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A roll call analysis of the Healthy Forests Restoration Act and constituent interests in fire policy

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Abstract

This study examined national wildland fire policy by focusing on the political process. The evolution of federal wildland fire policies was reviewed first. Wildland fire suppression in the long term has resulted in a high accumulation of fuels on federal forestlands. The enactment of the Healthy Forests Restoration Act (HFRA) in 2003 was a natural result of the evolution, intended to address the increasingly violent wildland fires in recent years. Utilizing the voting records on the HFRA, a roll call analysis was conducted to examine a number of factors that might have influenced legislators' voting behavior. Political affiliation was clearly a more vital aspect of the vote for Republicans than for Democrats. Republicans were more supportive of the HFRA and less divided in voting than Democrats. The percentage of the rural population in a congressional district or a state was positively related to the support of fuel reduction projects and the HFRA. Contributions from forest firms to legislators increased the probability of voting for the HFRA while contributions from environmental interest groups decreased it. The forest industry has overspent the environmental interest groups in political contributions by a wide margin and exerted more influences in the voting of HFRA.

Keywords: Fuels; Policy process; Roll call analysis; Wildland fires

1. Introduction

In late October of 2003, wildfires in southern California occupied the headlines of all news media. The region suffered its worst wildland fire season in modern history. Wildfires there burned over 739,000 acres, destroyed 3600 homes, claimed 22 civilian lives, caused tens of thousands to evacuate, and cost $250 million to contain (USDA, 2004). At the same time, debate in the United States Congress over the bill of HR 1904—the Healthy Forests Restoration Act (HFRA)—was increasingly passionate and fierce. Under the shadow of Californian wildfires, Congress passed the bill, and on December 3, 2003, President Bush signed it into law (PL 108-148).

The HFRA is a landmark legislation for forest management. In recent years, wildland fires have become a critical issue for management of federal

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forestlands. Significant physical and financial resources have been spent in protecting private property and lives. In addition to suppression costs, which were estimated at $1.33 billion nationwide in 2003, damage to public lands, rehabilitation, emergency aid for businesses and unemployment, and reimbursement of firefighting efforts have also added to the total costs of wildfires (National Interagency Fire Center, 2004). The HFRA was a legislative response to the increasing fire activities. Intended to improve the capacity of federal agencies to plan and conduct hazardous fuels reduction projects on federal lands, the bill was aimed at protecting communities and other at-risk lands from catastrophic wildfires and enhancing efforts to protect watersheds and address threats to forest and rangeland health.

The occurrence of the HFRA was not accidental; rather, it was the result of the evolution of fire polices in the United States during the past century. Advocates and opponents in the development of fire policy have long been divided on how to manage wildland fires. Federal agencies have increasingly recognized the need for proactive approaches such as thinning and prescribed burning in fighting wildland fires. In contrast, environmental groups have tended to be skeptical of such approaches and claimed that large-scale thinning projects would open the back door of the National Forests to the forest industry. These diverse debates have continued for decades. The newly passed Act serves as a legislative milepost in a period of gradual changes. It presents a good opportunity to analyze and quantify these debates and constituent interests that have revealed in the political process of fire policies.

Legislators' voting behavior has long been influenced by constituent interests and reflected in the floor vote records for bills. A legislator's vote can be perceived as the result of a constrained optimization decision (Coates and Munger, 1995). The legislator maximizes his utility function subject to constraints that come from party affiliation, general constituency characteristics, special interest characteristics, and legislator characteristics. Various related specifications have been developed in the literature (Stigler, 1971; Peltzman, 1984; Fennemore and Nelson, 2001). Roll call analysis has been applied to a wide range of issues in the past and has been proved helpful in understanding the legislative behavior and political process for these issues (e.g., Mehmood and Zhang, 2001; Cain and Kaiser, 2003).

Given the importance of the HFRA in fire policy evolution and the power of roll call analysis in comprehending political process, the focus of this study is to conduct a roll call analysis to examine various factors that have influenced the legislation of the HFRA. Party affiliation is an important determinant because Democrats have generally been perceived as being more pro-environmental while Republicans more supportive of industry. Among various participants in the political process of fire policy, federal agencies, the forest industry, and environmental groups were most active. They represented special constituent interests in fire policy. Special interests are much easier for legislators to capture because these interests will make themselves known to politicians through lobbying efforts. From their positions revealed in the debates, it is hypothesized that federal agencies and the forest industry have positively influenced the enactment of the HFRA while environmental groups negatively. A roll call analysis will be able to validate these hypotheses, and if statistically significant effects can be found, the magnitude of the effects.

The rest of this paper is organized as follows. In the next section, the evolution of fire policy is briefly reviewed in order to facilitate our understanding of fire policy changes in the past and the political process generating the HFRA. In the following sections, a theoretical voting model is developed to explain the voting behavior and a description of the hypotheses and the data used are presented. Finally, empirical results are analyzed and their implications are discussed.

2. Evolution of fire policy and the HFRA

For more than a century, wildfires have been largely perceived as an agent of destruction. After several severe fires at the beginning of last century (e.g., 1910), national fire policy was gradually formulated. In the context of the ecological theory of the time, fire exclusion was believed to promote ecological stability and also could reduce commodity damage and economic loss (Douglas and Mills, 2001).