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Science, Politics, and U.S. Forest Law: The Battle over the Forest Service Planning Rule

George Hoberg

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Resources for the Future
1616 P Street, NW
Washington, D.C. 20036
Telephone: 202–328–5000
Fax: 202–939–3460
Internet: http://www.rff.org

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Abstract

This paper reviews the battles over the Forest Service planning rule that culminated in the November 2000 revising of the regulations implementing the National Forest Management Act. In a departure froj the agency's emphasis on multiple use, the rule established ecological sustainability as the key objective guiding planning for the national forests. The supporting material explicitly states that "it is based on the recommendation of an eminent committee of scientists." This pape5r examines the Committee of Scientists and the NFMA rule as a case study in the relation between science and politics in the development and implementation of statutory standards for management of the National Forest System. The conclusion considerations the broader question of whether the Committee and Forest Service overstepped their appropriate roles in promoting what is essentially a new statutory mandate.

Key Words: Forest Service, planning, National Forest Management Act, Committee of Scientists, multiple use, sustainability

JEL Classification Numbers: K00, Q23, Q28

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Science, Politics, and U.S. Forest Law: The Battle over the Forest Service Planning Rule

George Hoberg*

Introduction

On November 9, 2000, in the waning days of the Clinton administration, the secretary of Agriculture issued the final rule revising the regulations implementing the National Forest Management Act (NFMA). This decision was the culmination of a nearly decade-long process of redefining the mission of the USDA Forest Service. In a striking departure from the agency's historical emphasis on multiple use, the rule established ecological sustainability as the key objective guiding planning for the national forests. The supporting material for the rule explicitly states that "it is based on the recommendations of an eminent committee of scientists" (11/9/00 press release). The secretary appointed the Committee of Scientists in 1997, and the committee issued its report March 15, 1999. The new policy was not in place for long, however. The Bush administration suspended the rule in May 2001, and in November 2002 issued a new proposed rule that would reverse of number of changes embodied in the Clinton rule.

This paper examines the Committee of Scientists and the Clinton NFMA rule as a case study in the relation between science and politics in the development and implementation of statutory standards for management of the National Forest System. It begins with a brief review of principles guiding the relations between Congress, courts, agencies, and experts in the American administrative state. It then considers these principles in light of the recent reality of

* Department of Forest Resources Management, University of British Columbia, 604 822 3728 (phone), 604 822 9106 (fax), hoberg@interchange.ubc.ca. An earlier version of this paper was delivered at the University of Montana School of Forestry and Resources for the Future, "Collaboration and Decision-making on the National Forests: Can It Work? Four Perspectives of the Potential Problems and Opportunities." January 22–23, 2001, University of Montana, Missoula. I am grateful for comments from Roger Sedjo, Ross Gorte, Steve Daniels, and Jim Lyons. Research for this paper has been supported by Resources for the Future and the Social Sciences and Humanities Research Council of Canada.

forest policymaking in the modern era of fractious natural resource politics. Third, it analyzes the evolution of planning under NFMA, with a focus on the first Committee of Scientists and the diversity provisions of the statute. Fourth, it analyzes the origins, mandate, and output of the Committee of Scientists. Fifth, it examines how the Forest Service during the Clinton administration responded to the committee. Sixth, the changes proposed by the Bush administration in late 2002 are briefly reviewed. The conclusion considers the broader question of whether the Committee and the Forest Service in their development of the Clinton NFMA rule overstepped their appropriate roles in promoting what is essentially a new statutory mandate.

The paper concludes that indeed they did but emphasizes the dilemmas of how an administrative agency should act in the context of shifting societal values and scientific understandings, on the one hand, and a stalemated Congress incapable of acting, on the other hand. At the outset I want to make my position very clear. Personally, I think that ecological sustainability should be the highest priority on U.S. federal lands. However, I am troubled by how this value found its way into federal law. I think it is important to distinguish preferences for policy outcomes from principles about how institutions ought to work. Otherwise, the legitimacy of the system is further tarnished. Recent federal forest policy runs this risk. We need a new understanding of the appropriate boundaries between science, politics, and law in federal forest policy.

1. The Theory and Reality of Policymaking in the Modern Administrative State

The American system of policymaking has a clear set of principles governing the relations between various actors in the process. Congress, acting on the preferences of the voters who elected it, makes laws that establish the objectives for programs. Administrative agencies, with congressional grants of authority and appropriations of funds, implement the objectives established by Congress. In pursuing their statutory mandates, agencies are expected to marshal expertise, from both within and outside the agency. The role of the courts is to ensure that agencies do not deviate from their statutory mandates (Dodd and Schott 1979).

Of course, things are not quite so simple. Citizens rarely pay sufficient attention to complex policy issues to allow politicians to judge their preferences, and interest groups eagerly fill the vacuum, creating a cacophony of claims to represent the public interest. The legislative process is extraordinary complex, riddled with opportunities for those who control veto points to

frustrate the will of the majority. When Congress and the president are controlled by the same party, 60% majorities are needed to overcome the filibuster in the Senate. When the two branches are controlled by different parties, the effective majority is 67%, the amount needed to overcome a presidential veto (Krehbiel 1998). Members of Congress, either because they do not understand the complexities of policy issues or because they cannot agree among themselves, typically adopt legislation that is too vague to address conflicting objectives (Schoenbrod 1993; Mortimer 2002; McCubbins et al. 1989). As a result, administrative agencies are left the task of clarifying the objectives and developing detailed programs. Policy frequently results from a complex interaction between agencies and reviewing courts, with Congress episodically reasserting itself through the budgetary process or, less frequently, legislative change.

The role of science and expertise in the policy process is also exceptionally complex. The traditional view of the politics-administration dichotomy, in which politics provided the values and administrators provided the expertise, has long since faded. Science can rarely answer with an adequate degree of certainty the questions policymakers pose (Weinberg 1972). As a result, science becomes politicized, as interest groups adopt whatever factual claims support their views, and policy conflicts frequently become heated disputes between credentialed experts (Mazur 1973).

2. The Pluralist Forest Policy Regime

How does all of that play out in federal forest policy? Interest groups pursue the venue where they perceive they have the best advantage.[1] Historically, industry groups have benefited from a cozy relationship between the Forest Service and regional delegations of Congress working through the appropriations process. Traditionally, forest management was a regional concern dealt with by the regional delegation of Congress through the appropriations process (Culhane 1981; Yaffee 1994). But in the 1970s, environmental groups broke up that iron triangle by getting the courts to intervene, and then by appealing to a more national political audience through the authorization process in Congress. Not trusting the agency to comply with its preferences, Congress appointed a scientific committee to keep watch. When this new system

[1] On venue shifting, see Baumgartner and Jones (1993).

didn't result in adequate policy change, in the late 1980s environmentalists went back to the courts, new science in hand, and got injunctions in the Pacific Northwest. The industry and regional political delegations fought back through the appropriations process, and the beleaguered agency thrashed around in vain for an acceptable solution. But the courts wouldn't let go, and eventually a new president, acting on the advice of a scientific panel he commissioned, imposed a solution for that region that the courts accepted. With the political process paralyzed by divided government, the agency gradually went through a transformation of its own. With the help of its own scientific committee, it asserted its own new ecofriendly mission for the entire National Forest System.

The development that ultimately undermined the traditional forest policy regime was litigation in 1975 by environmental groups to halt clearcutting.[2] Conservationists found an obscure provision of the original authorizing statute of the Forest Service, the 1897 Organic Act, that required harvested trees to be "dead or matured" and to be marked before being cut. Although these requirements were legislated even before the development of the forestry profession in the United States, the court refused to defer to the Forest Service's interpretation of the statute's meaning and enjoined clearcutting in the Monongahela National Forest in West Virginia and the Tongass National Forest in Alaska. By outlawing the most common method for harvesting timber, these rulings created a crisis in timber management. Congress was forced to rewrite forest management laws to address the impasse (Le Master 1984, Chapter 4; Wilkinson and Anderson 1987).

In revising the statute, Congress was acting in a political environment far more favorable to environmental interests. The mobilization of environmental groups and more environmentally oriented public opinion elevated environmental protection as a policy objective and downgraded traditional timber interests. The court-imposed clearcut ban also gave environmentalists and their supporters in Congress a strategic advantage, in that the alternative to new legislation was a very proenvironment status quo.

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[2] The decision reflects a marked change from a mere four years earlier. The last gasp of the era of judicial deference was the 1971 case of *Sierra Club v. Hardin,* in which environmentalists challenged the Forest Service's commitment to rapid liquidation of old-growth forests in the Tongass National Forest, in Alaska. The district court ruled that despite the obvious priority given to timber over other multiple-use values, "Congress has given no indication as to the weight to be assigned each value and it must be assumed that the decision as to the proper mix of uses within any particular area is left to the sound discretion and expertise of the Forest Service."

Adopted in 1976, the National Forest Management Act transformed forest policy in several ways. First, it shifted jurisdiction over forest policy from the appropriations committees, dominated by industry and regional interests, to authorizing committees far more sensitive to national environmental constituencies. Appropriations committees continued to be powerful vehicles for the representation of regional interests (Sample 1990), but they were now more effectively balanced by proenvironment authorizing committees.

Second, NFMA elaborated the planning process, in which the Forest Service is required to prepare long-term, integrated plans for each national forest.[3] This planning process transformed the forest policy process by dramatically expanding opportunities for public participation, intensifying the role of courts, introducing new government officials representing new values into the policy process, and eventually leading to a change in the scientific knowledge base underlying forest policy plans (Office of Technology Assessment 1992; Hoberg 2001).

Third, NFMA required changes in forest practice regulations to shift forest policy away from its historical emphasis on timber extraction. The clearcutting crisis created by the court rulings was resolved by permitting clearcutting but requiring the agency to institute forest practices protecting a wide range of resource values—water, fisheries, wildlife, soils, and so on. In developing these standards, the Forest Service imposed a number of restrictions on its own discretion (Wilkinson and Anderson 1987, 119). The most consequential turned out to be agency's interpretation of that statute's language for the protection of wildlife. NFMA requires that forest planning "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives" [16 U.S.C. sec. 1604(g)(3)(B)]. This diversity provision originated from two concerns. The first was an effort to increase the protection of wildlife in the agency's multiple-use equation, and the second was to restrict the conversion of native stands into exotic or monoculture plantations (Wilkinson and Anderson 1987, 123). The implementing regulations transformed this general guideline into a stringent requirement: "fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate

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[3.] This planning requirement was originally established by the Forest and Rangeland Renewable Resources Planning Act of 1974, but the act was fundamentally revised by NFMA before it could be fully implemented.

species in the planning area" (Wilkinson and Anderson 1987, 296). This regulation would eventually lead to a fundamental transformation of forest policy.

3. The Evolution of NFMA Planning

Prior to the adoption of the 2000 revisions, NFMA planning rules went through an extraordinary evolution. An exceptionally vague statutory mandate to protect species diversity was clarified by a scientific committee and then agency rulemaking, and then transformed by a remarkable episode of judicial policymaking into sharp cutbacks in logging in one region. The approach to planning in that region, which changed the agency's mission from multiple use to giving priority to ecosystem protection, then spilled over into other regions and filtered its way up to the agency leadership and finally was adopted as regulation.

3.1 The first Committee of Scientists.

When adopting NFMA, Congress took the novel step of requiring the secretary of Agriculture to appoint a committee of scientists to propose the implementing regulations for NFMA (Corbin 1999). The committee's directive from Congress was as follows:

> …the Secretary of Agriculture shall appoint a committee of scientists who are not officers or employees of the Forest Service. The committee shall provide scientific and technical advice and counsel on proposed guidelines and procedures to assure an effective interdisciplinary approach is proposed and adopted. The committee shall terminate upon promulgation of the regulations. The views of the committee shall be included in the public information supplied when the regulations are proposed for adoption. (sec. 6(h)(1))

This extraordinary initiative clearly reflects a deep congressional distrust for the capacity of the Forest Service to develop regulations in a manner reflecting the new statutory standards (Cooper 1996, 68). The committee played a direct role in writing the regulations that were adopted by the secretary of Agriculture in 1979. Its members clearly understood that they were doing more than providing scientific and technical advice. According to its chair, Arthur Cooper from North Carolina State, "We understood that we were helping to resolve policy issues that had been sidestepped by policymakers" (Cooper 1999, 17).

The implementation of the new regulations was stalled, however, when the Reagan administration targeted them for overhaul as part of Vice-President Bush's Task Force on Regulatory Relief. The Reagan administration's draft revision was met with a very strong environmental backlash. In response, the Forest Service reconvened the Cooper Committee of Scientists, and the committee helped the Forest Service rewrite the changes so that they very closely resembled the original regulations adopted in 1979. Thus, the Cooper committee was instrumental in writing the 1979 regulations and was then used in 1982 by the Forest Service to deflect pressure from its superiors to weaken the regulations (Daniels and Merrill 1992; Hartgraves 1992).

This committee helped establish a pattern for the resolution of modern forest policy conflicts. Many of the issues were value questions of balancing conflicting objectives that were cast in technical terms to promote the social and political legitimacy of the outcomes. According to Steven Daniels, "Even though forestry's most intractable dilemmas stem from differences in value hierarchies, debates about them tend to be cast in technical terms. As such, scientists are asked to resolve social questions as a fundamental as equity and appropriate rates of economic growth by focusing on technical natural resource issues that serve as convenient proxies" (Daniels 1992). We see this pattern continued with the Gang-of-Four report, the Interagency Committee of Scientists (ICS), the Forest Ecosystem Management Assessment Team (FEMAT), and finally the most recent Committee of Scientists.

3.2 The judicial transformation of NFMA.[4]

The new standards of the 2000 NFMA regulations have their origins in a remarkable episode of judicial policymaking involving the infamous northern spotted owl and the old-growth forests of the Pacific Northwest. Environmental groups combined a lobbying strategy to nationalize the issue with a brilliantly successful litigation strategy to bring logging in the region's forests to a virtual halt. In developing a response to these challenges, the Forest Service was forced to rely increasingly on the new science of conservation biology, which has revolutionized the ways the forests in the region are being managed. The Pacific Northwest was the crucible for forest policy changes that have spilled over into other regions and eventually into national policy.

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[4] This section relies heavily on Hoberg (2001).

The legal and political controversy over old-growth forests in the Northwest emerged in late 1987.[5] There is a widespread perception that these legal conflicts centered on the Endangered Species Act. There was in fact litigation over whether the northern spotted owl should be listed, but it turned out to have little practical significance. Rather, the litigation centered on the National Environmental Policy Act (NEPA) and particularly NFMA and its regulations on species viability. In December 1988, the Forest Service finalized its supplemental environmental impact statement on the spotted owl and issued new regional guidelines for its protection. The Sierra Club Legal Defense Fund sued in the district court in Seattle, and in March 1989, Judge William Dwyer ruled that the plan was inadequate and issued his first injunction on timber sales in Washington and Oregon. This injunction—as it turned out, the first of many—was a pivotal event in the history of Northwest forest policy because it changed the beneficiary of the status quo. Now, for affected timber sales to go forward, the Forest Service either had to comply with the judge's strict interpretation of the law, or Congress had to take specific action to change the law as it applied in this case. Success in the judicial arena gave environmentalists new power resources in the executive and legislative arenas.

The Northwest delegation to Congress sought to regain control over the issue by attaching riders to appropriations bills exempting relevant logging activities from lawsuits (Sher and Hunting 1991; Balmer 1990; Johnston and Krupin 1991). In response, environmentalists revamped their strategy, recognizing that as long as old-growth forests were considered a regional issue, they would continue to lose in Congress. According to Andy Kerr of the Oregon Natural Resources Council, "expecting the Northwest congressional delegation to be rational about ending the cutting of ancient forests in the late 1980s is like expecting the delegation from the American South to deal rationally with ending segregation in the late 1950s" (personal interview). Environmentalists understood that to succeed politically, they would have to nationalize the issue. Public opinion surveys show that there are significant differences between the national and regional publics on these issues, with the national public being consistently more proenvironment. The timing for the nationalization of the old-growth debate could not have been better, as environmental issues more generally were gaining extraordinary salience nationwide.

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[5] A thorough account of the spotted owl controversy, focusing on the administrative and interest group aspects, can be found in Yaffee (1994).

The revamped environmental strategy was extraordinarily successful. Although it resurfaced briefly in 1995 (see below), the use of appropriations riders to change forest policy had been largely delegitimized by environmental advocates' concurrent political campaign to nationalize the issue. Legislators outside the region began taking an interest in the issue, and authorizing committees, whose statutes were being quietly rewritten, began to reassert their jurisdictional interests in the issue.

The focus of the process returned to efforts by the Forest Service and associated agencies to develop a plan for the protection of the spotted owl that could win judicial approval. A haphazard plan put together by the hostile Bush administration was challenged in court, and Judge Dwyer again ruled in favor of environmentalists, chastising the government for "a deliberate and systematic refusal...to comply with the laws protecting wildlife."[6] The law he referred to here was the species viability section of the NFMA regulations. Dwyer ordered the Forest Service to develop "revised standards and guidelines to ensure the northern spotted owl's viability" by March 1992 and enjoined timber sales until it did so.

The Forest Service went back to work. This time, in addition to following proper legal procedures, the agency turned to the results of a scientific panel the administration had established in late 1989 (Yaffee 1994, 123–26). The Interagency Scientific Committee to Address the Conservation of the Northern Spotted Owl, chaired by Jack Ward Thomas, issued its report in May 1990, recommending the retention of large blocks of old-growth habitat. In March 1992, the Forest Service adopted a new plan based on the "Thomas report," setting aside about 8 million acres of old-growth forest for spotted owl habitat. Environmentalists sued again. In late May 1992, Judge Dwyer rejected the Forest Service's attempt to adopt the Thomas report as its spotted owl plan. The most striking part of the decision was his ruling that the plan was flawed because it did not adequately address issues related to species other than the spotted owl.[7] Continuing the pattern of previous cases, Dwyer imposed an injunction on timber sales until a satisfactory plan was put in place.

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[6] *Seattle Audubon Society v. Evans,* 771 F.Supp. 1081 (W.D. Wash. 1991). The decision was upheld on appeal, *Seattle Audubon Society v. Evans,* 952 F.2d 297 (9th Cir. 1991).

[7] *Seattle Audubon Society v. Moseley,* U.S. District Court, Western District of Washington, C92-479WD, May 28, 1992; July 2, 1992.

The decision stunned the Forest Service. Not only was the Thomas report, a state-of-the-art scientific document in 1990, ruled inadequate, but the whole objective of the process was redefined by judicial order. The scope of the issue was significantly enlarged from one species of owl to an entire ecosystem. A far more sophisticated analytical process was necessary to address this larger problem. As a result, a new scientific committee was commissioned, again under the leadership of Jack Ward Thomas, this time called the Scientific Assessment Team.

The Forest Service was not alone in marshaling scientific opinion to try to resolve the conflict. Congress gave its stamp of approval to the Interagency Scientific Committee that the administration had formed, and a year later commissioned its own assessment to examine old-growth ecosystem issues beyond the northern spotted owl. The so-called Gang-of-Four report[8] had no impact on the stalemate over Northwest forests in Congress but was very influential in the options developed by subsequent scientific committees (Johnson 1997; Gordon and Lyons 1997).

With Clinton's election, the executive arena was transformed, with protimber officials being replaced by proenvironmental ones. Making good on a campaign promise, the administration held a "forest summit" on April 2, 1993, in Portland, Oregon. The president, vice-president, and six Cabinet officials spent an entire day around a table listening to presentations on one regional issue. In his closing remarks, Clinton committed his administration to the development of a plan that is "scientifically sound, ecologically credible, and legally responsible" (Pryne and Matassa 1993).

To implement this commitment, the Clinton administration established the Forest Ecosystem Management Assessment Team. FEMAT was a bigger and broader group than any of the previous committees. In addition to examining management strategies to preserve the viability of the owl and the marbled murrelet, FEMAT was also charged with examining the "maintenance and/or restoration of habitat conditions to support viable populations, well distributed across their current range, of species known (or reasonably expected) to be associated with old-growth forest conditions" (FEMAT 1993, II-5). The team assessed 10 management options, many of them developed by the Gang-of-Four report, on a broad range of consequences, ranging from the viability of more than 1,000 species to impacts on timber supply and related employment.

[8] The four were Norman Johnson, Jerry Franklin, Jack Ward Thomas, and John Gordon.

The Clinton administration selected Option 9. The resulting Northwest Forest Plan, announced on July 1, 1993, called for an annual harvest level of 1.2 billion board feet (bbf), which FEMAT concluded was the maximum cut permissible under current law. In addition, the plan provided for extensive reserves for spotted owl protection and dramatically expanded riparian reserves for the protection of fish habitat.[9]

The compromise was bitterly attacked from all sides. Industry and labor groups said the dramatically reduced cuts would devastate timber-dependent rural communities. Environmentalists harshly criticized the size of the cut and especially the nature of the old-growth reserves, which would not be inviolate: some logging for fire or insect salvage would be allowed, as would some thinning of second-growth stands to promote old-growth characteristics.

Although environmentalists seemed as outraged as the timber industry and loggers, they had in fact achieved a remarkable victory. To put Clinton's plan in perspective, one need only go back to 1989. During the debate over section 318 in 1989, environmentalists proposed an allowable cut level of 4.8 bbf per year—four times higher than the level they considered too high in 1993. This shift indicates the dramatic redistribution of power achieved after four years of effective lobbying in Congress, a successful public relations campaign to polish and nationalize the issue, and especially, a brilliant litigation campaign.

Environmentalists were not satisfied, however, and once the plan was finalized in April 1994, they challenged the plan in court again. This time industry challenged the decision as well, arguing that the process used to develop the plan violated the Federal Advisory Committee Act. In what began to mark the appearance of finality on this policy issue, Judge Dwyer upheld the Clinton forest plan in December 1994, brushing aside the criticisms from both sides.[10]

The Republican "revolution" in Congress did bring the issue back to the fore, however. Although the GOP had relatively little success at rolling back environmental laws, one modest success was a rider to the 1995 Rescissions Act. Originally understood as an effort to facilitate

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[9] The scientific team assessed the plan's impact on the viability of more than 1,000 species. Of the 82 vertebrate species analyzed, the plan is expected to provide an 80% likelihood of the maintenance of viable populations of all but three species of salamanders. In total, the plan would set aside 80% of remaining old-growth forests. In an attempt to ease economic suffering in the region, the plan also provided for a massive $1.2 billion economic assistance package.

[10.] *Seattle Audubon Society et al. v. Lyons*, 871 F.Supp. 1291 (W.D. Wash 1994), upheld *Seattle Audubon Society v. Moseley*, 80 F.3d 1401 (9th Cir. 1996).

the harvesting of fire- or insect-damaged trees, the rider has turned out to be far more sweeping, opening up areas of old-growth forests that had been protected in the Clinton forest plan and insulating many timber sales from citizen appeals and environmental reviews. Most of the political fight over forests in 1995 and 1996 involved this rider (Kriz 1996). Despite all the sound and fury, the rider expired at the end of 1996, and industry and its supporters in Congress appear to have little inclination to rejuvenate the strategy. The rider did increase logging, some of it in old-growth forests, but industry and environmentalists both agree that the total amount is extremely small—less than 1% of the remaining old-growth forest in the region.

Environmental groups have remained vigilant in the administrative and legal arenas as well. When the Forest Service prepared timber sales without doing the wildlife surveys promised by the Northwest Forest Plan, environmental groups challenged the agency in court, in a 1999 case. Judge Dwyer again agreed with the environmentalists and enjoined the sales.[11]

This case study reveals the success of a concerted campaign by environmental groups to change forest policy in fundamental ways. Although they did not get everything they wanted, the case reflects an extraordinary victory for the environmental movement. The strategy can be boiled down to two tactics: nationalization and judicialization. The victory would not have been possible if the issue had remained regional, as forest policy traditionally has been. And it is perhaps the most extreme case of judicial intervention into environmental policymaking. From the time of his first injunction in 1989 to his approval of the Clinton forest plan in late 1994, Judge Dwyer essentially managed Region 6 of the Forest Service. When in 1999 the agency drifted from its previous commitments, Dwyer reemerged to force the agency to abide by strict interpretations of the 1994 plan. The impact on traditional measures of forest policy has been enormous. After peaking at 5.6 billion board feet in 1987, harvest levels in the region have fallen by a factor of 10—to 570 *million* board feet in 1999, well below the 1.2 bbf provided for in the Clinton forest plan.

Environmentalists would respond that Dwyer was merely enforcing the law, and they have a point. The regulations promulgated to implement NFMA's diversity requirements elevated the status of species protection in the agency's multiple-use equations and forced the agency into unexpectedly preservationist decisions. As the priority given to nontimber values increased, the expertise of biologists and ecologists increased in importance, and so did their

[11] *Oregon Natural Resources Council v. US Forest Service*, 59 F. Supp. 2d 1085 (W.D. Wash 1999).

influence in the region. The new science of ecosystem management, implied by NFMA viability regulations, began to take shape in the development and implementation of the Clinton forest plan.

3.3 The spread to other regions.

After the crisis in the Pacific Northwest, the agency began to reconsider its management of forests in other regions. In Alaska, the Forest Service began working on applying the concepts emerging from the Northwest to the Tongass National Forest. When the region issued its new management plan in 1997, it called for a 50% decrease in harvest levels.[12] In the Pacific Southwest region, after protracted conflict (Ruth 2000), in May 2000 the Forest Service issued a new draft environmental impact statement for its proposed Sierra Nevada Forest Plan. The draft mentions two preferred alternatives, both of which would lead to significant reductions in harvest levels, especially after the first five years. Even the preferred alternative with higher proposed timber sale levels would reduce sales in the year 2005 to 50% below levels allowed under the 1993 interim guidelines, and 80% levels before the spotted owl protections were put in place. The plan was finalized January 13, 2001.

Another major effort involves the Columbia River Basin in eastern Washington and Oregon, Idaho, and Montana. The Clinton administration created the Interior Columbia Basin Ecosystem Management Project, which is developing an integrated ecosystem plan for the region. Here the preferred alternative, announced in March 2000, would actually increase harvest levels, but the objectives of timber harvesting would undergo a profound change. Management objectives would shift from emphasis on timber production to emphasis on the restoration of forest health and old-growth ecosystems (USDA and USDI 2000, 27).

4. The Committee of Scientists

Developments in the Pacific Northwest, Alaska, the Columbia basin, and the Sierra Nevada all demonstrate the immense implications of the legal decisions arising from the interpretations, during the northern spotted owl case, of the viability regulations promulgated

[12] After environmentalists objected and appealed the plan, it was amended to reduce planned harvest levels by an additional 30% (USDA 1999, 12). That 1999 plan was subsequently struck down by judicial review, and levels were returned to those specified in the 1997 plan.

under NFMA. Although the act was explicitly designed as a multiple-use statute, the implementation of its viability regulations forced the agency to subordinate timber production and other economic outputs to the preservation of ecosystems. As a result, the agency's emerging *de facto* mission appeared to be in profound conflict with its official statutory mandate (U.S. General Accounting Office 1999; Wilkinson 1997, 681). This has created serious tensions within the agency and in its political environment, leading several prominent observers to suggest that the Forest Service may have outlived its utility as a separate administrative entity (Sedjo 2000; Nelson 2002).

The legislative stalemate of the 1990s made any statutory resolution of this issue unlikely. The Republican Congress opposes the shift toward greater concern with environmental values, but Democratic control of the White House up through 2000 ensured that any attempt to override the judicial decisions with new statutory language would be vetoed. In this vacuum of political leadership, the Forest Service attempted to redefine its own mandate. Mike Dombeck, chief of the Forest Service, made several speeches trying to hook a new ecosystem focus onto the watershed protection provisions of the ancient Organic Administration Act of 1897 (cited in U.S. General Accounting Office 1999, n. 7).

More importantly, the agency appointed a Committee of Scientists in 1997 to review the land and resource management planning process. Note in particular the italicized words (emphasis added) in the charter of the committee:

> The purpose of this advisory committee *is to provide scientific and technical advice* to the Secretary of Agriculture and the Chief of the Forest Service on improvements that can be made in the National Forest System Land and Resource Management planning process.
>
> The Committee should address such topics as how to consider the following in land and resource management plans: biological diversity, use of ecosystem assessments in land and resource management planning, spatial and temporal scales for planning, public participation processes, sustainable forestry, interdisciplinary analysis, and any other issues that the Committee identifies that should be addressed in revised planning regulations.
>
> In its report, the *Committee shall make recommendations on how best to accomplish sound resource planning within the established framework of environmental laws and within the statutory mission of the Forest Service*. The Committee shall also provide technical advice on the land and resource management planning process; and provide material for the Forest Service to consider for incorporation into the revised planning regulations. The Committee shall also recommend improvements in Forest Service coordination with other

> Federal land management or resource protection agencies, state and local government agencies, and tribal governments recognizing the unique roles and responsibilities of each agency in the planning process.
>
> The Committee shall consist of no more than 12 members and a Committee Chair appointed by the Secretary of Agriculture. Officers or employees of the Forest Service may not serve as members of the Committee…
>
> The Committee shall consist of representatives of a variety of academic disciplines, including but not limited to, the following: forest and range ecology, fish and wildlife biology, silviculture, hydrology, natural resource economics, sociology, public participation and conflict management, ecosystem management, land management planning, and natural resource law. Committee members should have a demonstrated ability to work across scientific and resource management disciplines. Collectively, the members should represent a diversity of disciplines and perspectives, have a knowledge of the National Forest System, insights into the National Forest Management Act and its implementation, and National Forest System planning.[13]

Note that nowhere does the charter ask for the committee to propose a new mission or objective for the agency. The committee members are listed in the following table.

1998 Committee of Scientists Members

Member	*Affiliation*
Dr. K. Norman Johnson (chairman)	Department of Forest Resources, Oregon State University
Dr. James Agee	College of Forest Resources, University of Washington
Dr. Robert Beschta	Department of Forest Engineering, Oregon State University
Bob Cunningham	Environmental Compliance Manager, National Science Foundation
Dr. Virginia Dale	Environmental Sciences Division, Oak Ridge National Laboratory
Dr. Linda Hardesty	Department of Natural Resource Science, Washington State University
Dr. James Long	Department of Forest Resources, Utah State University
Dr. Larry Nielson	School of Forest Resources, The Pennsylvania State University

[13] The full charter is accessible at http://www.cof.orst.edu/org/scicomm/charter.htm.

Dr. Barry Noon	Department of Fishery and Wildlife Biology, Colorado State University
Dr. Roger Sedjo	Resources for the Future
Dr. Margaret Shannon	Maxwell School of Citizenship and Public Affairs, Syracuse University
Dr. Ronald Trosper	School of Forestry, Northern Arizona University
Dr. Charles Wilkinson	University of Colorado Law School

Despite its title and its mandate to provide "scientific and technical advice," the committee had no qualms about proposing new policy objectives for the agency.[14] The committee urged the agency to consider sustainability its "guiding star." When sustainability is defined as a triad of ecological, economic, and social elements the concept is not much different from old-fashioned multiple-use management: competing objectives are pursued within a larger framework to achieve societal objectives. [15] However, the committee clearly goes beyond that in declaring that *ecological* should be given priority over social and economic sustainability:

> The Committee recommends that ecological sustainability provide a foundation upon which the management for national forests and grasslands can contribute to economic and social sustainability. This finding does not mean that the Forest Service is expected to maximize the protection of plant and animal species and environmental protection to the exclusion of other human values and uses. Rather, it means that planning for the multiple use and sustained yield of the resources of national forests and grasslands should operate within a baseline level of ensuring the sustainability of ecological systems and native species. Without ecologically sustainable systems, other uses of the land and its resources could be impaired (USDA Committee of Scientists 1999, xvi).

The committee presents its case for the primacy of ecological sustainability in Chapter 6 of its report, as well as the synopsis. The case is made in two ways, factual and legal. The factual case is made following a recitation of the benefits that come from the forests.

> Such benefits include: clear air and water, productive soils, biological diversity, goods and services, employment opportunities, community benefits, recreation, and naturalness. they also provide intangible benefits such as beauty, inspiration, and wonder (xiv).

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[14] One committee member, Roger Sedjo of Resources for the Future, criticized his colleagues for attempting to assert what he believed was a new statutory mission for the agency (Sedjo 1999).

[15] For an elaborate discussion of the term *ecosystem management* and whether it represents a new paradigm of resource management, see Cortner and Moore (1999).

Although this sentence mentions goods and services, it is fascinating that the Committee doesn't use the word timber. The committee continues:

> Yet these benefits depend upon the longer term sustainability of the watersheds, forests, and rangelands if the public is to enjoy the ecological, economic, and social values that these lands can provide. Accordingly, based on the statutory framework for the national forests and grasslands, the first priority for management is to retain and restore the ecological sustainability of these watersheds, forests, and rangelands for present and future generations (xiv).

In expanding upon the legal case, the committee states that a "suite of laws call for ecological sustainability." It refers to the Endangered Species Act, the diversity provisions of NFMA, and the Multiple-Use and Sustained Yield Act's call for "achievement and maintenance in perpetuity of a high-level or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land" (145–46). The argument for a more ecologically defined mission is obviously stronger if statutes outside the core forest statutes are considered. The committee was well staffed to make such a legal assertion, as Charles Wilkinson is arguably the nation's leading expert on forest law.

What the argument overlooks, however, is that what forced all the action in the agency was not this broad suite of laws but the NFMA viability regulations. Even Assistant Secretary James Lyons has argued this in print.[16] It is surprising that there is not a broader discussion in the report of the potential conflicts with the larger multiple-use mandate. For example, Mark Rutzick, a forest industry lawyer, makes a strong case that the legislative history of NFMA shows that the priority given to ecological values in the viability regulations is contrary to congressional intent. In both the House and the Senate, amendments to change the diversity section to make it more like the viability regulations were explicitly considered and rejected (Rutzick 2000). In a law review article, Wilkinson make the opposite argument, stating, "The agency seems increasingly to be imbued with the primacy of biodiversity as a management goal. Proceeding in this way is within the NFMA mission and procedures, because the Act was drafted in a sufficiently broad-gauged way" (Wilkinson 1997, 681). But neither his argument in the law

[16] "Ironically, however, the injunctions against harvesting national forest old-growth timber in the region were not the result of legal challenges brought under the Endangered Species Act. Rather, they were based on the failure of the Forest Service to comply with its own regulations under the National Forest Management Act. Those regulations required the Forest Service to maintain the owl's viability" (Gordon and Lyons 1997, 449).

review article nor the Committee of Scientists' report specifically rebuts the claims made by Rutzick and colleagues.[17]

But what I find even more striking is that the committee never makes a *scientific* case for the primacy of ecological sustainability. The room for making a case is certainly there. In the context of integrated resource management, both an economic and a scientific case can be made that competing benefits simply cannot be simultaneously provided, and one resource needs to be given priority. I take this to be the logic behind the committee's factual assertion, but the report does not provide any evidence to support it. The closest it comes is the following paragraph:

> In addition to the suite of environmental laws calling for protection of ecological systems, scientific results and common sense point to the necessity of protecting forests and rangelands so they continue providing benefits to society. Lessons from across the National Forest System suggest that the conservation of ecological systems cannot be ignored. As an example, concerns over the effect that declining water clarity will have on tourism in Lake Tahoe have led to an intensive and expensive effort to reverse this trend…Once ecological systems are pushed to the edge, the costs of recovery can be high, and the ability to apply adaptive management is significantly compromised (xvi).[18]

In the next paragraph, the committee does make an explicit fact-value distinction but then merely reasserts the factual claim.

> While the scientific community can help eliminate the risk associated with different management strategies, decisions about an acceptable level of risk are value-based, not science-based decisions…Nonetheless, it is clear that ecological sustainability lays a necessary foundation for national forests and grasslands to contribute to the economic and social components of sustainability…(xvi).

If this prioritization of ecological sustainability is so self-evident, why didn't Congress enshrine it in NFMA in 1976? If 25 years of working under NFMA have made this self-evident, where is the evidence and documentation?

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[17] These issues are also not addressed in a later article that explicitly addresses the Committee of Scientists and its role (Wilkinson 1999).

[18] There is also some explicit discussion of the conditions of forests, including a general statement about biodiversity concerns, in Chapter One (see especially page 10). But these are not very detailed and they are not explicitly linked to the mission statement.

I am not in any way arguing that the recommendations on ecological sustainability came as a surprise to the agency or were unwelcome. Even before the committee was named, the agency was expressing a new ecologically oriented mission in its strategic plans and annual report. For example, in its strategic planning exercise completed in 1997, the agency described its mission as follows:

> To sustain the health, productivity and diversity of the land to meet the needs of present and future generations…As the lead Federal agency in natural resources conservation, the Forest Service provides leadership in the protection, management, and use of the Nation's forest, rangeland and aquatic ecosystems. Our ecosystem approach to management integrates ecological, economic and social factors to maintain and enhance the quality of the environment to meet current and future needs. Through implementation of land and resource management plans, the agency will ensure sustainable ecosystems and provide recreation, water, timber, minerals, fish, wildlife, wilderness, and aesthetic values for current and future generations on [National Forest System] lands.

In pursuit of this mission, the agency adopted the following objectives: (1) ensure sustainable ecosystems, (2) provide multiple benefits for people within the capability of ecosystems, and (3) ensure organizational effectiveness (USDA 1997). The language of the first two objectives makes clear that timber harvest and other economic activities, including recreation, can be pursued only within the context of the dominant objective of ensuring healthy ecosystems.

Thus, the conclusion of the Committee of Scientists were clearly consistent with the intentions of agency leadership. Nonetheless, the assertion of ecological sustainability as the primary goal of the agency appears to go beyond the committee's mandate to provide scientific and technical advice. Moreover, to the extent that the committee supported this new objective with factual claims, it relied largely on mere assertion and did not provide any detailed factual rationale or scientific evidence.

5. The 2000 Rule of the Clinton Administration

The Department of Agriculture proposed a new rule for National Forest System planning in October 1999 (64 FR 54074, October 5). The proposal relied heavily on the ideas and language of the Committee of Scientists' report. Section 219.2, "Goals and Principles for Planning," explicitly states, "The goals and principles for planning are those recommended by the Committee of Scientists…" (54080). In the section designed to replace the species viability

section of the earlier rule, section 219.20 proclaims the agency's commitment to ecological sustainability. The rationale states, "This section incorporates the key principles and desired outcomes for ecological sustainability that were outlined in the Committee of Scientists' report" (54087). In justifying ecological sustainability, the rationale follows the lead of the Committee of Scientists and states, "The concept of managing the national forests and grasslands in an ecologically sustainable manner can be traced back over 100 years." It then cites the same acts, from the Organic Act of 1897 to the Multiple-Use and Sustained Yield Act (MUSYA), Endangered Species Act, NEPA, and NFMA.

In the preamble to the final rule, issued November 9, 2000, the agency explicitly addressed the criticism raised in the comment period that the preeminence given to ecological sustainability exceeded the agency's statutory mandate. The agency responded as follows:

> Although some respondents perceived a conflict between emphasis on sustainable ecosystems and legislative mandates, the Department does not believe this is true. Instead, the Department sees ecological sustainability not only as a complement to multiple-use, sustained-yield management, but also a prerequisite for it. It is the Department's view that the rule is consistent with the Forest Service's conservation and legislative mandates. Contrary to some comments, the proposed rule did not change the overarching purpose of planning. Rather, it affirmed the direction in the MUSYA (67521).

This statement is striking, given that section 219.2 of the proposed rule, entitled "Goals and principles for planning," begins, "Goal: Planning must be directed toward assuring the ecological sustainability of our watersheds, forests, and rangelands" (54095).

The criticisms about mandate did lead the Forest Service to change the language defining sustainability in section 219.1, "Purpose." The proposal read, "Sustainability is broadly recognized to be composed of interdependent elements, ecological, economic, and social" (54095). The final rule directly linked that statement to the MUSYA mandate: "Sustainability, composed of interdependent ecological, social, and economic elements, embodies the principles of multiple-use and sustained-yield without impairment of the productivity of the land" (67568). In addition, section 219.2 was changed slightly to read, "The first priority for planning to guide the management the National Forest System is to maintain or restore ecological sustainability of national forests and grasslands to provide for a wide variety of uses, values, products, and services." Both changes were clearly made to link ecological sustainability more directly to the formal statutory mandate of the agency. However, the final rule still asserted the primacy of

ecological sustainability and for that reason was vulnerable to the charge that it exceeded the multiple-use mandate established by Congress.

6. The George W. Bush Administration Response

The Bush administration clearly has a different approach to environmental issues generally, and forest policy in particular. In terms of personnel, Clinton's Undersecretary of Agriculture Jim Lyons, an ally of environmental groups, was replaced by Mark Rey, who worked at the American Forest and Paper Association, the leading forest industry association, before serving on Senate GOP committee staff. The Bush administration moved quickly to review the new rule and in May 2001 issued a Federal Register notice suspending its application. In December 2002, the administration proposed a new rule, which if adopted would represent a marked departure from the 2000 rule and the 1982 rule it replaced (67 Fed. Reg. 72770-72815, December 6).

Among the several significant changes in the Bush proposal, in the context of this analysis two in particular stand out. First, the administration proposes to remove the priority of ecological sustainability over economic and social sustainability. The new language emphasizes integration and balance: "This proposed rule emphasizes the interconnection between the ecological, social, and economic components of sustainability, and requires consideration of each in the planning process…In contrast to the 2000 rule, this concept of sustainability is linked more closely to the MUSYA in that economic and social components are treated as interdependent with ecological aspects of sustainability, rather than as secondary considerations" (67 Fed. Reg. 72799). Thus, while embracing the modern term of sustainability, the Bush proposal reverses the Clinton rule's new mission of prioritizing ecological sustainability, and returns to the balancing approach more consistent with the multiple-use mandate as traditionally defined.

Second, the Bush proposal would eliminate the mandatory protection of species viability contained in the 1982 rules, and carried forward in the 2000 rule; instead, it outlines two options for the viability provision, neither of which contains mandatory language. The Bush proposal is compared with the earlier versions in the following box (emphasis added).

1982 regulations. "Fish and wildlife habitat *shall* be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area." 36 CFR § 219.19.

2000 regulations. "Plan decisions affecting species diversity *must* provide for ecological conditions that the responsible official determines provide a high likelihood that those conditions are capable of supporting over time the viability of native and desired non-native species well distributed throughout their ranges within the plan area, except as provided in paragraphs (b) (2) (ii-iv) of this section." 36 CFR § 219.20(b)(2).

2002 draft regulations. Option 1: "Plan decisions *should* provide for ecological conditions that the Responsible Official determines provides a high likelihood of supporting over time the viability of native and desired non-native vertebrates and vascular plants well distributed within their ranges in the plan area." Sec. 219.13(b)(2)(ii), 67 Fed. Reg. 72800.

2002 draft regulations. Option 2: "Plan decisions, to the extent feasible, *should* foster the maintenance and restoration of biological diversity in the plan area, at ecosystem and species levels, within the range of biological diversity characteristic of native ecosystems within the larger landscape in which the plan area is embedded." § 219.13(b)(2)(i), 67 Fed. Reg. 72802.

Source: Mike Anderson, The Wilderness Society, comments on Proposed Regulations on National Forest Planning, December 11, 2002, at http://www.tws.org/newsroom/NFMADraftRegsAnalysis021211.doc

Given the pivotal role of the mandatory nature of the viability regulations in shaping the dramatic change in federal forest policy over the 1990s, the implications of these proposed changes are potentially immense.

In other significant changes, the regulations would create a blanket exemption from NEPA for forest plans, create more flexibility in the application of environmental standards, and limit the appeals process for forest plans.

If enacted, these proposals could fundamentally reshape policy on federal forest lands by undermining the twin pillars of the environmental groups' strategy on federal forest policy: judicialization and nationalization. By removing the mandatory language in the viability

provisions, the regulation could undermine the legal basis used to force the agency to act to protect wildlife in several regions of the country. By reducing appeals and exempting forest plans from NEPA requirements, environmentalists would have fewer causes to bring action in court challenging Forest Service decisionmaking. By giving greater discretion to "responsible officials" in the regions, the proposed regulation is also designed to allow local managers to adapt management provisions to local circumstances, thus decentralizing decisionmaking.

Environmentalists have been sharply critical of the proposal. Democratic members of Congress have also denounced it. In their critique, Democrats on the House Committee on Resources chastised the Bush administration for not relying on a committee of scientists in developing their proposal.

> Finally, we question why you have rejected the bipartisan precedent of three previous Administrations in declining to convene an independent Committee of Scientists to assist in revising the rule…There is good reason for this consistent precedent: the planning rule is too important to be shaped by partisan politics, but must be grounded in an independent assessment of applicable scientific principles. The Forest Service cannot credibly claim that it has relied on the Committee of Scientists convened for the 2000 rulemaking. The agency never solicited the views of this earlier Committee on this proposed rule, as the NFMA provides, nor did the Forest Service adopt the previous Committee's recommendations for rigorous wildlife protection and monitoring provisions. We urge you to convene a Committee of Scientists before revising the rule (Committee on Resources (Democrats) 2002).

Rather than demanding that Congress address the question of how ecological sustainability should be balanced with social and economic sustainability, or squarely address the question of whether protection of species viability should be mandatory, the representatives call instead for another committee of scientists.

7. Conclusion

The Johnson Committee of Scientists followed a long pattern of employing scientific advisers to help resolve difficult forest policy conflicts. When Congress enacted NFMA in 1976,[19] it didn't trust the Forest Service to write its own regulations, so it gave the task to a

[19] As Johnson shows, this pattern goes back even further, to assessment of the sustainability of timber outputs in the 1960s and 1970s (Johnson 1997).

committee of scientists. When the Forest Service wanted to deflect Reagan administration efforts to weaken those regulations, it reconvened the committee to help it. When the Democratic Congress was vexed by the controversy over the northern spotted owl, it commissioned the Gang-of-Four report. After having its own efforts flatly rejected by Judge Dwyer, the Bush administration turned to the ICS, and then the Scientific Assessment Team. When the Clinton administration took over, it turned to FEMAT. Thus the Johnson Committee of Scientists was not a new strategy in forest policy. However, the committee asserted a different role, and its results were used in an unprecedented way. None of the committees dealing with the Pacific Northwest spilled over into raw policy. Certainly, the Cooper committee did. For example, its transformation of the vague diversity provision of NFMA into the rigorous viability regulations was an exercise in policymaking. But the difference was that Congress had explicitly invited its participation. None of the scientific committees went as far as the Johnson Committee of Scientists in articulating a new mission for the agency.

Forest management is a difficult challenge that involves complex questions of science and values. By continuing to cloak political choices about values in the language of science, American forest policy raises challenging questions about political accountability and the appropriate boundaries between experts and policymakers. Indeed, forest policy seems quite out of step on this issue compared with other environmental policy areas. The literature on risk management includes a long-standing and robust discussion of the relationship between facts and values. Early efforts to impose a stark distinction between facts and values have proven overly simplistic and been replaced by far more sophisticated discussions. The key insight has been that there is a very large gray area between fact and value, one that Alvin Weinberg called "trans-science." He defined the term as questions "which can be asked of science but not answered by science" (Weinberg 1972). In this area, it is necessary to make policy judgments to resolve the policy-relevant uncertainties. Sound decisionmaking attempts to explicitly identify the boundaries between science, trans-science, and policy, and utilize the appropriate approaches to addressing each. In articulating policies for the regulations of toxic substances, the Environmental Protection Agency and the Occupational Safety and Health Administration have worked very hard to clarify these boundaries since the late 1970s (Jasanoff 1987, 1990; Harrison and Hoberg 1994).

Forest policy, however, has not been very effective at addressing these boundary issues. At least one of main actors holds a narrow view of the appropriate role of scientists. For example, in a paper he wrote before chairing the Committee of Scientists, Johnson defines a "science-based assessment" as "attempts to use science-driven information and techniques to

answer, or to help answer, questions formulated by politicians and other policy makers" (Johnson 1997, 397). He continues: "Scientists in these studies are at best hired hands and should not usurp the roles of decision maker, manager, or individual citizen in weighing public values" (1997, 407). However, the language and the reasoning used in the report, and the agency's response to it, are not as clear about which issues are facts, which are values, and which lie in between. For a planning framework so intent on integrating the roles of scientists and a broad range of stakeholders, a clear understanding of these boundary relationships is very important.

Did the Forest Service in the Clinton administration exceed its statutory mandate in making ecological sustainability the guiding star for planning? The agency and the committee argue that doing so is consistent with the laws guiding the Forest Service since its inception. There is certainly an element of truth in this, but the Congress of 1897, 1960, or 1976 would certainly not have understood that ecological sustainability would be pursued to the exclusion of other uses, especially timber harvesting, in the way that it has over the past decade. The courts have yet to squarely address this question. In its challenge to the Northwest Forest Plan, the industry argued that the NFMA viability rule was contrary to the NFMA statute, but Judge Dwyer waved it away with declaratory sentence.[20]

Of course, it is the responsibility of Congress to establish the policy objectives of administrative agencies and oversee the activities of those agencies to ensure they do not depart from congressional preferences. But on this issue Congress has been paralyzed over the past several decades, and that has created the room for this administration assertion of policy. Regional delegations sympathetic to the industry have obtained temporary relief on several occasions, but the authorization process is stalemated. Neither side has been able to overcome the extraordinary majorities necessary to force statutory change through. What this means is that so long as agencies do not go outside the comfort zone of most members of Congress, they have a great deal of latitude for administrative policymaking.

During Clinton's administration, the Johnson Committee of Scientists and the Forest Service did little to help overcome the legislative stalemate. The committee did not recommend statutory change, even though it was not shy about an expansive interpretation of its mandate in other areas. One could argue that a committee of experts would have a responsibility to inform Congress that the modern reality of the contemporary National Forest System was incompatible

[20] *Seattle Audubon Society v. Lyons* F. Supp. 1291 (W.D. Wash. 1994) aff'd 80 F.3d 1401 (9th Cir. 1996).

with the statutory framework. One could also argue that the expert agency has a duty to inform its legislative sovereigns in such a case, but the reality of modern American politics provides the opposite incentives. It is now the norm for presidents to do everything in their power to use whatever discretion can be read into statutes to pursue their policy interests, regardless of congressional intent. Indeed, with the rule on roadless areas and the chief's directive banning old-growth logging, the NFMA rules were not even the most extreme case of administrative policymaking in the Forest Service during the Clinton years.

By attempting to cloak those significant policy changes in the mantle of science, the agency risked delegitimizing science and undermining the democratic accountability of the system. By asserting the legitimacy of such changes without congressional endorsement, the agency also left itself vulnerable to reversal when the new administration with new forest policy preferences assumed power. This couldn't be demonstrated more clearly than by the recent actions of the Bush administration.

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