey, August 2, 2002

WESTERN GOVERNOR'S ASSOCIATION (http://www.westgov.org/)

A Collaborative Approach for Reducing Wildland Fire risks to Communities and the Environment – 10 Year Comprehensive Strategy, August, 2001

A Collaborative Approach for Reducing Wildland Fire risks to Communities and the Environment – 10 Year Comprehensive Strategy Implementation Plan, May, 2002, 27p.

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION (http://www.napawash.org/)

Managing Wildland Fire – Enhancing Capacity to Implement the Federal Interagency Policy. December 2001, 150p.

Wildfire Suppression: Strategies for Containing Costs. A Report by a Panel of the National Academy of Public Administration for the U.S. Congress and the Departments of Agriculture and the Interior, September 2002, 65p.

GENERAL ACCOUNTING OFFICE (http://www.gao.gov/)

Federal Fire Management: Limited Progress in Restarting the Prescribed Fire Program (GAO/RCED-91-42, Dec. 5, 1990).

Forest Service Decision Making: A Framework for Improving Performance. GAO/RCED-97-71, April, 1997, 146p.

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).

Western National Forests: Status of Forest Service's Efforts to Reduce Catastrophic Wildfire Threats (GAO/T-RCED-99-241, June 29, 1999).

Forest Service: A Framework for Improving Accountability. GAO/RCED/AIMD-00-2, A Report to the Subcommittee on Interior and Related Agencies, Committee on Appropriations, House of Representatives, October, 1999, 63p.

Fire Management: Lessons Learned From the Cerro Grande (Los Alamos) Fire (GAO/TRCED-
00-257, July 27, 2000).

Fire Management: Lessons Learned From the Cerro Grande (Los Alamos) Fire and Actions Needed to Reduce Fire Risks. Statement of Barry T. Hill, Associate Director Energy, Resources, and Science Issues Resources, Community, and Economic Development Division. Monday, August 14, 2000, GAO GAO/T-RCED-00-273, 34p.

Reducing Wildfire Threats: Funds Should Be Targeted to the Highest Risk Areas. Statement of Barry T. Hill, Associate Director, Energy, Resources, and Science Issues, Resources, Community, and Economic Development Division. September 13, 2000, GAO/T-RCED-00-296, 7p.

Severe Wildland Fires: Leadership and Accountability Needed to Reduce Risks to Communities and Resources. Report to Congressional Requesters, GAO-02-259, January 2002, 41p.

Wildland Fire Management: Reducing the Threat of Wildland Fires Requires Sustained and Coordinated Effort. Statement of Barry T. Hill, Director, Natural Resources and Environment,
Thursday, June 13, 2002, GAO-02-843T, 7p.

SOURCE DOCUMENTS FROM EVENTS THAT CHANGED POLICY

South Canyon Fire Review

Report of the Interagency Management Review Team - South Canyon Fire. August 17, 1994

Final Report of the Interagency Management Review Team - South Canyon Fire, June 26, 1995

http://www.nifc.gov/scanyon/execsumm.html

Cerro Grande Fire Review

Cerro Grande Prescribed Fire - Board of Inquiry - Final Report. National Park Service, February 26, 2001, 47p.

Cerro Grande Prescribed Fire Independent Review Board Report, May 26, 2000, Independent Review Board. State of Florida, Division of Forestry, U.S. Department of the Interior, Bureau of Land Management, U.S. Department of Agriculture, Forest Service, White Mountain Apache Tribe.

http://www.nps.gov/fire/fireinfo/cerrogrande/reports/

Thirtymile Fire Review

Thirtymile Fire Investigation Accident Investigation – Factual Report and Management Evaluation Report - Chewuch River Canyon, Winthrop, Washington, July 10, 2001. September 26, 2001 as amended October 16, 2001, USDA Forest Service, 97p.

Thirtymile Accident Prevention Action Plan, United States Department of Agriculture, Forest Service, October, 2001, 8p.

http://www.fs.fed.us/fire/safety/investigations/30mile/index.html

Appendix H: Review Process and Reviewers

During the spring of 2003 the contents of this document, and most importantly the Implementation Direction Flowchart, Glossary, and Appendix B, were subjected to internal review throughout the Federal agencies.

In addition, two external peer review panels were conducted. One panel, held in Seattle, was comprised of academics familiar with fire, environmental, and political science, as well as the development of public lands policy. The second panel was held in Washington, DC and was comprised of governmental and policy academics from several universities. The external reviewers were:

SEATTLE

Professor James K Agee
Ecosystem Sciences Division, College of Forest Resources
University of Washington

Brian Boyle
Former Commissioner of Public Lands – State of Washington
University of Washington

Professor Keith Gilless
University of California at Berkeley

Duane A. Neitzel
National Laboratory, Battelle Northwest

Ronald H. Wakimoto
Professor, Wildland Fire Management
The University of Montana

WASHINGTON, D.C

Jay Jensen (representing Western Governor's Association)
Western Forestry Leadership Coalition

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