The Forest Service Since the National Forest Management Act: Assessing Bureaucratic Response to External and Internal Forces for Change

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There has been considerable recent discussion and debate about change and the need for change in the United States Forest Service. A number of observers have argued that the agency has shifted its emphasis from commodity to non-commodity values of the National Forests, has become more sensitive to environmental and ecological concerns, and has become more responsive to public input. However, to date most articles on the topic of change in the Forest Service have been either theoretical and speculative in nature or have based their conclusions on attitude surveys of agency employees. So far no studies have provided "hard," empirical evidence of change or have conducted any systematic examination of the presumed causes. This symposium attempts to fill this gap. What follows is the presentation of the analyses of a wide range of important quantitative indicators of agency change. From these analyses, we attempt to answer the following questions: Has the Forest Service indeed been changing? If so, what direction has it taken and how significant has this change been? What are the possible causes of change, and what have been the consequences for National Forest policy? What factors are likely to influence future change in the agency?

The Forest Service has been praised often for its commitment to the conservation of the nation's resources, its professionalism, esprít de corps, and high degree of effectiveness (Clarke & McCool, 1985; Culhane, 1981; Dana & Fairfax, 1980). It also has been criticized for being overly focused on the management of commodity outputs from the National Forests, especially timber, and insufficiently attentive to non-commodity values, such as wildlife, wilderness, and recreation, and in maintaining ecological balance (Anderson, 1993–94; Twight, 1983; Twight & Lyden, 1988, 1989; Wilkinson, 1987). The Forest Service also has been characterized by some as a closed organization, with members conforming tightly to a central value orientation (Kaufman, 1960; Twight & Lyden, 1988, 1989) and unresponsive to changing societal demands (Twight & Lyden, 1988, 1989).

Recently, however, there has been considerable discussion and debate about changes happening in the agency and the need for further change (see, for example, Allison, 1993; Anderson, 1993–94; Brown & Harris, 1992a, 1992b, 1993; Kennedy, Krannich, Quigley, & Cramer, 1992; Lyons & Tuchman, 1993; McCarthy, Sabatier, & Loomis, 1991; Tipple & Wellman, 1991; and Wilkinson, 1987; see also recent congressional testimony given by Forest Service Chief Jack Ward Thomas [1994], and a recent speech by Assistant Secretary of Agriculture James Lyons [1993]). A number of observers believe that changes have been occurring because of the accumulating pressures that have been brought to bear on the agency since the environmental movement began to increase its presence and influence in the 1960s and 1970s (Kennedy, 1988; Tipple & Wellman, 1991). With this movement came the passage of significant new laws such as the National Environmental Policy Act (1969), the Endangered Species Act (1973), and the National Forest Management Act (1976).

These laws have put pressure on the agency to increase its emphasis on ecological balance and environmental sensitivity and to become more accountable to the public. These laws also have broadened and complicated the tasks before the agency. Public involvement and environmentalists' frequent use of the courts to enforce these laws has sustained the pressure on the agency to change the way it does business. Observers have noted that change also has come from within, as the agency has continued to diversify its workforce (Kennedy, 1988; McCarthy, Sabatier, & Loomis, 1991; Brown & Harris, 1993). It is believed that the greater numbers of women, minorities, and non-foresters who have entered the agency in the past decade have increased the range of ideas and perspectives in the agency, thereby causing attitudes and behavior to change.

Despite these developments, some observers, such as Twight and Lyden (1988, 1989), believe that little substantive attitudinal and behavioral change in an agency like the Forest Service is possible because the socialization and identity-building mechanisms in the Forest Service that result in conformity and "groupthink" themselves have changed very little over this time. Referring to the processes first described by Kaufman (1960), Twight (1983) explains in some detail how Forest Service training, identity-building mechanisms, socialization, and the promotion-andreward system serve to develop strong adherence to a central value orientation among Forest Service employees, particularly those in leadership ("line") positions. value orientation emphasizes commitment to "sustained-yield" and "utilitarian" theories. These theories involve, among other things, the beliefs that objects of nature have value only in terms of their usefulness to humans ("utilitarianism"), that timber is the most important use of forests ("timber primacy"), and that timber should be managed on a sustained-yield even-flow basis (no more should be cut from the forest than grows in on an annual basis). Twight (1983) argues that agency employees adhere to this value orientation so tightly that they become very resistant to outside input, particularly if that input runs counter to the value orientation. Hence, Twight argues, the Forest Service is not only highly resistant to change, but the agency would rather lose political ground than compromise its values.

So where does reality lie? Has the Forest Service been changing, or not? As strongly as it may adhere to its professional value orientation, has it been possible for the agency to resist the shifting and accumulating societal and political demands noted above? Some organizational theorists, such as Romzek and Dubnick (1987), have argued that it is not possible for public agencies to ignore such pressures indefinitely, as they are dependent on other political actors for their support and survival. However, the Forest Service long has held "superstar" status (Clarke & McCool, 1985)—enjoying the prestige and support due a powerful and respected agency from Congress, presidential administrations, and the general public. Have shifting social and political demands over the past several decades altered significantly that prestige and support? What has been the effect of these accumulating pressures on the agency? A strong commitment to its traditional value orientation notwithstanding, can the Forest Service resist these pressures? For how long? Has meaningful change been occurring, after all? If so, what direction has it taken, and what are the implications for National Forest policy?

To date, most of the evidence shedding light on change in the Forest Service has come from surveys of Forest Service employees (see, for example, Kennedy, Krannich, Quigley, & Cramer, 1992; Brown & Harris, 1992a, 1992b, 1993; McCarthy, Sabatier, & Loomis, 1991). Most have inferred change by comparing the attitudes of Forest Service employees with the attitudes of employees reported in earlier studies. The interest in examining attitude changes in the Forest Service has stemmed from the anticipation that changes in attitudes will result in changes in behavior, and ultimately

in management and policy decisions in the agency. As compared to earlier studies, these studies have tended to conclude that employees exhibit greater environmental sensitivity and more concern for the non-commodity values of the National Forests.

More recently, Mohai, Stillman, Jakes, and Liggett (1994) (see also Mohai & Jakes, in press) reported results of a survey in which Forest Service employees were asked directly their perceptions of the extent of changes in the agency over the past decade and whether these changes have been for the better. They found that the vast majority of employees (both line officers and staff employees) perceive that significant changes have taken place, both in terms of specific policies dealing with important and controversial issues, such as the loss of old-growth forests and below-cost timber sales in the National Forests, and in the agency in general. They also found that employees believe these changes are in the right direction for the agency, but that the agency has considerably further to go to get to where employees believe it should be. Consistent with the findings of earlier attitude surveys, the vast majority of employees believe the agency has shifted its emphasis from commodity to non-commodity values of the National Forests, has become more sensitive to environmental and ecological concerns, and has become much more responsive to public input.

Despite the observations concerning the changing social and political conditions within which the agency finds itself, and despite the reported perceptions of Forest Service employees from numerous surveys to date, there have been no systematic studies providing empirical evidence as to whether the agency or its policies in fact have changed or are changing. There also have been no systematic examination and testing of hypotheses pertaining to the possible causes of change. In this symposium, we present a collection of studies that provide such evidence, to test the proposition of change more thoroughly and to examine what direction this change has taken, if indeed it has occurred.

Rather than examining employees' attitudes and perceptions of changes in the agency, as other studies have done, the studies in this symposium attempt to test the proposition more directly by examining quantitative indicators of change. substantive changes have occurred, we should be able to witness observable changes in indicators of policy outcomes. For example, if the agency has been shifting its emphasis from commodity to non-commodity values and uses of the National Forests we should expect to see increases in various quantitative measures of non-commodity outputs such as wildlife and recreation, and decreases in various quantitative measures of commodity outputs such as timber. We also should see concomitant shifts in Forest Service budget requests and congressional appropriations for the various multiple-use programs. In addition to observing changes in quantitative measures of Forest Service effort and output we also should expect that outside groups, both environmental and commodity-oriented, agree with Forest Service employees that change is occurring. Furthermore, if, as a number of observers have argued, changes have been occurring because of the increasing pressures brought to bear on the agency by Congress and the courts in response to societal concerns about the environment, we should also be able to discern patterns in congressional and court activity that bear this out.

Studies providing evidence for the above are presented in this symposium. First, Farnham attempts to determine the extent of priority shifts in the agency by analyzing trends of Forest Service budget requests related to the various commodity and non-commodity programs of the National Forests. He compares and contrasts these requests with the budget requests of the United States Department of Agriculture (USDA) and the Office of Management and Budget (OMB), as well as the appropriations made by Congress in these various program areas. He asks two questions: (a) To what extent do trends in Forest Service budget requests reflect shifting

program priorities in the agency from commodity to non-commodity? (b) To what extent is the Forest Service initiating these shifts rather than responding to the shifting priorities of the other actors, particularly Congress?

Although shifts in budget requests and congressional appropriations are important indicators of change in policy priorities for the Forest Service, perhaps a more direct set of indicators involve changes in measures of Forest Service management efforts and outputs. As indicated above, if since the passage of the National Forest Management Act (NFMA) the agency has been shifting its emphasis from commodity to non-commodity values and uses of the National Forests, we should see corresponding declines involving relevant measures for commodity uses, and corresponding increases involving relevant measures for non-commodity uses and values. Accordingly, Farnham and Mohai analyze trends regarding the National Forests' major commodity use: timber. The quantities of timber offered, sold, and harvested from the National Forests over a 13-year period are analyzed. Farnham and Mohai not only attempt to assess whether these amounts have been declining in recent years, but also whether there is evidence that the Forest Service has been changing its traditional reliance on clearcutting—often a controversial practice—as the principal method of timber harvesting to reliance on alternative methods. They address the question of how significant are the observed changes.

Farnham, Taylor, and Callaway similarly analyze trends regarding the National Forests' two major non-commodity uses: recreation and wildlife. Using multiple indicators of agency effort and output regarding recreation management and wildlife management, they examine changing trends to assess the degree to which the agency is shifting its management emphasis to non-commodity values of the National Forests. Taking together the analyses in articles by Farnham and Mohai, and by Farnham, Taylor, and Callaway, the reader should find the results to be revealing.

Next, Thomas and Mohai examine changes in the Forest Service workforce. Using a complete census of Forest Service personnel between 1983 and 1992, they examine not only whether the numbers and proportions of non-traditional employees (i.e., women, minorities, and non-forestry professionals) have been increasing over the past decade, but they also pose the question of how significant these changes are in light of the continued dominance of the agency by white male foresters. Do non-traditional employees currently have a sizable presence in the agency? Is their presence significant enough to be a likely cause of the value and attitude shifts in the agency that have been hypothesized by some (for example, Kennedy, 1988; Brown & Harris, 1993)?

Jones and Taylor examine Forest Service-related litigation and appeals over the past two decades for their potential in affecting change in the Forest Service. They examine not only the frequency of administrative appeals and lawsuits brought against the agency, but they also analyze the purposes for which these appeals and lawsuits were made, who initiated them, which kinds of cases were likely to be won by the litigants, and what effect these cases have had on the agency. Their detailed analyses and discussion build a rather strong case that the courts and the administrative appeals process have been important catalysts of change in the agency.

Jones and Callaway similarly examine the role and impact of Congress, and likewise build a case that it has been a major factor of change. They analyze trends over the past two decades concerning the frequency of requests for agency testimony at congressional hearings, the number of Forest Service-related bills and amendments introduced in Congress, and the amount of Forest Service-related legislation enacted. They also discuss the increasing pressure brought upon the agency as the result of the intervention of individual members of Congress and of the detailed directives to the agency that often are attached to annual appropriations bills.

Finally, Jones and Mohai complement the results discussed in the earlier articles by presenting and discussing the findings from surveys of key groups outside the Forest Service concerning their perceptions of change in the agency. Specifically, interest group representatives familiar with National Forest policy and the heads of the nation's accredited forestry schools were asked to assess their perceptions about the extent of changes in the agency and the likely causes of those changes. Jones and Mohai find remarkable agreement among environmentalists, industry representatives, and forestry school heads about the extent and sources of change. Disagreements exist among the various groups concerning whether these represent net positive or negative change, however. Nevertheless, the reader will be struck by the convergence of outside groups' perceptions of change in the agency and the empirical findings of change presented in the earlier articles.

Indeed, by the symposium's end the reader should be left with little doubt about whether or not substantive changes in the Forest Service and its policies have occurred over the past two decades, or about what the likely causes of change have been. Whether these changes have gone far enough—or in the right direction—to meet adequately the needs of a changing American society will no doubt be debated in the near and distant future.¹

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Note

The reader also should consult the reports by Mohai, Stillman, Jakes, and Liggett (1994) and Mohai and Jakes (in press) for information about Forest Service employees' perceptions of change in the agency and its policies. Striking is the apparent agreement among Forest Service employees, environmentalists, and the heads of the nation's forestry schools that significant changes have occurred and that these changes have been in the right direction. See these two reports also for employees' recommendations about what further actions the agency should be taking in the future.

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