

Wildland Fire Management Policy

Learning from the past and present and responding to future challenges

Tom Zimmerman

WILDLAND FIRE is one of the most important vegetation-shaping factors that land managers deal with. It is our highest risk, most complex, and potentially highest consequence program. Wildland fire management policy is the most important element in defining the direction, scope, and focus of the program. What is policy? If we look it up in Merriam-Webster's dictionary, it is a "high-level overall plan embracing the general goals and acceptable procedures, especially of a governmental body." It is interesting to see that the dictionary defines policy as a province of a government. Fire policy is a course of action to guide present and future decisions and to identify procedures and means to achieve wildland fire management goals and objectives. It is adopted and developed by a group of people, specifies principles for management, and involves commitment to implement it and carry it forward.

The components of policy include those driving factors that give us a need for policy and determine its influences. Policy is also comprised of supportive processes identified through policy elements. The main results and outcomes of these processes are performance, achievements, and lessons learned. Results and outcomes set the program requirements, guide our management procedures, define this broad course of action, and facilitate program implementation. Theoretically, a good, sound policy facilitates both efficiency and accomplishment.

If we look back at historical fire policy, the driving factors are:

The state of our knowledge. In many cases, our early policy was based on an immature knowledge of ecology and the natural role of fire. The state of our knowledge is also comprised of current economics and politics, including awareness of whether we are protecting values, valued resources, or perpetuating resources for the future.

Our capability to respond to implementing the policy. In the early twentieth century we did not have the capability to respond to a lot of fires; our organization shaped our actions. Safety is key to our capability and will continue to be a concern in fire management.

Personal or agency perspectives and experiences. In many cases, these are the dominant driving factors that influence policy. If you do not believe that, take a look at the changes in our country's foreign, domestic, and economic policies that come with each administration.

Early fire policy was shaped around agency perspective and driven by political interest. It called for suppression of all fires and it was one of the most rigid policies in fire management history. From 1968 through 1988 we saw a shift from fire "control" to fire "management." During this transition we went from a single focus with the objective of excluding fire

A Civilian Conservation Corps fire crew lines up for a meal at a fire camp on Mirror Plateau in 1935.





In 1932, Yellowstone firefighters put out a spot fire. Early policy called for the suppression of all fires.

to multiple objectives that included wildfire suppression, prescribed natural fire, and management-ignited prescribed fire.

Prior to 1988, policy reflected multiple fire types: wildfires included initial-attack fires, controlled fire, containment fire, or confinement fire; prescribed fire included management-ignited prescribed fire and prescribed natural fire. We were also on the verge of reclassifying prescribed natural fire into active or inactive categories. The number of boxes used to classify fire began to build confusion among managers. The 1988 Report on Fire Management Policy affirmed direction for the Department of Agriculture and the Department of the Interior but led into classifying all fires as either wildfires or prescribed fires, which included prescribed natural fires.

As a direct result of the Yellowstone fires and the policy of 1989, fire managers placed a greater emphasis on planning and preparedness, particularly to constrain prescribed natural fire. Prescribed natural fire direction required line officer certification in an attempt to restore the involvement of line officers in decision making and management of the fire. Some impacts of these constraints were positive because they increased our preparedness and improved long-term accountability.

Post-1989 fire policy is comprised of the same components and similar driving factors as historical policies. Our state of knowledge has advanced significantly; many of our milestones of the last 20 years have been in the advancement of scientific knowledge, technology, and improved awareness of fire as a natural process and fire effects. As fire managers looked back on the effects of fires in the late 1980s, they found that fire exclusion did not support resource management objectives and that they were unable to achieve full fire exclusion. We found that there were serious consequences associated with fire suppression and the techniques and tools used to suppress fires. We have also associated economics with the impacts of fire on communities and economic values, and the cost of fire suppression. Safety

and political pressures continue to be concerns. The need for greater interpretation of and information sharing is emerging as an important component of the program.

Our capability to respond to and manage fires is an increasingly critical factor, which is influenced by interagency cooperation, a driving factor in policy after 1989. Interagency perspective shifted to protecting valuable resources, managing fire for resource benefits, and acceptance and use of fire on the landscape. The seriousness of potential consequences, such as community protection and personal loss, became a driving factor and had an increasingly important role in shaping policy. Before 1989, the fire community perceived the public's role in wildland fire as personal risk and responsibility, but that has shifted toward public participation in decision making and development of management direction.

Our current fire policy is the most flexible policy we have ever had. It combines multiple objectives and specifically incorporates science. It allows fire managers to do what we should, rather than what we could, which we have historically done whether it was needed or not. The present policy advocates more wildland fire use and more application of fire to accomplish resource benefits. It advocates appropriate management response, which was the cornerstone of the 1995 Federal Wildland Fire Management Policy.

Since 1989, we have learned that fire has a critical natural role and that we need to manage it where possible. We have learned that one size does not fit all situations. Appropriate management response is relevant and timely, and it is something that we should make greater use of since it is included in our policy. An example of management changes is in 1988, we spent over a million dollars to keep the Huck and Mink fires in the Teton Wilderness separate and save an area of timber blow-down. In 2000, we spent about \$150,000 to manage fire though that same blow-down area in the Enos Fire, and we



Firefighters spraying water over the business district in Cooke City, Montana, in 1988. The seriousness of potential consequences, such as community protection and personal loss, became a driving factor in shaping fire policy after 1988.

are pretty happy with results. The thought process of how we use and manage fire changed over a 12-year period; we learned there are different ways to manage individual fires.

We have learned that our roles and responsibilities in protecting the wildland-urban interface need clarification. This role as a responsible organization has become confused over time. Our fire management activities are increasingly focused on the wildland-urban interface; almost every large smoke column is visible from somewhere and people watch it. Historically, we worked in remotely-based situations in wilderness or inaccessible areas where most people could not see the smoke columns and did not know what was happening. The social acceptance of the long-term impacts of smoke, air quality, and visibility is becoming so important that it may be a constraining factor in the future.

We have learned that not all fires should be or can be suppressed, although we continue to struggle with that lesson. In Stephen Pyne's 2004 book, *Tending Fire*, he reflects on some of the lessons learned in the last century. He states that the options are to do nothing with fire management and let nature take its course, try to exclude all fires and deal with the effects of that, conduct the burning ourselves through the application of wildland fire use or prescribed fire and minimize wildfire acres, or go out and change the combustibility of the landscape. But the reality, he says, is that we are not capable of fully accomplishing any of those alternatives and even if we could, none of them would work completely.

I think the real lesson that we have learned is about what we can do in suppression. Based on social, economic, and ecologic needs and our own capabilities, we have learned that we must have a policy that allows for and fosters a balanced fire management program. We must be able to suppress unwanted fires when we need to, apply fire through management and prescribed fires when we need to and can, manage fires from ignitions that we can use for resource benefits where feasible, and apply non-fire treatments to reduce hazardous fuels around high-value areas.

Our fire environment is changing and this will have remarkable impacts on fire management and our program complexity. Our fire regimes, the types of fires we experience, fuel situations and fire behavior, and the timing, extent, and area of the fires are all changing. We are on a rapidly increasing trend of fire complexity that shows no sign of decreasing. This complexity is a composite of acres burned, numbers of fires, fire season length, explosion of the wildland-urban interface, fuel types and changes in fuel types, and altered fire regimes.

The complexity of fires that we are dealing with is increasing and our capability to respond is decreasing. Early fire

management between the 1940s and 1960s started out with an almost non-existent organizational capability, which we quickly addressed. We created agencies, organizations, and training. We developed a sophisticated firefighting operation and, after a point, our organizational capability surpassed the complexity of the fires. We became pretty good at what we were doing, though this was during some of the coolest and wettest climate periods of the twentieth century. Once we peaked though, a slow erosion of our capabilities started and continued until the

2001 national fire plan infusion of monies and additional staffing. Following that our operational capability has continued to slowly erode since 2001.

Though our capability to respond to fires is decreasing, we are rapidly improving decision-making support with wildland fire science and technology information. The fire

community has always pursued development of improving information assessment, analysis, and application. Now this support is in forms that help us deal with specific pieces of information that we are lacking to make better decisions. Use of prescribed fire as a tool has been steadily increasing and shows strong potential for continued improvement. Managing wildland fires for resource benefits, which is only a small part of the program, has only been in place for 30 of 40 years, but is rapidly increasing.

It is going to take the sum of organizational capability, science and technology, decision support, managing fires for resource benefits, and prescribed fire application to match the increasing fire complexity. Our capability to manage fires for resource benefits may be limited in the future. Future policy

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JENNIFER J. WHIPPLE

Firefighters line up for a meal at the Old Faithful fire camp in 1988. Firefighting resources now need to be more mobile.

will have to promote increased efficiency. It is going to have to guide us through the smart and safe use of limited fire management resources. We can no longer just throw resources and money at fires or try to exclude all fires. Fire suppression costs are increasing and future policy will need to help guide effective cost management and cost responses.

Our resources will have to be mobile; we will not be able to commit firefighting resources for long durations on all fires. Specific management policies have been adopted since 1989 that focus on more fire-specific needs and include appropriate management response, implementing a full range of tactical responses, and applying an individual set of tactics. Will we continue to see declines in our workforce; will we be augmented by another organization's workforce? We do not know what will happen. We have to manage future fire seasons within constraints and our policy in the future is going to have to reflect and facilitate this.

When we manage fires we are also dealing with economic, social, and political problems. This is no longer a simple fire-vegetation dynamic. The future policy has to allow for strategic creativity in light of diminished capability. Our capability can increase in certain ways but it will not be the same way of the past: overwhelming mass of resources, and relentless shovels to the dirt. Societal demands and needs will continue to affect fire policy. Some estimates show that while economic growth is slowing, 5 to 6 million new homes will be built in the next 10 years in some western and Sunbelt states, particularly in southern California, Arizona, and the coastal Southeast. All of those homes will be built in the wildland-urban interface or expand the interface. Under this scenario, nearly all fires in these areas will be wildland-urban interface fires within 10 or 15 years. How are we going to respond to that? What responses are acceptable? These issues need to be addressed in our policy.

More importantly, future policy must

clarify terminology. We struggle with terminology that is confusing to the public and even our own fire community. Appropriate management response is a seemingly understandable term but has not been fully implemented because it is the most misunderstood and misused policy term we have right now. You might think, while looking back at previous policies and terms we have produced, that policy makers sit around the room spinning a random buzzword generator. We have had good terms in the past. Prescribed natural fire was a pretty good term; people understood that, so we changed it! I expect to open up the dictionary and find definitions for some of our terms that say, "For bureaucracies, look for antonyms; for all other organizations look for synonyms." We need a policy that clarifies and simplifies terminology and presents a common message. We have had policy at times that is confusing, and because it is hard to understand, it does not get down to the field or to the public (or if it does, the public does not understand it). If our own practitioners do not understand it, we will not be able to succeed.

Future policy needs to clarify the importance of different ignition sources and how we can respond. This policy must be flexible and responsive to change—change will not disappear. This policy will need to allow us to plan and implement the full range of management responses drawn from the full tactical response spectrum. It is going to have to simplify wildland fire management and its understanding for all audiences. It will need to foster a balanced program. This program will be a mix of protection activities, maintenance activities, restoration, and fire application. It will have to be based equally on ecological, social, economic, and political considerations.

Our fire management program is going to continue to grow and change in both temporal and spatial extent; it is going to continue to become increasingly more complex. The ecological significance of how we are managing fire is going to continue to change. To continue

program improvement, we must have a continually responsive policy. The simple fact of this is there is no going back. We are not going back to any previous policies; that is not acceptable. Our program is highly visible to the public, media, and politicians. Fire management is no longer ignored and we want to make it something that is adored, but it is hard to get there without a good policy.

Again drawing from Webster's dictionary definition of policy, fire policy must provide "prudence and wisdom" in the management of wildland fire. I think that is something we should all keep in mind. If we have a policy that allows us to do that, it will be successful.

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COURTESY OF THE AUTHOR

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