

Policy Incentives for Wildland Fire Management in the United States ¹

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Abstract

Researchers, politicians, and land managers have described a “fire crisis” in the United States during the late 20th and early 21st centuries: Fuels have built up over decades of fire suppression and combined with an ever-expanding urban-wildland interface to result in economically and ecologically disastrous wildfires. Recent policy debate in the United States suggests that regulatory environmental policy at the federal level conflicts with the new priorities of fire management. This should be seen as very real and serious criticism of federal environmental policy. I suggest three possible analyses of this debate: first that the goals and principles of fire management inherently contradict the goals and principles of federal environmental policies; second, that some aspect of the implementation of environmental policies may constrain or contradict good fire management practices; and third, that no significant conflict exists either in policy or in implementation and that the policy dialogue described above is wholly or primarily a political construction. In a systematic comparison of the goals of federal wildland fire management and two major environmental regulatory policies, I find only very few and very minor conflicts. Where conflicts do exist, they are most commonly the result of insufficient scientific information or of paradoxes of priorities within fire management that will require significant flexibility in policy implementation. Finally, I present some preliminary evidence on the possibility of a conflict in policy implementation, a framework for evaluating the possible political construction of this policy debate, and some directions for future research.

Introduction

Researchers, politicians, and land managers have described a “fire crisis” in the United States during the late 20th and early 21st centuries: Fuels have built up during decades of fire suppression and combined with an ever-expanding urban-wildland interface to result in economically and ecologically disastrous wildfires. In addition, several consecutive seasons of significant fires and an expanding popular awareness of the resulting property damage have led the general public to become more attentive to fire issues and policy changes. It is now clear that effective management of fire regimes will be a major challenge for land managers and policymakers in the foreseeable future.

Because of our new understanding of 20th century forest management practices, priority is now given to minimizing fire risk rather than to complete fire exclusion or suppression. One result has been an emphasis on managing fire through fuel treatments. Land managers have focused on two major methods for resolving the

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current fuels problem, namely mechanical fuels management (usually in the form of forest thinning) and the use of prescribed and naturally ignited fire (“wildland fire use”) to restore a “natural” fire regime.

Recent policy debate in the United States suggests that regulatory environmental policy at the federal level conflicts with the new priorities of fire management. Substantial evidence of this perceived conflict appears in the public record, including public statements and press releases by the president and key federal agency leaders and policy documents relating to wildland fire.

Much of this dialogue has come from President George W. Bush’s public statements surrounding his Healthy Forests Initiative and related legislation. For example, the president’s comments on signing the Healthy Forests Restoration Act included the following statement (USDA 2003a):

“The bill expedites the environmental review process so we can move forward more quickly on projects that restore forests to good health. We don’t want our intentions bogged down by regulations.”

Similarly, in an earlier statement on the same act, the president argued that (Office of the Press Secretary 2003):

“...there’s too much confrontation when it comes to environmental policy. There’s too much zero-sum thinking. What we need is cooperation, not confrontation... current law makes it too difficult to expedite the thinning of forests.”

The heads of several federal land management and environmental agencies have also expressed pessimistic views on the applicability of environmental policies to fire management. In a proposed rule change concerning the Endangered Species Act, the U.S. Fish and Wildlife Service refers to “unnecessary regulatory obstacles that have at times delayed and frustrated active land management activities” (DOI/DOC 2003). Similarly, in an agency press release, Secretary of Agriculture Ann Veneman referred to regulatory requirements as “layers of unnecessary red tape and procedural delay that prevent agency experts from acting quickly to protect communities and our natural resources from devastating wildfire” (USDA 2003b). An opinion piece authored by Secretary Veneman and Secretary of the Interior Gale Norton stated that efforts at fire management “have been thwarted by burdensome regulations and litigation” (Norton and Veneman 2003). Given that these departments and agencies are charged not only with the responsible management of public lands but also with the implementation and enforcement of the very policies they find “burdensome,” these comments should be seen as very real and serious criticism of federal environmental policy.

In light of this criticism, there are at least three analytical conclusions. First, it is possible that the goals and principles of fire management inherently contradict the goals and principles of federal environmental policies. Second, it is also possible that some aspect of the implementation of environmental policies may constrain or contradict good fire management practices; that is, the conflict may be not in the letter of the law but in its implementation on the ground. Third, it may be that no significant conflict exists either in policy or in implementation and that the policy dialogue described above is wholly or primarily a political construction. It is worth noting that these three options are not entirely mutually exclusive. For example, a relatively minor policy discrepancy might be exacerbated by the way that policy is currently being implemented, or several small contradictions might be exaggerated by the political construction of fire issues.

The primary aim of this paper is to evaluate the first possible conclusion, that there is an inherent contradiction between good fire management and federal environmental policies. I outline the new principles of federal fire management and evaluate the compatibility of those aims with two major federal environmental policies. The goals and priorities of fire management will be summarized from several bipartisan, cooperative policy statements, including the Federal Wildland Fire Management Policy, the National Fire Plan, and the 10-Year Comprehensive Strategy. The principles drawn from these documents will be used to evaluate the effectiveness of the National Environmental Policy Act (1970) and the Endangered Species Act (1973) in permitting, supporting, and mandating the effective management of wildland fires. Finally, I will briefly consider the other two possible conclusions and suggest some directions for further research.

Principles of Fire Management

Under the Clinton and George W. Bush administrations, wildland fire has emerged as a major issue in natural resource management. Especially severe fire seasons and well-publicized large fires have tended to focus governmental (as well as popular) attention on wildland fire, often resulting in the development of significant policy statements and initiatives.

One such severe fire season occurred in 1994. Thirty-four lives were lost and more than 4.7 million acres burned, and a working group was convened by Secretary of Agriculture Dan Glickman and Secretary of the Interior Bruce Babbitt to develop a common approach to wildland fire for the federal land management agencies (NIFC 2003, USDI/USDA 1995). The resulting document was the Federal Wildland Fire Management Policy and Program (or Federal Wildland Fire Policy), which was non-legislative but had lead personnel of several relevant agencies as signatories.

Following even more extensive fires in the 2000 season (a total of 122,827 wildfires and more than 8.4 million acres burned), President Clinton asked the same secretaries to prepare an analysis of the wildland fire situation (USDI/USDA 2001). The report, titled *Managing the Impact of Wildfires on Communities and the Environment: A Report to the President in Response to the Wildfires of 2000*, became the basis for the National Fire Plan, a further attempt to clarify priorities for fire management, especially in terms of allocating funding (USDI/USDA 2001). Another result of Clinton's request was the reassembly of the 1995 working group for an analysis, review, and revision of that policy. The outcome was a 2001 review and update document that replaced the 1995 version. Although the guiding principles of the policy changed very little, the working group found that implementation was inconsistent and incomplete and that the failure of federal agencies to fully implement the 1995 policy had significantly undermined its effectiveness.

In 2001, based on the ideas of the National Fire Plan, a broad cross-section of governmental and non-governmental stakeholders developed an implementation plan: a "collaborative approach for reducing wildland fire risks to communities and the environment," generally referred to as the 10-Year Comprehensive Strategy (Western Governors' Assoc. 2001, p. 1). The Comprehensive Strategy addressed the National Fire Plan priority of community involvement by designing a "proactive, collaborative, and community-based approach to reducing wildland fires," as opposed to the more agency-centered approach of, for example, the Federal Fire Policy (Western Governors' Assoc. 2001, p. 3).

Together, these three policies represent a relatively comprehensive picture of the bipartisan, multi-stakeholder goals and priorities of federal wildland fire management. (The more recent Healthy Forests Initiative and Healthy Forests Restoration Act are not explicitly included, because those documents make direct and exclusive reference to the goals and priorities of the National Fire Plan and 10-Year Comprehensive Strategy.) From a synthesis and condensation of these key points, I propose the following key principles of federal wildland fire management:

- Protecting firefighter and public safety is the first priority in fire management;
- Fire management practices should aim to restore landscapes and rebuild communities, with particular focus placed on hazardous fuel reduction and on returning fire to fire-adapted ecosystems;
- Fire management practices should be based on existing land and resource management plans, economic viability, best available science, and principles of sound risk management;
- Public health and environmental quality should be considered in fire management planning; and
- Cooperation and coordination among numerous groups, including federal agencies, state, tribal, and local governments, international partners, and communities, is key to effective fire management.

As noted above, recent debate suggests that federal environmental policies come into direct conflict with the principles and priorities of fire management. In the following section, two federal environmental policies will be summarized and evaluated with respect to the principles outlined above.

Federal Environmental Policy

The National Environmental Policy Act

The underlying intent of the National Environmental Policy Act (NEPA) is to require federal agencies to incorporate environmental considerations into project development and decision-making processes. Its application is not limited to formal planning but covers a variety of federal activities from small-scale public resource allocations to major land use planning to federal legislation. Even more importantly, NEPA requires federal agencies to put this decision-making process into writing and makes it open to public and judicial review at several levels.

NEPA itself barely comprises ten pages, largely because the details of its implementation are set out separately, in the Code of Federal Regulations and in other regulations set forth by individual agencies. The statute itself consists of three main parts. The first, section 101, outlines the intent of the act by setting goals for the environmental health of the nation and establishing the role of the federal government in assuring “for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings,” (42 USC 4331(b)). Section 102 forms the core of the act, stating in part that every federal agency must examine the environmental impacts of its decisions and must include these environmental considerations in the decision-making process. Furthermore, it must do so in a formal, systematic, and interdisciplinary manner (42 USC 4332). The third key point

of NEPA, found in section 202, is to establish the President's Council on Environmental Quality (CEQ) (42 USC 4342). The CEQ was established to provide the federal agencies with guidance in implementing NEPA, and it developed a set of guidelines for that process that are widely used by agencies and courts and play a substantial role in its interpretation and implementation.

The Supreme Court has repeatedly ruled that NEPA is a strictly procedural statute, meaning that although it forces agencies to formally consider the environmental impacts of their actions, it does not in any way dictate the final decision on the action. An agency could legally take the most environmentally destructive course of action of all its alternatives, provided that it appropriately considered the impacts and alternatives and set forth its reasoning as required by NEPA regulations (see *Strycker's Bay Neighborhood Council, Inc. v. Karlen* 444 U.S. 223 (1980)).

The procedural nature of NEPA is critical to its compatibility with fire management activities. With fire management, as with many natural resource management situations, there is often no management decision that is clearly more environmentally preferable than all other alternatives. NEPA allows federal agencies significant flexibility in balancing fire management priorities, while still ensuring that these priorities are considered in a formal and public manner. The following sections more specifically evaluate the compatibility of NEPA with the five fire management priorities discussed above.

Firefighter and Public Safety

Firefighter and public safety takes first priority in environmental policy as well as in fire management. The NEPA regulations developed by the Council on Environmental Quality (CEQ) allow agencies to make special arrangements when emergency circumstances prevent full NEPA documentation from being completed before an action is taken (40 CFR 1506.11). The U.S. Forest Service criteria for making these arrangements require an “immediate imminent risk to public health or safety” or “immediate imminent threat to substantial loss of private property” (USFS 1992). As a result, fire suppression activities have not been subject to environmental analysis under NEPA. Notably, the 2001 Federal Wildland Fire Policy mandates the development of Fire Management Plans, which must outline all strategic fire management practices, including fire suppression. Although very few have been developed thus far, these documents should be subject to NEPA analysis, both because they form part of the broader Land Management Plans (which are subject to NEPA) and because they do not constitute an emergency response to any imminent danger.

Restoration of Fire-Adapted Landscapes

NEPA's procedural nature also allows significant flexibility in restoring fire-affected landscapes and communities. In general, mechanical fuel reduction projects, prescribed fires, and wildland fire use fires (the use of naturally ignited fires to reach land and resource management goals) are all subject to NEPA requirements: Briefly, federal agencies must determine whether a proposed activity will have a significant environmental impact (usually through an environmental analysis, or EA) and, if so, must develop an environmental impact statement (EIS) describing the potential

impacts and the impacts of a range of viable alternatives to the project and incorporating significant public comment and participation. While the responsible agency must respond to public comments, the NEPA process does not mandate or prohibit any specific action or decision. In other words, the agency, once it has completed and documented the necessary procedural requirements, is free to choose any alternative, including one that has serious negative environmental consequences. Therefore, from the text of the policy itself and associated regulations, it is difficult to imagine how NEPA could interfere with the restoration of fire-adapted landscapes or fire-affected communities.

In 2003, The USDA Forest Service and the Department of the Interior announced a rule change that included certain fire management activities under “categorical exclusions:” that is, categories of actions that do not normally significantly effect the human environment and therefore do not require development of an EA or EIS except under special circumstances. Among the activities listed are any hazardous fuels reduction and post-fire rehabilitation activities that fit certain requirements (e.g., those that will not be conducted in wilderness areas, will not involve the construction of new roads, and do not exceed certain size limits) (USDA/USDI 2003). In other words, following this rule change, many of the smaller hazardous fuel reduction and post-fire rehabilitation projects will be effectively exempted from NEPA.

Fire Management Planning

Fire policy and guidance documents state that fire management decisions should be based on existing management plans (including, for example, the Forest Service’s Land and Resource Management Plans or Fire Management Plans), as well as principles of economic viability, best available science, and sound risk management. NEPA’s procedural requirements clearly support this planning process by providing a formal process for decision-making in a format that is common to all federal agencies and transparent to the public. If developed according to CEQ regulations, an environmental impact statement (EIS) generally consists of a clear comparison of the proposed action with a range of alternative actions (including a “no action” option), including the environmental consequences of each potential action. Projects covered under the Healthy Forests Reform Act of 2003 (HFRA) are subject to less stringent requirements and generally need present and analyze only the proposed agency action, the “no action” alternative, and one additional alternative. Certain kinds of actions in the wildland-urban interface may not be required to develop either a “no action” or an additional alternative (16 USC 6501 et seq.). Agencies commonly use economic considerations to evaluate action alternatives, especially when dealing with the public, so the economic viability of the different options is often included (formally or informally) in the EIS process. Furthermore, CEQ regulations require agencies to “rigorously explore and objectively evaluate all reasonable alternatives” (40 CFR 1502.14(a)). Through a clear and formal evaluation of the costs, benefits, and risks of each alternative, good planning practices are strongly encouraged. Finally, by mandating the inclusion of a “no action” alternative, NEPA acknowledges that, as is common in fire management, a failure to act can have significant consequences.

Public Health and Environmental Quality

One of the stated goals of NEPA is “to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man” (42 USC 4321). NEPA is, in essence, a legislative attempt to ensure that public health and environmental quality are considered in all federal agency actions and is therefore effectively a legislative mandate to comply with this fire management principle.

Cooperation and Coordination

Public involvement in agency decision-making is stressed in the CEQ’s NEPA regulations. As part of the NEPA process, agencies are required to “(e)ncourage and facilitate public involvement in decisions which affect the quality of the human environment” (40 CFR 1500.2(d)) and to “(m)ake diligent efforts to involve the public in preparing and implementing their NEPA procedures (40 CFR 1506.6(a)). In addition to publicizing hearings, decision notices, and the like, the responsible agency must make a draft EIS available for public comment before the final EIS is prepared. The agency must obtain comments from any other federal agency with special expertise or legal jurisdiction over the process and must request the comments of the general public (especially any people or organizations that might be interested or affected), any private applicant involved in the proposed action (e.g., a permittee), all relevant state and local agencies and any tribes that may be affected, and any agency that had previously requested to receive statements on similar actions (40 CFR 1506.6). Interagency cooperation is also strongly encouraged, and agencies are permitted to designate joint lead agencies if state or local agencies are closely involved in the proposed project (provided at least one federal agency is included) (40 CFR 1501.5(b)). Special provisions are also made to allow joint processes in order to avoid overlaps in documentation between federal and state or local procedure (40 CFR 1506.2). However, when more than one lead agency is involved in a project, a lead agency must be designated (40 CFR 1501.5(a)). In some cases this may discourage agencies from cooperating in fire management planning by prompting interagency competition or conflict (Gebow, personal communication).

This analysis of NEPA suggests that this federal policy actually supports the principles of good fire management and in some cases even mandates the suggestions made by fire policy documents. The idea that the NEPA process causes unnecessary delays in fire management projects (especially in fuels management) has been a common point of criticism in the policy debate. However, considering the high degree of overlap between NEPA requirements and fire management principles, this must be seen as an issue of implementation and is therefore addressed in this paper’s final section.

The Endangered Species Act

The stated purposes of the Endangered Species Act (ESA) are (16 USC 1531(b)):

...to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions [on international trade in endangered species].

Certainly the best-known impact of ESA is the establishment of broad prohibitions against any take of animal species that are listed as endangered or threatened. In addition, federal agencies are required to (a) actively promote the conservation of listed species; and (b) avoid any actions that would have negative effects on listed species and their critical habitat. The application of the Endangered Species Act to fire management on federal lands is somewhat complex. In many cases, scientific understanding of a listed species' relationship with fire is limited or even nonexistent. While it is often assumed that wildland fire poses a threat to endangered species, many species actually need fire to maintain their populations or habitat, and many more tolerate fire well. Many animal species are able to avoid fire, and a recent summary of U.S. Fish and Wildlife data showed that just four of the 186 listed, proposed, and candidate plant species that are found on Forest Service lands are actually harmed by fire (Brown and Smith 2000). However, there is no doubt that not only wildfires but also prescribed fires and fuel treatments can have confusing, complex, and sometimes adverse effects on endangered species' habitats. It can be difficult to weigh long- and short-term impacts of different fire management decisions within the context of ESA.

Firefighter and Public Safety

The agency responsible for enforcement of the Endangered Species Act (the U.S. Fish and Wildlife Service, in conjunction with the National Marine Fisheries Service) has made it clear that firefighter and public safety is the first priority in any fire management decision. Federal regulations related to ESA state that in an emergency situation, consultation may be informal and may take place either during or after the necessary response measures (50 CFR 402.05). This alternative is applicable for fire suppression tactics in general, and the wildfire itself is considered an act of God and not an agency action; thus, consideration of endangered species never takes priority over human life. The Secretary of the Interior has periodically released statements clarifying and emphasizing this position.

Restoration of Fire-Adapted Landscapes

The most common conflicts between ESA and attempts to restore fire-adapted landscapes and fire-impacted communities have been centered on selective logging efforts (including both fuel reduction treatments and post-fire "salvage" logging). Section 7 of the act mandates that (16 USC 1536(a)(2)):

Each Federal Agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary... to be critical, unless such agency has been granted an exemption for such action by the Committee...

In other words, the standard for agency actions in terms of listed species is "no likelihood of jeopardy;" with very few exceptions, an agency action must not threaten the continued existence of a listed species or destroy or degrade its designated critical habitat (*Babbitt v. Sweet Home Chapt. Comms. for Ore.*, 515 U.S. 687 (1995)). The section 7 process is relatively straightforward and is outlined within the act; relatively few external regulations dictate the process. However, it is important that the agency complete each step of the consultation process (see *Thomas v. Peterson*, 753 F.2d

754 (9th Cir. 1985)). The consultation generally results in the secretary either finding that there is no likelihood of jeopardy associated with the proposed action or suggesting alternative actions to the agency's proposed action that would not be likely to result in jeopardy. ESA is often seen as unnecessarily hindering fire management practices, especially the fuel-thinning techniques described above, because the act does not recognize that avoiding these management activities for fear of harming species and their critical habitat could theoretically lead to even higher mortality of an endangered species by creating more severe fire conditions in the future. However, the Secretary of the Interior is given substantial leeway in interpreting the "no jeopardy" clause and may easily choose a broader, more long-term view of potential species impacts. Perhaps more importantly, the purpose of the act with respect to federal agencies is to ensure that management actions, no matter how well intentioned they may be, do not directly threaten the continued existence of listed species. When confronted with a decision such as whether to conduct a fuel thinning project in critical habitat or risk the eventual destruction of such habitat to a severe fire, it seems logical that an agency decision-maker might welcome a formal consultation with the Fish and Wildlife Service and the opportunity to form a reasonable, science-based opinion on the management practices in question.

As noted above, it is also difficult to anticipate the effect a prescribed burn or wildland fire use ("let burn") fire will have on any given species. Fortunately, while ESA requires decisions to be science-based, it does not force agencies to wait for exhaustive studies or complete information on a question. Rather, agencies are to use the "best scientific and commercial data available" in fulfilling the requirements of section 7 (16 USC 1536(a)(2)). An agency must develop a biological assessment, generally within 180 days of the initiation of the consultation and before beginning the activity, describing any listed species that might be affected (16 USC 1536(c)(1)). The time constraint, in combination with the fact that monitoring can be and often is recommended as part of the consultation, functions to encourage the continuing improvement of management practices.

Fire Management Planning

As described above, ESA requires that fire management planning be based on the best available science, and section 7 considerations should be crucial in the development of a Fire Management Plan. However, ESA does not permit economic considerations to take priority over listed species; the courts have upheld that this was the clear intention of Congress (in *Tennessee Valley Authority v. Hill*, 437 U.S. 153 (1978), for example, the court stated, "The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost."). It is possible, for example, that section 7 requirements might prevent hazardous fuel reduction activities from taking place, which might in turn result in a later fire of greater magnitude causing greater long-term threat to the species and resulting in substantial suppression costs. Because ESA can make it difficult for agencies to weigh short- and long-term or direct and indirect risks, this kind of risk management can be a somewhat questionable proposition. However, any conflict between the short- and long-term survival of a species might more appropriately be seen as an inherent paradox of conservation efforts than as a policy failure. Significantly, this paradox could be resolved in many cases through better scientific knowledge of listed species. Furthermore, as noted above, the secretary has

substantial leeway in interpreting the “no jeopardy” clause, and ultimately, this conflict must also be seen as one of implementation.

Public Health and Environmental Quality

Although the substantive portions of the Endangered Species Act focus on single-species management, it is a stated purpose of the act to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved” (16 USC 1531(b)). While no specific provision is made for public health issues, it is difficult to imagine a situation in which conservation of a listed species threatens public health or environmental quality (except in emergency situations as discussed in section 1).

Cooperation and Coordination

One of the unstated goals of ESA seems to be integrating the U.S. Fish and Wildlife Service’s (and the National Marine Fisheries Service’s) biological expertise into decision-making processes in federal land management agencies. In this sense, the entire section 7 process, might be seen as mandated cooperation. Biological assessments may be developed in conjunction with the NEPA process to expedite a project (16 USC 1536). Consultation with the states is also required in several aspects, and the responsible secretary may enter into cooperative agreements at the state level (16 USC 1535). International cooperation is also explicitly encouraged (16 USC 1537). Public participation is relatively limited, but citizens are explicitly granted the right to sue for enforcement (16 USC 1540(g)) and may also petition the secretary to list a species or revise critical habitat designation (16 USC 1533(b)). Landowners may also enter into a variety of different agreements for species conservation.

In summary, the Endangered Species Act does appear to conflict somewhat with fire management principles in terms of economic viability. It is clear that the legislative mandate was to prevent agencies from directly threatening the survival of listed species regardless of economic cost. The balancing of long- and short-term conservation goals appears to pose a problem in implementation – from one view, there may be no alternative available to agencies that does not place a species’ survival in jeopardy – and this dilemma warrants further examination.

Conclusions

This analysis finds only very few and very minor conflicts between these two pieces of environmental legislation and the currently accepted principles of fire management. Where conflicts do exist, they are most commonly the result of insufficient scientific information or of paradoxes of priorities within fire management that will require significant flexibility in policy implementation.

The two alternative conclusions presented at the beginning of the paper, namely that the perception of a conflict between environmental policies and fire management has been produced either by implementation problems or by political construction, would benefit from closer analytical examination. Some preliminary ideas are presented here.

It is possible that significant conflicts exist in the implementation of these laws in the fire context. One outstanding theme of the policy debate has been that of administrative or bureaucratic delays. For example, some managers have argued that the NEPA documentation process in particular is unreasonably lengthy and time-consuming. Others argue that the citizen appeals and litigation permitted under these laws are slowing implementation and interfering with fire management efforts. As with any policy, it may be that the ground-level implementation of NEPA and ESA is significantly different than what might be suggested by the policy document itself. Similarly, it may be that the current fuels situation is such a crisis that agencies simply do not have time to meet the procedural requirements of the laws without further exacerbating the problem.

However, some initial evidence suggests that these conclusions may be inaccurate. The CEQ regulations concerning NEPA implementation clearly address issues of timeliness, and the CEQ allows agencies to set time limits for each part of the NEPA process based on the potential for harm, the magnitude of the action, the degree of controversy, and other criteria (40 CFR 1501.8). A recent report from the non-partisan General Accounting Office suggests that litigation has played a relatively minor role in delaying hazardous fuels projects. Of 762 fuels-related decisions in fiscal years 2001 and 2002, only 180 were appealed (affecting 900,000 of a total 4.7 million acres) and only 23 were litigated (affecting 100,000 acres) (GAO 2003). The same GAO report also found that 79 percent of appeals were handled within the mandated 90-day period.

A final alternative is that the policy dialogue described here is primarily or wholly a political construction. L. Earl Peterson, a Florida state forester, began his welcome address to the 1995 Environmental Regulation and Prescribed Fire Conference with what may be a telling story (Peterson 1997):

During a skit on the Smothers Brother Show, Tommy Smothers fell into a large vat of chocolate, and began to yell "FIRE". When asked by his brother Dick why he yelled fire, he responded, "Well, do you think anyone would have come if I had yelled 'CHOCOLATE'?"

Recent criticism by some citizen groups has effectively accused government agencies and the president of yelling "fire" instead of "chocolate." Popular dialogue has made wildland fire an increasingly sensitive and emotional subject, which in turn makes it a good catchphrase for mobilizing support for new policies and regulations. In the absence of reliable data to either support or deny the claims that excessive litigation, burdensome procedures or conflicting policies are thwarting federal attempts to bring a fuel/fire crisis under control (or even to gauge the magnitude of the fire crisis itself) sweeping policy changes would be ill advised.

Schneider and Ingram (1997) provide what may prove to be a useful framework for evaluating the possible political construction of this policy debate. They describe a situation in which public policy design has become increasingly hyperpoliticized; in other words, they argue that through the political and social construction of oppositional target groups, "policies deceive, confuse, and in other ways discourage active citizenship, minimize the possibility of self-corrections, and perpetuate or exacerbate the very tendencies that produced dysfunctional public policies in the first place" (p. 5). Because the debate described here is based on the assumption that past fire policy has been dysfunctional, and because it is rapidly evolving into new policy designs (e.g., the Healthy Forests Restoration Act), a unique opportunity exists to examine whether the emerging federal fire policy is an example of hyperpoliticization. There are some hints that this might be the case, especially in the

new restrictions on citizen suits and decreasing transparency that have developed from the fire debate.

If fire policy is a hyperpoliticized issue, academic analysis of its implications has generally been depoliticized. However, a worthwhile analysis of these policies should incorporate an explicit discussion of the political and economic interests involved. If, as Schneider and Ingram's (1997) framework suggests, the emerging wildland fire policies build different incentives for different target groups, promote self-interested conflict among constructed target groups, and show signs of subverting democratic values, any further policy analysis should make explicit the policy incentives for different stakeholders in fire management.

Exploring these research questions will require substantial on-site work with federal land, resource, and fire planners and managers, but the issues addressed are critical ones: Finding the exact points of contention between fire management and environmental policy may allow policymakers to solve those specific problems rather than undermining otherwise effective legislation.

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