

Managing Wildland Fire

Including the Concept of “Managed Fire”

A Position of the National Association of Forest Service Retirees

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Wildland fires are presenting major challenges to public land managers, private forest landowners, and nearby communities. Recent trends show the increase in area burned annually. In the 1990s, an average of 3.3 million acres burned annually; since 2010, 7.1 million acres. The ten years with the greatest area burned have all occurred since 2004. Firefighter risks have reached unprecedented levels. Threats to communities are also growing. According to the National Oceanic and Atmospheric Administration, between 1980 and 2020 the United States had 18 wildfire events that caused more than \$1 billion in damages; 15 of those since 2000.¹ Eight of the top ten wildfires with the largest insurance losses to homes and property have occurred since 2017.² These statistics are causing citizens, community leaders, and wildfire experts—firefighters, fire managers, and fire scientists—to raise some concerns and discuss how wildfire management policies and strategies are being implemented.

Position: The National Association of Forest Service Retirees (NAFSR) supports and promotes maintaining and implementing a *balanced* wildland fire management program, including the use of “managed fire”. Balanced means consistent with the current framework of federal wildfire management policy; strategic guidance that has been developed in consultation with partners, stakeholders, and communities; and land and resource management objectives for affected lands. Although many wildfires are unplanned ignitions, once burning, some fires present opportunities as well as threats. To seize the opportunities, NAFSR believes that fires should be carefully managed—balancing the risks to people, property, and natural resources with the possibility of obtaining critically needed resource benefits. Taking a balanced approach in the long run will make communities and forests less vulnerable to future wildland fires, while also better protecting resource values, such as maintaining wildlife habitats and resilience.

The wildland fire management environment of today and tomorrow is swiftly shifting. The late 1990s were a period of transition in certain climate cycles that tend to shift every few decades.³ NAFSR believes this shift—combined with other ongoing changes in temperature, drought, and snowmelt patterns—has contributed to warmer, drier conditions that have led to widespread and uncompromising shifts in fuels conditions and the behavior, extent, and intensity of wildfires. When swings in forest management capacity are factored in, the complexity and difficulty of accomplishing both wildfire and land and resource management objectives increases. Wildfire suppression costs and risks to firefighters also escalate.

While the USDA Forest Service is attempting to chart a path forward, there are some concerns and discussions about how to respond effectively. Some voices are advocating for revisions in wildfire policy that would eliminate fundamental strategic options, such as the ability to manage wildfires to achieve important resource objectives like fuels reduction, or return to firefighting policies more aligned with those from early in the 20th century. NAFSR does not advise following such a course.

NAFSR believes that successful fire suppression begins with rapid, preplanned initial response. We believe this can include the use of wildland fire⁴ as a viable component of the full range of strategic options to achieve goals established in Land and Resource Management Plans (LRMPs). Every wildland fire response should be based on objectives, requirements, limitations, locations, and conditions identified in the LRMP and Fire Management Plan. Fire management decisions should be responsive to changing conditions—both during the fire and in the future. Fewer strategic options are available when fire danger rises while more options are possible when fire danger declines. All options must consider firefighter safety and exposure objectives.

¹ NOAA. 2022. Billion-dollar weather and climate disasters. www.ncdc.noaa.gov/billions. doi:10.25921/stkw-7w73.

² <https://www.iii.org/fact-statistic/facts-statistics-wildfires>

³ <https://www.epa.gov/climate-indicators/climate-change-indicators-wildfires>

⁴ Wildland fire is defined in the *Guidance for Implementation of Federal Wildland Fire Management Policy, Feb. 2009* as “a general term describing any non-structure fire that occurs in the wildland”. The definition was updated by the *Fire Management Board Memorandum 19-004, Federal Wildland Fire Policy Terms and Definition, Oct. 2009* as “Any non-structure fire that occurs in vegetation or natural fuels. Includes wildfire and prescribed fires.”

NAFSR also believes:

- Wildland fire management planning and implementation must remain consistent with the National Cohesive Wildland Fire Management Strategy vision: ***To safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire.*** Changing conditions do not alter this strategic direction.
- The term “managed fire” does not define a specific type of fire or a specific strategy and should not be used to describe types of fire strategies. Based on fire policy guidance, **every** wildland fire receives a management response, is managed in some way, and therefore is a managed fire.
- Wildland fire—even when ignitions are unplanned—along with prescribed fire and strategically placed fuel treatments are necessary and important tools in successfully managing landscapes and in protecting communities.
- Negative outcomes (e.g., large, long-duration fires that drain energies of firefighters and other suppression assets, extreme expenditures, or substantial impacts to resource values and communities) do not warrant instituting bans on the use of specific strategies and tactics by wildland fire managers. These outcomes are normally a product of several interrelated elements such as, but not limited to, risk-based decision-making and external decision factors, resource availability, safety concerns for firefighters, and extreme weather and fuel conditions.
- Flexibility in program direction is of the utmost importance in a complex, shifting and uncertain environment. No viable “one-size-fits-all” management option exists. Even if it did, it is not desirable.
- Responses to wildland fires must be coordinated, well thought out, risk-based, and efficiently directed to safely accomplish desired objectives. Initial responses can be—and often are—successful within their designed capabilities. But for those fires that escape initial actions, specific situational analyses and **use of the full range of options** must be considered and applied.
- Continuing to apply failed tactics or over-utilizing a particular tactic or type of firefighting resource, regardless of the specific situation, does not usually further protection objectives, can increase costs, and exposes firefighters and equipment to heightened risk and exposure.

Issue: The significant changes are affecting wildland fire management today and in the foreseeable future. These changes are creating increased complexity and far-reaching management challenges. Shifting trends in wildland fuel complexes, expanding wildland-urban interface (WUI) areas, increasing numbers of human-caused fires, changing climatic conditions, transforming fire regimes, and intensifying social/cultural perspectives about forests and fires provide little doubt that we are in a period of increasing complexity. Consequently, wildland fire impacts to social, economic, political, and resource management values present rapidly mounting demands on and expectations of decision-makers and responders. Firefighter risks are reaching unprecedented levels. Suppression costs are rising steeply, distorting agency budgets and disrupting other vital agency programs. “Managed fire”—a vaguely-defined term—has been blamed for a few recent fire suppression negative outcomes, leading some voices to call for either a short-term suspension or permanent elimination of key wildland fire management options available to Federal fire managers.

Keeping the Management “Toolbox” Well-Stocked: Assessments of capabilities and outcomes cannot focus on single solutions and short-term fixes. Fire managers must have the full range of tools available to be applied to the situation they face at the time and place, and for the right reasons. Limiting fire management options risks driving managers toward a single objective program. Land and resource management has become more complex since the early 1900s, with fuels management increasing in importance in recent decades. Current fuel hazards are high across many landscapes and ownerships, and are a major driver of wildfire severity, concurrent with longer and drier fire seasons and more humans acting as ignition sources and victims (Parks et al. 2018). Strategies and tactics narrowly focused on fire suppression alone are increasingly ineffective as fuels accumulate, fire seasons lengthen, wildfire behavior intensifies, and human communities expand (Westerling et al. 2006; North et al. 2015).

To reduce the frequency, intensity, and size of areas burned in the coming years, a broader array of land and fire management tools are needed in the toolboxes of both the land manager and the fire manager. Further, the pace and scale of land management must be accelerated, requiring additional financial and human resources. The added capacity needs to focus on

several goals critical to the long-term health and productivity of landscapes. One goal is reducing fuel loadings, especially near communities and where forests are losing health and vigor. Another goal is pivoting forest structure and composition towards more resilient, and at some places fire-adapted, ecological communities. Maintaining wildlife habitat is another vital goal. So is protecting watersheds and the clean water that communities and fisheries depend on. Reducing the risk of pest outbreaks that can ravage extensive areas across land boundaries and whose dead trees would add to fuel loadings is another worthy goal. The array of tools and capacities available to land managers and fire managers must include tools useful for many different goals and objectives.

Elimination of the strategic option to use fire for resource benefits would be short-sighted and inconsistent with ecological knowledge gained over the last century. Fire as a natural disturbance is an ancient and effective process to treat landscape fuels and is fundamentally consistent with the restoration and maintenance of resistant and resilient landscapes, with their associated biotic communities and product bases that will meet long-term societal needs (Knapp et al. 2009).

What is “Managed Fire”? Forest Service Chief’s direction (2021a, 2021b) has referred to “managed fire” as an available strategy, but in August 2021, it temporarily suspended use of this strategy. Following the waning of the fire season, additional Chief’s direction in December 2021b lifted the suspension and clarified that the agency would resume using all the tools in the toolbox when and where appropriate (Forest Service 2021b). The Chief reinforced the value and benefits of using fire as a management tool to achieve resource benefits and stressed the importance of reaching a collective understanding of what defines a “managed fire,” and what difference it makes in protecting communities and creating resilient forests (Forest Service 2021b).

“Managed fire” has not been specifically defined within the *Federal Wildland Fire Policy* and the *National Cohesive Wildland Fire Management Strategy*. “Managed fire” is a name originating from other expressions like “Prescribed Natural Fire” and “Wildland Fire Use.” These well-defined strategic terms are used during planning and implementation activities in early policy iterations. “Managed Fire” has been used to categorize fires that do not receive an aggressive suppression response, regardless of the reason.

The *National Cohesive Wildland Fire Management Strategy* clearly identifies the need for more and larger-scale prescribed burning, both manager-ignited burning on planned units and the management of fire intensity and spread during wildfire management/suppression efforts (USDI and USDA 2014). NAFSR supports this. Wildfire response does not necessarily mean wildfire suppression. Responses can and should vary depending on landscapes, land management objectives, even within the same fire (Christiansen 2019). Full suppression strategies alone are not always the safest and most effective response to wildfire. A strategy incorporating multiple management options, consistent with the fire policy and National Cohesive Strategy, can use fire to meet many land management objectives (SAF 2021).

Background: Wildland fire management policy and large-scale long-term strategic planning provides important guidance and strategic direction for the fire management program. These elements frame program direction and structure, function, flexibility, and embody the state of the knowledge, state of the art, and the latest science and technology.

Fire policy history and development: Over the last 50 years, federal fire policy has been steadily evolving to become more responsive to changing situational dynamics. As a result, current fire policy is very inclusive and flexible. It now advocates more sophisticated and thorough strategies, wider tactical spectrums, and supports implementation of multiple objectives including using wildland fire to provide natural resource benefits. Fire policy has grown to be a multi-objective focused program rather than a single-objective program focused only on suppression of all fires.

In 1988, the outcome of several fires generated a major review of fire policy (van Wagtendonk 2007). This review stated that all fires were either a prescribed fire or a wildfire. Prescribed fires were composed of two types: management ignited prescribed fires and prescribed natural fires (PNF). Prescribed Natural Fire was the official term to describe management of naturally-ignited wildland fires to accomplish beneficial objectives within a set of predetermined prescriptive criteria. Over the years, PNF was inadvertently called “let-burn” which was actually a misnomer as no fires were ever left totally alone, unattended, and not managed under a defined plan to achieve resource benefits. Early PNF efforts were viewed as subordinate

to suppression operations, limited in extent, financially constrained, and carried out under close scrutiny.

The 1994 fire season and serious outcomes led to the most comprehensive review and update of the federal wildland fire policy since the formation of the land management agencies. The updated policy guidance moved away from defining prescribed fires as two types and stated that all fires were wildland fires. The policy eliminated the term Prescribed Natural Fire and directed that wildland fires would either be managed for resource benefits or suppressed. It further advanced the natural role of fire and diminished the dominant view of suppression by stating, *“Wildland fire, as a critical natural process, must be reintroduced into the ecosystem. This will be accomplished across agency boundaries and will be based upon the best available science”* (U. S. Department of the Interior/U. S. Department of Agriculture 1995).

While Prescribed Natural Fire was eliminated as a term, the 1995 policy still allowed naturally-ignited fires to be managed for resource benefits. However, a void in how to describe and categorize fires being managed for different objectives existed. As a result, the term Wildland Fire Use (WFU) was coined to describe the management of natural fires for resource benefits and became the name of the strategic application that had been PNF.

Many misconceptions developed around the 1995 policy and its terminology causing some delays in implementation. There were thoughts that this policy was a broad scale shift to allowing fires to burn freely, that suppression would not be utilized where needed and as often, that fewer safe actions would dominate the operational landscape, and that widespread misrepresentation of the use of “managed fire” as a major driver for escalating wildfire costs occurred.

The 1995 policy was reaffirmed and updated in 2001. The 2001 review and update of the 1995 Federal Wildland Fire Management Policy (U.S. Department of the Interior/U. S. Department of Agriculture 2001) established guidance for managers’ strategic and tactical options. Under this direction wildland fires could either be managed for resource benefits or suppressed but could not be managed for both objectives concurrently. Only one management objective could be applied to a single wildland fire and fires could not change between objectives. Once a fire had been managed for suppression objectives, it could never be managed for resource benefit objectives again.

In February 2009, the *Fire Executive Council*, issued the Guidance for Implementation of Federal Wildland Fire Management to address an insufficient implementation of current wildland fire policy (Fire Executive Council 2009; Schultz et al. 2019).

Significant changes in this policy statement included:

- Elimination of the term Wildland Fire Use as a type of fire and a description of a strategy.
- Retention of the use of wildland fire as a strategic direction.
- Categorizing wildland fire into two distinct types:
 - 1) Wildfires – Unplanned ignitions (lightning or human caused) or prescribed fires that are declared wildfires; and
 - 2) Prescribed Fires - Planned ignitions that perform as intended.
- Focusing implementation on objectives rather than type names:
 - A wildland fire may be concurrently managed for one or more objectives and objectives can change as the fire spreads across the landscape. This eliminated the prior focus that all fires were of one type or another and all wildfires had to be suppressed.
- Use of the Wildland Fire Decision Support System (WFDSS) for decision and planning documentation for all wildfires (*Managers will use a decision support process to guide and document wildfire management decisions. The process will provide situational assessment, analyze hazards and risk, define implementation actions, and document decisions and rationale for those decisions* [US Department of Agriculture and Department of the Interior 2009]).

This direction has remained in place since 2009 and wildland fires are now managed for the appropriate objectives. Some objectives and situations call for full and aggressive suppression. Others call for minimal on-the-ground actions. Multiple objectives can be achieved on a single fire, meaning that concurrent actions to suppress and protect as well as striving to realize resource benefits from fire presence can and do occur on a single fire. It also means that a single fire can be managed as a suppression action but still be shifted into other response tactics on all or part of it to obtain resource benefits, or the

reverse. Because of this direction, there is no need for defining different types of fires with each type having discrete objectives, different names, and constraints on the tools available to manage them. **All wildland fires receive an appropriate level of management actions, and all are actually “managed fires.”**

The current policy is not “rule based.” Current policy permits but does not mandate the use of any wildfire management strategy, tool, or tactic. Also, the policy requires that acceptable tactics and objectives identified in Resource Management plans conform to strategies and policies.

National Cohesive Wildland Fire Management Strategy: The most recent step in developing a national framework and strategy for managing wildland fires was development of the National Cohesive Wildland Fire Management Strategy (USDI-USDA 2014). This Strategy represents a significant step forward and is the most comprehensive wildland fire management strategy ever completed. It introduces a highly relevant, logical, and supportable vision for the next century: *To safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire.* That vision has empowered strategic planning—nationally, regionally, and locally—to prepare appropriate management responses to wildland fires when they occur.

The Cohesive Strategy presents three goals necessary to achieve its vision:

- 1) *Restore and maintain landscapes* - Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.
- 2) *Fire-adapted communities* - Human populations and infrastructure can withstand a wildfire without loss of life and property.
- 3) *Wildfire response* - All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

A strengthened and flexible policy, along with a clear comprehensive long-term strategic plan with a forward-looking vision, far-reaching goals, and sound guiding principles and core values provide a sound framework for wildland fire management. All three goals need to work together across landscapes, inclusive of communities (Christiansen 2019).

Closing Remarks: NAFSR believes there have been some issues with the execution of “managed fire” policies that continue to plague the agency and give the public concern. We feel it would benefit the agency to evaluate how the policy is being applied, identify any holes in the process and what procedural adjustments may be appropriate. Such an assessment should provide lessons learned that can then be communicated to the field⁵.

Additionally, NAFSR believes that two factors are vitally important for the nation’s forests. First, latitude in wildland fire management should be expanded, not narrowed. This requires that a full range of viable strategic options and tactics must continue to be available, including the ability to use fire in the right places and in the right ways to achieve resource benefits while also protecting firefighters, community residents, and property from harm. Second, continuing discussions are needed with stakeholders—other public agencies, community leaders, and citizens. The actions they take at home and in their communities can contribute greatly to reducing the size and intensity of wildland fires and their risks of loss. Because they highly value the many goods and services that the nation’s forests provide, their support for practices—including fire management—that help deliver the values they cherish is essential to agency success and the future of America’s forests. No one with a stake in the wildfire crisis is in it alone. We will all need to work together to effectively address the challenges ahead.

⁵ Letter from NAFSR to Chief Randy Moore 2/23/22

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