

# U.S. Policy Response to the Fuels Management Problem: An Analysis of the Public Debate About the Healthy Forests Initiative and the Healthy Forests Restoration Act

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**Abstract**—The Healthy Forests Initiative (HFI) and Healthy Forests Restoration Act (HFRA) represent major policy and legislative responses to the fuels management problem in the United States. This study examined the nature and evolution of the public discussion and debate about these policy responses. Computer content analysis was used to analyze favorable and unfavorable beliefs about HFI / HFRA expressed in about 2,800 news stories published from August 1, 2002 through December 31, 2004. The most frequently mentioned favorable beliefs that emerged included the view that HFI / HFRA will (1) reduce the risk of catastrophic wildfire, (2) protect people, communities, and property, and (3) cut red tape and speed up decision making processes. The most commonly expressed unfavorable beliefs included the view that HFI / HFRA (1) is an excuse to increase logging, (2) will weaken environmental protections, and (3) will reduce public input. Some evidence was found of a growing consensus on the problem of fuel buildup and the need to reduce the risk of wildfire. But mistrust was found to be an ongoing issue as the HFRA is implemented. Building public trust will be a key to continuing to gain support.

## Introduction

The Healthy Forests Initiative (HFI) and Healthy Forests Restoration Act (HFRA) represent major policy and legislative responses to the fuels management problem in the United States. This study examined the nature and evolution of the public discussion and debate about these policy responses, as expressed in the news media.

Research by communications and public opinion researchers has found that the news media both shape and reflect public attitudes and beliefs about a wide range of social issues (Burgess 1990; Fan 1988; McCombs 2004). For example, Elliott and others (1995) found a significant impact of changes in media coverage on the level of public support for environmental protection. The news media also strongly influence agenda-setting for public policy issues (Dearing and others 1996; McCombs 2004). In other words, there is a relationship between the relative emphasis given by the media to issues and the degree of salience these topics have for the general public. Therefore, analysis of the public debate about social issues contained in the news media is not mere “media analysis,” it is a window into the broader social debate and a means to gauge, indirectly, public attitudes.

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Part of the explanation for the influence of the news media on public attitudes is the importance of the media as the primary information source for public policy issues, including forestry and other environmental issues. For example, a survey in Oregon found that “The most important sources of information about forestry issues tend to be newspaper and television, followed by radio, other printed materials, friends and relatives, and interest groups. Only 16 percent overall considered natural resource agencies to be important sources” (Shindler and others, 1996: 7).

The news media have also been found to be important information sources with respect to wildfire. In a study of public support for fuel reduction strategies in forest-based communities, Shindler and Toman (2003) asked respondents to rate the usefulness of information sources. Newspapers and magazines were rated as most useful, and the percent of respondents who rated the USDA Forest Service as a useful source dropped from 60 percent in 1996 to 48 percent in 2000.

Given the strong influence of the news media on public attitudes and the importance of the news media as an information source about wildfire, fire managers and policy makers need a better understanding of the way in which fire and fire policy is discussed in the media. Lichtman (1998: 4) argued that building support for fire policy will require paying close attention to the ways in which fire is portrayed in the public discourse. This paper contributes to this understanding by analyzing the news media discussion of the Healthy Forests Initiative (White House 2002) and the Healthy Forests Restoration Act of 2003. The following section describes the data and methodology used in this study, followed by a discussion of the main findings. A final section discusses the conclusions and implications for wildfire policy in the United States.

## Methodology and Data

This analysis involved five main steps: (1) identifying news media stories dealing with HFI / HFRA and downloading them from an on-line commercial database, (2) “filtering” the text to eliminate irrelevant news stories, (3) identifying favorable and unfavorable beliefs about HFI / HFRA contained in the stories, (4) developing computer instructions to score the paragraphs for the identified beliefs, and (5) assessing the accuracy of the analysis. These steps are briefly described in the following paragraphs.

Data for this study consisted of the text of articles from over 200 U.S. news media sources downloaded from the LexisNexis® online database. A Boolean search term was developed to identify articles about HFI / HFRA. The time frame for the analysis covered August 1, 2002 (the month in which the Healthy Forests Initiative was first proposed) through December 31, 2004. The downloaded text was then “filtered” using the InfoTrend™ method (described briefly below) to remove news stories that were not about the HFI or HFRA.

Favorable and unfavorable beliefs about HFI / HFRA were identified by reviewing a random sample of news stories. Eight main favorable beliefs and seven unfavorable beliefs were identified. The specific favorable and unfavorable beliefs are discussed in the following section.

Scoring the text for expressions of the favorable and unfavorable beliefs was done using the InfoTrend computer content analysis method and software. An algorithm was developed to score the text, that is, to count the number

of expressions of each of the beliefs. Briefly, this involves development of a *dictionary* (composed of a list of ideas related to the favorable and unfavorable beliefs, and groups of words and phrases associated with each idea) and a series of *idea transition rules* (computer instructions specifying how pairs of ideas in the dictionary are combined to give new meanings).

For example, one favorable belief that was expressed in the news stories and scored in this analysis is that HFI and HFRA will reduce the risk of wildfire. For this belief, a set of dictionary terms such as “avert,” “control,” “curb,” “eliminate,” “decrease,” “risk of,” etc., was developed and used to identify expressions of the concept of *reduce risk*. Another set of terms such as “blaze,” “burn,” “fire,” etc., was used to identify expressions of the concept *wildfire*. An *idea transition rule* was then developed specifying that when a “reduce risk” term and a “wildfire” term are in close proximity of each other within a paragraph that mentions HFI or HFRA, then one expression of the belief that HFI / HFRA will reduce wildfire risk is counted. For example, the statement “With 190 million acres at high *risk of* catastrophic *fire* across the country, this is the kind of partnership we need if we are going to conserve forests...” (Norton 2003: B7) connects the ideas “wildfire” and “reduce risk” in the context of a paragraph discussing HFI / HFRA, and was counted as one expression of the belief that HFI / HFRA will reduce the risk of wildfire.

To identify expressions of the belief that HFI or HFRA do *not* reduce the risk of fire, the same process was used but with the addition of a set of *negation* terms (for example, “not,” “won’t,” “can’t,” “fail”) in close proximity to a statement that HFI or HFRA reduces wildfire risk via another idea transition rule.

Finally, an assessment of the accuracy of the scoring was done by reviewing a random sample of paragraphs to check the accuracy of computer-coded results. After final refinements in the dictionary and idea transition rules, accuracy rates for the scoring of beliefs about HFI / HFRA were all in excess of 80 percent, which is used as an acceptable accuracy level in content analysis (Krippendorff 1980).

## Findings and Discussion

We found approximately 2,800 news stories about HFI / HFRA for the analysis time period August 1, 2002 through December 31, 2004. To put the number of stories in perspective, for the same time period and for the same news sources, there were more than 45,000 stories about wildfire, so news media discussion of HFI / HFRA was only about 5 percent of the volume of all wildfire discussion. The most commonly expressed favorable beliefs that we found about HFI / HFRA, in order of prevalence, included the beliefs that HFI / HFRA: (1) will reduce the buildup of fuels in forests and reduce the risk of catastrophic wildfire, (2) will cut red tape, streamline bureaucracy, and speed up decision making processes, (3) will protect people, communities and property, (4) will restore “forest health,” (5) will help deal with insect infestation and disease, (6) will create economic benefits, such as job creation and sustaining the local economy in forest-based communities, and (7) involves a collaborative approach with community involvement and partnerships.

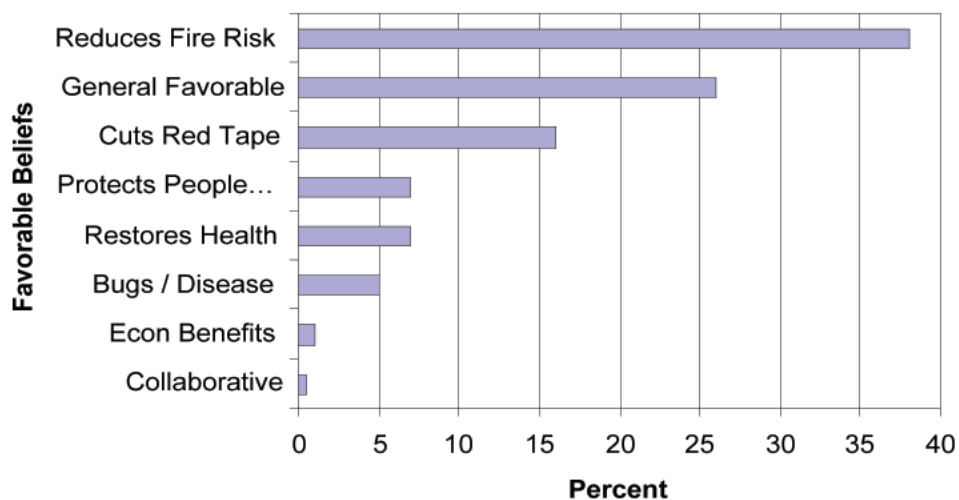
In addition to these seven specific favorable beliefs about HFI / HFRA, we found many non-specific favorable expressions, such as the belief that HFI was “a step in the right direction” or HFRA was a “common sense” approach.

A “general favorable” category was created to count all of these non-specific expressions of support for HFI / HFRA. There were also a number of infrequently expressed favorable beliefs, such as the view that HFI / HFRA will help protect wildlife and wildlife habitat, or that it will pay for itself. These beliefs were not tracked in this analysis because they were rarely expressed.

Figure 1 shows the share of each favorable belief as a percent of all expressions of favorable beliefs about HFI / HFRA in our database. The most frequently expressed favorable belief was “reduces fire risk,” the view that HFI / HFRA will reduce fuel buildup and reduce the risk of catastrophic wildfire. This belief accounted for 38 percent of all expressions of favorable beliefs. An example of an expression of this belief scored by our computer content analysis instructions is: “If signed, the bill will give foresters the funds and tools they need to prevent catastrophic wildfires from threatening homes and watersheds, supporters say,” (deYoanna 2003: B1). This text was also scored as an expression of the belief that HFI / HFRA will “protect people, communities, and property.”

“General favorable” expressions about HFI / HFRA was the second most frequently expressed favorable belief, accounting for 26 percent of all favorable beliefs. “Cuts red tape” was the third most frequently expressed, followed by “protects people, communities and property,” and “restores health.” The other three favorable beliefs were not often expressed and were not a significant part of the public discussion.

The most commonly expressed unfavorable beliefs that emerged in the news media debate included the beliefs that HFI / HFRA will: (1) be an excuse to increase logging and is really a subsidy to the timber industry, often referred to in the news media discussion as “stealth logging,” (2) reduce or weaken important, long-standing environmental protections, (3) reduce public input and threaten citizens’ rights to be involved in decision-making on U.S. National Forests, (4) fail to reduce the risk of catastrophic wildfire, (5) fail to protect people, communities, and property, and (6) fail to restore forest health.



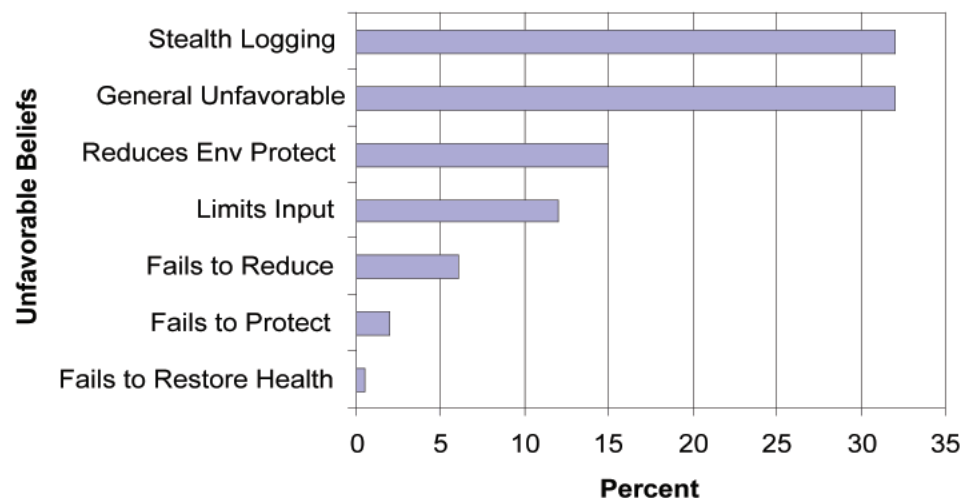
**Figure 1**—Share of favorable beliefs about the Healthy Forests Initiative and Healthy Forests Restoration Act, August, 2002 through December, 2004.

There were also many general, non-specific unfavorable expressions related to HFI / HFRA. These included unfavorable characterizations of HFI / HFRA such as “deceptive,” “double-speak,” “smoke and mirrors,” and so on. In addition, there were also a number of infrequently expressed unfavorable beliefs, such as the view that HFI / HFRA will be too costly, will result in more roads in National Forests, or will harm wildlife habitat due to increased logging. These infrequently expressed unfavorable beliefs were not tracked in this analysis.

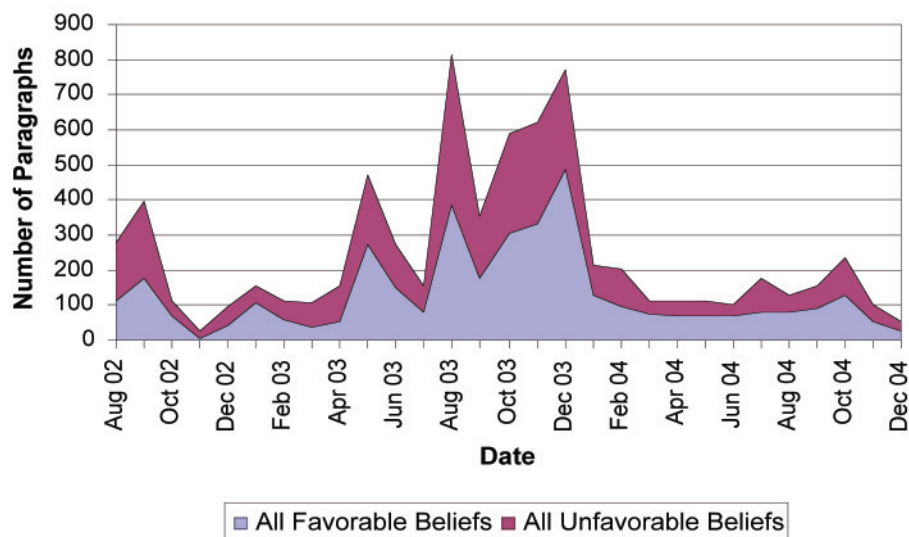
Figure 2 shows the share of each unfavorable belief as a percent of all expressions of unfavorable beliefs. The most frequently expressed unfavorable belief was “stealth logging,” the view that HFI / HFRA is primarily about logging and subsidizing the timber industry. This belief accounted for 32 percent of all expressions of unfavorable beliefs. An example of an expression of this belief is: “The “Healthy Forests Restoration Act” passed by the U.S. House this week has nothing to do with healthy forests and everything to do with a return to environmentally reckless, taxpayer-subsidized timber cutting,” (The Columbian 2003: C8).

“General unfavorable” expressions also accounted for 32 percent of all unfavorable beliefs (fig. 2). “Reduces environmental protection” was the third most frequently expressed unfavorable belief, followed by the belief that HFI / HFRA “limits input.” The other three unfavorable beliefs were not often expressed and were not a significant part of the public discussion as reflected in the news media.

Figure 3 shows an aggregation of all favorable and all unfavorable beliefs about HFI / HFRA expressed in the news media over time. Peaks in the volume of discussion are associated with major events. The biggest spike in discussion occurred in August, 2003 and coincided with President Bush using wildfires in the western U.S. as a backdrop for promoting the Healthy Forests Initiative. Other spikes in coverage are associated with the introduction of HFI by President Bush in August, 2002, the passage of HFRA by the U.S. House of Representatives in May, 2003, Senate passage of HFRA in October, 2003, and the signing of HFRA by President Bush in December, 2003. Since that time, there has been a dramatic drop in the volume of news media discussion of HFI / HFRA.



**Figure 2**—Share of unfavorable beliefs about the Healthy Forests Initiative and Healthy Forests Restoration Act, August, 2002 through December, 2004.



**Figure 3**—All favorable and all unfavorable beliefs about the Healthy Forests Initiative and Healthy Forests Restoration Act, August, 2002 through December, 2004.

We also found evidence in our database of HFI / HFRA news stories of a growing consensus about the fuel buildup problem and the need to deal with it. Although we did not develop computer instructions to explicitly identify expressions of this idea, this growing consensus was evident in the news stories we analyzed. For example:

“There’s strong consensus that the forests, particularly the federal forests, are in fuel conditions that are unnatural because of fire suppression and past management choices. There’s probably strong consensus on what can be done” (Cruz 2002: B1).

“We have serious reservations about some details of the President’s Healthy Forests Plan. But we have no lingering doubts about the need for Congress to approve fire legislation” (Oregonian 2003: B1)

“It doesn’t matter your race, religion or political beliefs—you have to make sure you don’t have a forest fire in your backyard” (Ratt 2004).

Other researchers have argued that there is a growing consensus among many stakeholders that fuel buildup and the risk of catastrophic wildfire is of great concern, especially in the wildland urban interface (Vaughn and Cortner 2005).

## Concluding Comments

This study examined the national debate about the Healthy Forests Initiative and Healthy Forests Restoration Act as reflected in the news media. A primary conclusion is that the Bush administration has been successful in connecting the Healthy Forests Initiative and the Healthy Forests Restoration Act with the need to reduce the risk of catastrophic wildfire and excess fuel buildup. The most frequently expressed belief in the news media discussion and debate, either favorable or unfavorable, was that HFI / HFRA will reduce

the risk of wildfire. Reducing wildfire risk has been the main selling point of HFI / HFRA and it has resonated loudly in the public discourse.

It is notable given the term “healthy forests” in the titles of the HFI and the HFRA that there was very little discussion of the favorable belief “restores health” in the news media discussion. Even if the “bugs and disease” category were combined with “restores health” in a broader forest health category, this would still only rank fourth in frequency of expression among the favorable beliefs.

The most frequently expressed unfavorable belief, “stealth logging,” indicates a strong lack of trust in the legislation, the Administration’s motives, and in the Forest Service’s implementation of HFRA. In addition, the terms used to identify “general unfavorable” expressions about HFI / HFRA also conveyed deep distrust. Examples of these terms include “cynically named,” “deceptive,” “dishonest,” “double-speak,” “duplicitous,” “insidious,” “misleading,” “Orwellian,” “pernicious,” “smoke and mirrors,” “untruthful,” and so on. Others have noted the vital role of building and maintaining trust in fuels management (Winter and others, 2004). Building trust will be a key concern for the Forest Service as it implements HFRA. The public and other stakeholders will be watching closely to see how the Healthy Forests Restoration Act is implemented.

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