

THE NATIONAL FOREST MANAGEMENT ACT: THE TWENTY YEARS BEHIND, THE TWENTY YEARS AHEAD

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In 1996, a generation after its passage, the National Forest Management Act ("NFMA")¹ is controversial and has bred proposals for its change.² Of course it has. Any law that attempts to be an organic act—to chart out a federal agency's mission as well as a procedural framework to achieve it—must inevitably breed controversy when the subject of the law is of such great societal importance as America's national forests. For these are sacred lands, 191 million acres,³ nearly ten percent of the country, one fifth of the American West⁴—lands that have great capacities to produce money, create livelihoods, bind human communities, make homes for animal and plant communities, and give us sport, solace, and spirituality in a society that has become too complex, impersonal, and hurried.

We should remain ever observant, therefore, of the landscape of NFMA reform. Our first task is not to understand the law to see if it is working and if it ought to be changed. Instead, we should first understand these lands themselves and, after having done that, see if and how the law ought to be revised. This is an inquiry of land as much as law.

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1. Pub. L. No. 94-588, 90 Stat. 2949 (1976) (codified as amended at 16 U.S.C. §§ 1600-1687 (1994)) (amending the Forest and Rangeland Renewable Resources Planning Act of 1974).

2. See, e.g., Senator Larry Craig, Public Land Management Responsibility and Accountability Restoration Act (Dec. 5, 1996) (draft bill, proposing amendments to the National Forest Management Act); see also Sarah Dry, *Is Craig's Bill Salvage Rider II?*, HIGH COUNTRY NEWS, Feb. 3, 1997, at 6.

3. See FOREST SERV., U.S. DEP'T OF AGRIC., LAND AREAS OF THE NATIONAL FOREST SYSTEM 1 (1995).

4. There are approximately 141 million acres of National Forest land in the 11 western states. See *id.* at 15-38. The total area of the 11 western states is approximately 762 million acres; the total area of the United States is approximately 2.3 billion acres. See BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, 1996 STATISTICAL ABSTRACT OF THE UNITED STATES 228.

First, I will sketch some of the turbulent events that gave rise to the NFMA in 1976 and explain the kind of law the NFMA is as I see it. Then I will assess some of the changes that have taken place over the past two decades—changes in society, in law, in science, in economics, in the Forest Service, and in the ways we think about land. This will include a discussion about the changes we have seen in the lands themselves, for I believe it critical that we focus on what the lands have gained and lost under the NFMA regime. Needless to say, the cumulation of these changes has been immense. Then, I will give my evaluation of some aspects of the NFMA that have worked and some others that have not. Finally, I will offer my own thoughts on amending the NFMA, remembering always that a high value of law is its stability and predictability, and that the burden will always rightly lie with those who propose change.

I. THE PASSAGE OF THE NFMA

A year ago *Northern Lights* magazine asked me to write a tribute to Arnold Bolle,⁵ the Montana forestry school dean who passed on in 1994 and who gave his name to the Bolle Report,⁶ one of the main triggering forces of the NFMA. Arnie and I served on The Wilderness Society board together and, among other things, he had been kind enough to write the foreword to *Land and Resource Planning in the National Forests*,⁷ a book that Mike Anderson and I wrote. I admit to being deeply fond of Arnie. One gala banquet night in Missoula, when Arnie was still alive and able to enjoy a good bourbon after dinner, I announced some conservation awards. My last award was for the most courageous forestry school dean in history. But, to the good-natured boos and hoots of a couple of hundred Arnold Bolle admirers, I steadfastly refused to announce the recipient because the name was so obvious.

So it was hard when we lost Arnie. At the same time, writing that article and going back over Arnie's life, especially his role in

5. See Charles F. Wilkinson, *Arnie Bolle: Dean of the Western Forests*, 11 N. LIGHTS 8 (1995).

6. See SELECT COMM. OF UNIV. OF MONT., A UNIVERSITY VIEW OF THE FOREST SERVICE, S. DOC. NO. 91-115 (1970).

7. CHARLES F. WILKINSON & H. MICHAEL ANDERSON, *LAND AND RESOURCE PLANNING IN THE NATIONAL FORESTS* (1987).

the tumultuous events of the late 1960s and early 1970s that led to the NFMA, was an educational and inspirational experience. It was a time that I had lived through, but doing the tribute to Arnie, his work, and his courage brought those years back into my mind more than anything else has, reminding me vividly of how remarkable the people and events and land, always the land, really were and how the legacy of those years is one we ought to remember and honor. We act at our peril if we do not keep that legacy with us during public discussions over amending the NFMA, in committee rooms on Capitol Hill, and in such places a generation from now and beyond.

The Bitterroot National Forest made up most of the western and southern skyline of Missoula and, by the late 1960s, had undergone nearly two decades of high-yield logging.⁸ This was new to the Bitterroot, new to the national forest system. Before the post-World War II housing boom, logging in the forests had been minimal, less than ten percent of the cut in the 1960s.⁹ The situation was aggravated at the Bitterroot where the Forest Service was beginning a program of terracing. After a stand was clearcut, D-7 Cats bulldozed rows of terraces into the hillsides. Seedlings were planted on the flat terrace surfaces. Initially, two words described it: tree farm. Soon, many other four-letter words were being employed.

People in Missoula complained that the clearcuts ruined their vista from town. The runoff pattern changed, angering some farmers and ranchers. Trout fishers saw their favorite feeder creeks clouded up. Remember, although *A River Runs Through It* had not yet come out, Missoula was Norman MacLean's boyhood home—and he was just one of thousands who loved those streams.

In an even larger sense, citizens simply sensed an imbalance. Growing numbers of people—old timers, newcomers, and tourists—saw it and felt it whether they were fishing, hiking, birding, hunting, driving into town, flying into the airport, or arguing about it over coffee.

8. For more on the Bitterroot and the Bolle Report, see DALE A. BURK, *THE CLEARCUT CRISIS* (1970) and Arnold W. Bolle, *The Bitterroot Revisited: A University Re-view of the Forest Service*, 10 PUB. LAND L. REV. 1, 15 (1989).

9. See generally FOREST SERV., U.S. DEP'T OF AGRIC., *REPORT OF THE CHIEF OF THE FOREST SERVICE (1945-1969)* (reporting the annual harvest in the national forests).

In 1969, the great conservationist senator, Lee Metcalf, asked Arnie and a group of university colleagues to write an independent, non-partisan analysis of the logging in the Bitterroot.¹⁰ Metcalf's letter contained a key phrase. The Bitterroot was important in its own right, but Bolle's study also would be significant, he wrote, because "[t]he Bitterroot is a typical mountain timbered valley and the results of such a study might well be extended to recommendations national in scope."¹¹ Metcalf well knew that high-yield cutting was raising hackles all across the West. Conversations with his colleagues—Frank Church of Idaho, Gale McKee of Wyoming, Clinton Anderson of New Mexico, and others—told him that.

Arnie knew as well as anyone how the backcountry in the Bitterroot was being rearranged. He loved flyfishing with all his heart. Later, after cancer took his right arm, he would learn to cast a fly with his left. He had been an expert birder ever since his teens. Although colorblind, several of his rare bird sightings are lodged in Montana's state bird records.

Arnie also completely understood Metcalf's point about the national dimensions of the issue. He, too, had talked with many people around the West and had visited many national forests. In terms of impacts on the ground, the scale of this new logging was radical in comparison with anything that the Forest Service had ever done, tracing all the way back to Gifford Pinchot.

Arnie also saw it from another angle. What the Forest Service was doing was antidemocratic. Foresters were making all of the decisions, without the benefit of the perspectives of other disciplines. Beyond that, the people were not being consulted. The people, Arnie used to say, have little to offer on how a clearcut ought to be planned and carried out, but the people should have a *hell* of a lot to say about whether there should be a clearcut in the first place. That, he believed, was a social decision, not a technical one.¹²

The committee Arnie chaired was a respected, broad-gauged group including, among others, Dick Shannon, for decades a highly regarded, straight-talking economist at the University of

10. See Letter from Lee Metcalf, U.S. Senator, to Arnold Bolle, Dean, School of Forestry, University of Montana (Dec. 2, 1969), in S. DOC. NO. 91-115, at v (1970).

11. *Id.*

12. For more on Arnold Bolle, see Donna Metcalf, *Tributes to Arnold Bolle*, 15 PUB. LAND. L. REV. 1 (1994).

Montana, and Dick Behan, who later, as dean at Northern Arizona University, would develop one of the most creative forestry curricula in the country. The report, released in 1970 and styled as "A University View of the Forest Service," but popularly known as the Bolle Report, was sharply critical of timber practices in the Bitterroot.¹³ In the Bitterroot, the professors concluded, the basic principle of sustained-yield management was being violated: "We doubt that the Bitterroot National Forest can continue to produce timber at the present harvest level."¹⁴ Timber sales were subsidized: "Clearcutting and planting is an expensive operation. Its use should bear some relationship to the capability of the site to return the cost invested."¹⁵ Timber removal was done in unacceptable ways: "Quality timber management and harvest practices are missing."¹⁶ In all, the Forest Service was violating multiple use, the agency's basic statutory mandate: "Multiple use management, in fact, does not exist as the governing principle on the Bitterroot National Forest. . . . Consideration of recreation, watershed, wildlife and grazing appear as afterthoughts."¹⁷

The Forest Service, the timber industry, and much of the forestry profession lashed out against the Bolle Report, but the report quickly gained credibility and held it.¹⁸ The authors had stature. They had firsthand knowledge from site visits and long-time familiarity with the Bitterroot. Their conclusions were well-documented. And the report was fair. Indeed, a reluctance, a sadness, ran through it. The real message was not that the Forest Service was a bad agency. Rather, the Forest Service was a great agency that had gone astray.

If the report carried an intangible sadness, it also was endowed with another intangible: courage. It was not easy for Arnie and his co-authors to levy this broadside, for the report was nothing short of that. They could expect heavy criticism from others in the profession and from their colleagues—people who were their friends. Yet they went ahead, following their consciences and their training. This display of courage and con-

13. See S. DOC. NO. 91-115 (1970); see also Bolle, *supra* note 8, at 1.

14. S. DOC. NO. 91-115, at 13 (1970).

15. *Id.*

16. *Id.*

17. *Id.*

18. See Bolle, *supra* note 8, at 12-13.

science infused the Bolle Report, gave it an electricity, and became a key factor, though often unspoken, in the report's broad acceptance.

Few people would have predicted it in 1970, but we can see in retrospect that major forest reform probably was inevitable upon the publication of the Bolle Report. It covered all the basic concerns that had created a rising tide of public opinion and it quickly became a rallying cry as well as a solid professional document. Congressional hearings followed.¹⁹ Then came the so-called Church Guidelines, issued by Senator Frank Church's Public Lands subcommittee.²⁰ These guidelines set broad, but still meaningful, standards for national forest timber harvesting, whether clearcutting or otherwise.

Then, in 1975, the *Monongahela* opinion in the Fourth Circuit ruled that clearcutting violated the 1897 Organic Act.²¹ Like the authors of the Bolle Report and the Church Guidelines, the judges recognized the deep changes within the Forest Service. The *Monongahela* court wrote that before World War II "the Forest Service regarded itself as a custodian and protector of the forests rather than a prime producer" of timber for the nation.²² After the war, "the posture of the Forest Service quickly changed from custodian to a production agency."²³

After *Monongahela*, the national forests faced a crisis. Of course, the nature of the crisis was in the eye of the beholder. To some, the crisis was that clearcutting might be terminated. To others, the crisis was that clearcutting might continue. Regardless, the controversy had assumed a rare posture. Usually, in the legislative process, some interests argue for reform, while others want to preserve the status quo. Thus most bills move slowly, and few ever become law. By 1975, however, essentially all affected interest groups—even though their proposals directly conflicted—wanted change, quick change if possible, in the

19. See "Clear-Cutting" Practices on National Timberlands: Hearings Before the Subcomm. on Pub. Lands of the Senate Comm. on Interior and Insular Affairs, 92nd Cong. (1971) (three volumes).

20. See SUBCOMMITTEE ON PUB. LANDS, SENATE COMM. ON INTERIOR AND INSULAR AFFAIRS, 92ND CONG., REPORT ON CLEARCUTTING ON FEDERAL TIMBERLANDS (Comm. Print 1972).

21. See West Va. Div. of Izaak Walton League, Inc. v. Butz, 522 F.2d 945, 948 (4th Cir. 1975).

22. *Id.* at 954.

23. *Id.* at 955.

national forest laws. Congress was destined to act and, on October 22, 1976, with the passage of the NFMA, it did.²⁴

Before turning to the provisions of the NFMA, it is necessary to make one observation about the issues in national forest policy. As I have alluded, we have seen many sweeping changes in this field since the NFMA, since Arnie Bolle wrote his report. Yet, in another sense, although we sometimes use different terms, the issues identified in the Bolle Report remain the issues today: sustainability, the subsidizing of federal timber sales, and the impact of timber harvesting on wildlife, watershed, and recreation. Of the central issues in the Bolle Report, only the propriety of clearcutting, while still of significance, has taken on less importance. So, while we have seen change and reform aplenty in this field, there remains a sense in which the central issues remain unsolved twenty-six years after Arnie Bolle had the courage to put his historic words down on paper. The words he wrote created reform but have not yet caused resolution. Today, the issue of timber harvesting in the national forests represents the single longest-running unresolved conflict in federal public land law and policy.

II. THE CHARACTERISTICS OF THE NFMA

The NFMA went through Congress in near record time for complex modern legislation. Senator Jennings Randolph of West Virginia introduced his bill on February 4, 1976,²⁵ and Senator Hubert Humphrey of Minnesota introduced his, the other key proposal, on March 5, 1976.²⁶ Just a few months later, the NFMA became law.²⁷ By way of comparison, the Federal Land Policy and Management Act ("FLPMA"),²⁸ which President Ford signed together with the NFMA on October 22, had been introduced in 1970; FLPMA's roots went back even further, as it was the child of the Public Land Law Review Commission, which

24. See National Forest Management Act of 1976, Pub. L. No. 94-588, 90 Stat. 2949 (codified as amended at 16 U.S.C. §§ 1600-1687 (1994)) (amending the Forest and Rangeland Renewable Resources Planning Act of 1974).

25. See S. 2926, 94th Cong., 122 CONG. REC. 2216-18 (1976).

26. See S. 3091, 94th Cong., 122 CONG. REC. 5620-21 (1976).

27. See Pub. L. No. 94-588, 90 Stat. at 2949.

28. See Pub. L. No. 94-579, 90 Stat. 2743 (1976) (codified as amended at 43 U.S.C. §§ 1701-1784 (1994)).

began its work in 1964.²⁹ The Resources Planning Act of 1974,³⁰ to which the NFMA is technically an amendment, had been the subject of various bills for years and its progress through Congress was both leisurely and serene.³¹

Leisure and serenity are not terms commonly used to describe the cauldron from which the NFMA emerged. One's intuition would be that the NFMA must be a rushed-through, pieced-together statute with all manner of drafting errors and unintended ambiguities. But I, at least, do not see the NFMA that way. I would judge it both a well-written statute and one that struck the best level of consensus that could be put together in 1976. Several of the key senators and members of Congress were fine legislators who put a great deal of time into this bill.³² Congressional staff was experienced and able. The Forest Service has never been better represented than it was then by Chief John McGuire, who was a principal figure in the Act's passage. The words that senators regularly asked during the markup sessions were: "Can you live with that, Chief?"³³ The newly minted environmental movement enriched the proceedings with reform proposals. Industry was well-represented. For all of them, the NFMA was a top priority and received their best efforts.

My guess, then, is that the NFMA would not have looked much different had it been in the pipeline for twelve years, as FLPMA effectively was. The NFMA roughly reflects the nation's collective view of the national forests as of October 1976.

I would describe that rough agreement in these terms. The Forest Service, because of its tradition of excellence, deserved considerable autonomy. At the same time, serious mistakes had been made and, for the first time, it had become necessary to put sideboards on the agency's discretion. No longer would it be

29. See Public Land Law Review Commission Organic Act, Pub. L. No. 88-606, § 4, 78 Stat. 982, 983 (1964); see also U.S. PUB. LAND LAW REVIEW COMM'N, ONE THIRD OF THE NATION'S LAND (1970).

30. Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476 (codified as amended at 16 U.S.C. §§ 1600-1614 (1994)).

31. See WILKINSON & ANDERSON, *supra* note 7, at 37-40.

32. For more on the passage of the NFMA, see DENNIS C. LE MASTER, *DECADE OF CHANGE* (1984) and WILKINSON & ANDERSON, *supra* note 7.

33. See John R. McGuire, *Can You Live with That, Chief?* (Sept. 16, 1996) (unpublished comments prepared for "The National Forest Management Act in a Changing Society: 1976-1996," the 1996 Conference of the Natural Resources Law Center) (on file with the Natural Resources Law Center, University of Colorado School of Law).

acceptable for the Forest Service to run the national forests as it saw fit, accountable only through gauzy statutes like the Multiple-Use Sustained-Yield Act.³⁴

The NFMA's form of accountability would, to be sure, come partly through judicial review,³⁵ but several other mechanisms were employed as well. A main premise was Arnie Bolle's idea that the Forest Service had become antidemocratic. Under the NFMA, policy would be made by forest plans, with the national forests as the functional planning units.³⁶ These plans would be developed by interdisciplinary teams, with foresters and road engineers (who together then comprised two-thirds of all agency employees) being supplemented by biologists, hydrologists, ecologists, archaeologists, and other appropriate disciplines.³⁷ At least as important, these forest plans were intended to be truly public documents, with wholesale public participation from the earliest scoping sessions.³⁸ In an especially notable provision—I have never seen this kind of approach taken in any other federal legislation—a Committee of Scientists was appointed to provide advice on the NFMA regulations.³⁹ This Committee left a heavy imprint on the regulations, adopted in 1979. All of this was process, not substance, but, as I will discuss later, the NFMA process has plainly led to many substantive reforms.

The Act, for all its emphasis on the process of planning, includes some substantive requirements. The NFMA, which arose out of the crucible of clearcutting, does not prohibit the practice, but the language of the Act has enough presumptions and requirements that any national forest clearcutting proposal will be launched into stiff headwinds.⁴⁰ The NFMA's mention of diversity,⁴¹ brief though it is, has turned out to be monumental, leading both to the historic administrative regulation on indicator species⁴² and to the cutback in old-growth logging. Several

34. 16 U.S.C. §§ 528-531 (1994).

35. See WILKINSON & ANDERSON, *supra* note 7, at 69-75.

36. See 16 U.S.C. § 1604(a)-(f); see also 36 C.F.R. § 219.4(b)(3) (1996).

37. See 16 U.S.C. § 1604(b), (f)(3); see also 36 C.F.R. § 219.5.

38. See 16 U.S.C. §§ 1604(d), 1612(a); 36 C.F.R. § 219.6.

39. See 16 U.S.C. § 1604(h).

40. See 16 U.S.C. § 1604(g)(3)(F).

41. See 16 U.S.C. § 1604(g)(3)(B).

42. See 36 C.F.R. § 219.19. On the use of the northern spotted owl as an indicator species, see, for example, ELLIOTT A. NORSE, *ANCIENT FORESTS OF THE PACIFIC NORTHWEST* (1990).

provisions of the NFMA require protection of watersheds.⁴³ The reference to economic suitability is brief,⁴⁴ but it, too, has led to significant administrative regulations⁴⁵ and increased scrutiny of below-cost sales.⁴⁶ The technical requirements on nondeclining even flow ("NDEF"), culmination of mean annual increment ("CMAI"), and earned harvest effect ("EHE") also place constraints on timber harvesting.⁴⁷

It is difficult to articulate the appropriate level of judicial review under the NFMA. Generalizations are hazardous because many of the issues are extraordinarily technical and judicial analysis will turn on the facts and applied expertise in the record in each individual case. But the NFMA certainly sets out law, both substantive and procedural, for courts to apply. There is also, as a general matter, broad agency discretion. Congress had never previously put significant limits on Forest Service authority. But determination and caution were in the air as the NFMA moved across Capitol Hill in 1976. The legislative sentiment was to adopt substantial reform measures but not to intrude too much into technical, on-the-ground management.

I find two opinions particularly useful as guides to the nature of judicial scrutiny. The first is Douglas MacCleery's ruling as Deputy Assistant Secretary of Agriculture on the administrative appeals for the San Juan and three other Colorado national forests.⁴⁸ MacCleery, while not a judge, was acting in a judicial capacity, in substantially the same role as a federal district judge. The other opinion is Judge Finesilver's 1989 ruling on the appeal from the Rio Grande National Forest.⁴⁹

Both the MacCleery and Finesilver decisions established legal standards for Forest Service decisionmaking on economic

43. See 16 U.S.C. § 1604(e), (g).

44. See 16 U.S.C. § 1604(k).

45. See 36 C.F.R. § 219.12.

46. See, e.g., RICHARD E. RICE, 5 THE WILDERNESS SOCIETY, NATIONAL FORESTS: POLICIES FOR THE FUTURE: THE UNCOUNTED COSTS OF LOGGING (1989); see also RANDAL O'TOOLE, REFORMING THE FOREST SERVICE (1988).

47. See 16 U.S.C. §§ 1604, 1611.

48. See Letter from Douglas W. MacCleery, Deputy Assistant Secretary for Natural Resources and the Environment, to R. Max Peterson, Chief, U.S. Forest Service (July 31, 1985), in FOREST SERV., U.S. DEP'T OF AGRIC., FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT: GRAND MESA, UNCOMPAHGRE, AND GUNNISON NATIONAL FORESTS C-41 (1991).

49. See *Citizens for Env'tl. Quality v. United States*, 731 F. Supp. 970 (D. Colo. 1989).

suitability and other issues; having set those standards, both opinions then remanded to the Forest Service for reconsideration.⁵⁰ Judicial relief of that nature will not always be appropriate, but the NFMA is inevitably a statute that struggles to find a balance between statutory directives and agency discretion. We can expect many court decisions to set standards and then remand to the Forest Service to exercise its discretion within the boundaries of those standards.

That kind of judicial posture reflects the kind of consensus that existed in October 1976. Rein the Forest Service in, but do not hamstring it. Still, at bottom this was a reform law, one designed to create change, to bring timber domination in the Forest Service to an end. There is no denying that Congress, and the public, wanted a shift in the way that the Forest Service managed the national forests. The most quoted language from the NFMA process, whether in the statute itself or the legislative history, comes from Senator Hubert Humphrey. Humphrey, remember, introduced the so-called "industry bill."⁵¹ He made it clear that he, too, was a reformer who expected the same fundamental sea change that Arnie Bolle and Humphrey's colleagues, Lee Metcalf and Frank Church, wanted. And, ultimately, Humphrey rightly put the focus not on laws or on the Forest Service, but on the land:

The days have ended when the forest may be viewed only as trees and trees viewed only as timber. The soil and water, the grasses and the shrubs, the fish and the wildlife, and the beauty that is the forest must become integral parts of resources managers' thinking and actions.⁵²

III. THE CHANGES SINCE 1976

However one might articulate the rough consensus that existed in 1976, the situation is surely different today. We have seen waves of changes since then.

One of the largest series of events has been external to the national forests. Most of the national forests are found in the American West, which we now realize is a region remade. We

50. *See id.*; *see also* 132 CONG. REC. 29,919 (1986).

51. S. 3091, 94th Cong., 122 CONG. REC. 5620-21 (1976).

52. 122 CONG. REC. 5619 (1976).

often think of the settlement of the West in terms of the nineteenth century, but we now can see that the region's greatest change has taken place in the era since World War II, the era in which we still live.

The West has boomed from seventeen million people in 1945⁵³ to fifty-seven million today, and it will surely hit sixty million at the turn of the century⁵⁴—nearly a four-fold increase since the war. More than half of the population growth has been in the past twenty years. As importantly, our comprehension of the immensity of the growth has hit home just in the past five years or so. Population growth, traditionally assumed to be an unalloyed good out here, now is understood to have many and diverse costs and has become a front-line public issue.

The build-up of the West has had many different implications for the public lands. As towns, cities, and second-home owners have moved close to, and sometimes within, the forests, the number of devastating fires has multiplied.⁵⁵ The pressures to extract natural resources to meet new levels of demand have put enormous stresses on the forest's natural systems. We, as individuals, have also put pressures on the forests in our searches for backcountry recreation.

The New West has brought economic, as well as population, changes.⁵⁶ The combination of a burgeoning tourism sector and the influx of light industry, with corporate executives and individual entrepreneurs looking for attractive areas in which to locate, has made for a more diversified western economy. The public opposition to heavy-handed development has soared. Many mills have shut down, some due to changes wrought by the NFMA and other environmental laws, some due to the fall-down

53. See BUREAU OF CENSUS, U.S. DEP'T OF COMMERCE, 1957 STATISTICAL ABSTRACT OF THE UNITED STATES 10.

54. Compare BUREAU OF CENSUS, U.S. DEP'T OF COMMERCE, 1996 STATISTICAL ABSTRACT OF THE UNITED STATES 28 (estimating the population in the 11 western states at 55.8 million for the year 1995) with BUREAU OF CENSUS, U.S. DEP'T OF COMMERCE, CURRENT POPULATION REPORTS: POPULATION PROJECTIONS OF THE UNITED STATES BY AGE, SEX, RACE, AND HISPANIC ORIGIN 1995-2050 at 6 (1996) (estimating the addition of more than 25 million people to the national population during the decade of the 1990s and reporting that the West has the highest growth rates in the country).

55. See FOREST SERV., U.S. DEP'T OF AGRIC., NATIONAL FOREST FIRE REPORT (1977-present) (reporting total wildfires and total acres burned).

56. See generally CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST (1992).

that accompanies an exhaustion of the local timber resource. Some of those communities continue to suffer, while others have redirected themselves toward recreation and nonextractive businesses.

As economist Thomas Michael Power demonstrated in his important recent book, *Lost Landscapes and Failed Economies*,⁵⁷ the extractive industries now play a much smaller role in the diversified western economy. Power concluded an extended analysis of the western timber industry by writing that "there is nothing special or central about the timber industry that should cause the government to give it privileged access to public resources."⁵⁸ Not so long ago, such a statement would fall on deaf ears. Today, it has broad, though of course not universal, acceptance. But plainly, in the past, nature always had to give way to development in the West. Now, as often as not, it is the other way around. And, in many cases, the economic impacts of staying our hand are neutral or positive.

The legal context for the NFMA also has changed. In 1976, the Endangered Species Act ("ESA")⁵⁹ was a young, miscellaneous statute. *TVA v. Hill*⁶⁰ was still two years away. Since then, the ESA has moved front and center in forest management, sometimes eclipsing the NFMA. In addition, the National Environmental Policy Act⁶¹ has matured, adding significant layers of process to the NFMA. Appropriations riders have dictated some important forest policies.⁶² The Clean Water Act⁶³ and Clean Air

57. THOMAS M. POWER, *LOST LANDSCAPES AND FAILED ECONOMIES: THE SEARCH FOR A VALUE OF PLACE* (1996).

58. *Id.* at 146.

59. Pub. L. No. 93-205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531-1544 (1994)).

60. 437 U.S. 153 (1978) (affirming injunction prohibiting the operation of Tellico Dam under a strict construction of the Endangered Species Act).

61. 42 U.S.C. §§ 4321-4370d (1994).

62. For example, the "Salvage Logging Rider" exempted some timber sales from the constraints of environmental laws, including the Endangered Species Act. See Emergency Supplemental Appropriations for Additional Disaster Assistance, for Anti-Terrorism Initiatives, for Assistance in the Recovery from the Tragedy that Occurred at Oklahoma City, and Rescission Act, Pub. L. No. 104-19, §§ 2001-2002, 109 Stat. 194, 240-47 (1995); see also Northwest Forest Resource Council v. Glickman, 97 F.3d 1161 (9th Cir. 1996) (upholding § 2001(k)). The "Hatfield Riders" similarly exempted some sales from environmental laws by prohibiting judicial review. See, e.g., Department of the Interior and Related Agencies Appropriations Act for Fiscal Year 1990, Pub. L. No. 101-121, § 318, 103 Stat. 701, 745-50 (1989); see also *Robertson v. Seattle Audubon Soc'y*, 503 U.S. 429 (1992) (upholding § 318).

63. 33 U.S.C. §§ 1251-1387 (1994).

Act,⁶⁴ state and county regulatory laws,⁶⁵ the Federal Advisory Committee Act,⁶⁶ Indian treaties,⁶⁷ and other laws have all expanded their reach into the national forests. Numerically, the NFMA controls more national forest issues than any other law, but, to a far greater degree than its drafters ever anticipated, the cumulative effect of other sources of law has become significant indeed.

The scientific community has made astonishing advances since the NFMA was enacted. Edward O. Wilson has achieved international acclaim with his pathbreaking research on biodiversity.⁶⁸ The field of conservation biology has arisen seemingly full-blown. Concepts like biodiversity, ecosystem management, and sustainability were not part of our public discourse twenty years ago. While still young, these ideas have become serious working policies, not just at Yellowstone, where our ecosystem management is known around the world, but in the Pacific Northwest, the Columbia watershed, the Southern Appalachians, and elsewhere.

Although the pressures of population growth have stressed the forests, technological advances have taken some of the edge off the demand for timber. Our conservation practices are much improved. We waste less wood fiber at the logging site, at the mill, and at the construction site. Recycling of paper products has reduced the demand for pulpwood.⁶⁹

The forces I have just discussed are largely external to the NFMA, yet they must be accounted for by forest management under the NFMA. I would like to turn to some of the ways the Forest Service and the national forests have been changed, and in some cases not changed, by the NFMA and by the social,

64. 42 U.S.C. §§ 7401-7642 (1994).

65. See, e.g., Eric T. Freyfogle, *Granite Rock: Institutional Competence and the State Role in Federal Land Planning*, 59 U. COLO. L. REV. 475 (1988).

66. 5 U.S.C. app. §§ 1-15 (1994).

67. See, e.g., *Klamath Tribes v. United States Forest Serv.*, No. 96-381-HA (D. Or. Oct. 2, 1996) (granting preliminary injunction prohibiting timber sales that would adversely affect Klamath Tribes' treaty rights); see also Carnet Williams, *Klamath Tribes Prevail in Salvage Rider Suit*, W. ENVTL. L. UPDATE, Winter 1997, at 2.

68. For more on biodiversity, see EDWARD O. WILSON, *THE DIVERSITY OF LIFE* (1992).

69. See FOREST SERV., U.S. DEP'T OF AGRIC., *FOREST SERVICE PROGRAM FOR FOREST AND RANGELAND RESOURCES: A LONG-TERM STRATEGIC PLAN* at II-5 (1995).

economic, and scientific forces that have made their mark since 1976.

The Forest Service has evolved over these twenty years, and to some degree the NFMA has spurred its evolution. Foresters no longer dominate the agency as in times past. Biologists, ecologists, and members of other disciplines form a larger and more influential contingent, with several serving as regional foresters and, in the case of Jack Ward Thomas, as Chief. Representation of Hispanics, Indians, and African-Americans has increased.⁷⁰ I believe that the influx of women into the Service has made a difference. I remember speaking at the first convention of district rangers in the Pacific Northwest Region. The year was 1979. Exactly three women were among the 150 people in attendance. Today, women hold a significant number of positions at every level and Elizabeth Estill, Regional Forester in the Rocky Mountain Region, was a serious candidate for Chief.⁷¹

Twenty years after passage of the NFMA, the Forest Service is still timber-dominated, and that fact skews every decision to some degree, small or great. Yet timber determines less than before. This is a more open and diverse, and a better, agency. Youth and a new view on what constitutes a forest are increasingly being served. The inclusion of fresh and varied voices is critical, for more national forest law has been, and always will be, made in Forest Service offices and on the ground than in Congress or the courthouses. The new winds are blowing strong and will grow ever more hearty.

The NFMA and the Forest Service have achieved some considerable success in engaging the public's participation in planning. The amount and quality of participation have gone up as foresters attempt to educate and involve the public through workshops, hikes, interviews, open houses, and other forms of interaction. The Service also has made progress in working with tribal governments, whose lands and rights are so often affected by national forest resource development. I doubt that Arnie Bolle would believe that the Forest Service has achieved the goal of full

70. See FOREST SERV., U.S. DEP'T OF AGRIC., 1995 REPORT OF THE FOREST SERVICE 151; see also Jennifer C. Thomas & Paul Mohai, *Racial, Gender, and Professional Diversification in the Forest Service from 1983 to 1992*, 23 POLY STUD. J. 296 (1995).

71. See *Colorado Woman Among Candidates for Top Job at U.S. Forest Service*, DENV. POST, Dec. 18, 1996, at B4.

democratization, but I imagine he would cheer the fact that the process is no longer antidemocratic.

There have been other advances. As I have already suggested, clearcutting continues to be used as one method of harvesting trees, but the amount of clearcutting has been considerably reduced.⁷² Today, people think of biodiversity in terms of the ESA, but the NFMA also has played a crucial role. It was the work of Jack Ward Thomas and other biologists in researching and implementing the biological diversity provision of the NFMA⁷³ and the indicator species requirements of the NFMA regulations,⁷⁴ that brought the northern spotted owl and biodiversity into a central position in the making of timber policy in the Pacific Northwest.

Other areas have seen much less progress. Forest plans still ignore mining regulation, leaving it to analysis at the project stage.⁷⁵ In the sensitive area of western water, the Service has been more assertive about by-pass flows and some other issues, but much more needs to be done.⁷⁶ Water, every bit as much as the trees, makes a forest. The progress on tribal involvement in forest issues has, in my view, been impressive, but now the Forest Service needs to take the next steps. Access to sacred sites, even if they happen to be located in commercial timber stands, must be given fair and extensive analysis in the plans. Any tribe with a legal or strong equitable claim to national forest land should be entitled to have, in the forest plan, a full and fair consideration of the option of transferring land to the tribe.

72. See FOREST SERV., U.S. DEPT OF AGRIC., 1995 REPORT OF THE FOREST SERVICE 18-19.

73. See 16 U.S.C. § 1604(g)(3)(B) (1994).

74. See 36 C.F.R. §§ 219.19-.20 (1996).

75. See *Pacific Rivers Council v. Thomas*, 873 F. Supp. 365, 372 (D. Idaho 1995) ("LRMPs would be meaningless with respect to effective fish, habitat, and water management if the effects of mining activities were not factored into the long-range plans."); Recent Case, *Pacific Rivers Council v. Thomas: The Idaho District Court Halts Forest Service Activities Pending ESA Interagency Consultations*, 16 J. ENERGY NAT. RESOURCES & ENVTL. L. 191 (1996); see also Charles L. Kaiser & Scott W. Hardt, *Fitting Oil and Gas Development into the Multiple-Use Framework: A New Role for the Forest?*, 62 U. COLO. L. REV. 827, 851-53 (1991).

76. See, e.g., Ellen Miller, *Water Company Sues U.S. Hotchkiss: Farmers Fight Bypass Flows*, DENV. POST, May 7, 1996, at B2; Teresa Rice, *Beyond Reserved Rights: Water Resource Protection for the Public Lands*, 28 IDAHO L. REV. 715 (1992); James S. Witwer, *The Renewal of Authorization to Divert Water on National Forests*, 24 COLO. LAW. 2363 (1995).

The Forest Service has taken one position in the courts that would cut to the heart of the NFMA planning process. The agency has repeatedly argued that citizens cannot challenge forest plans in court because the plans are generalized documents that only allow, and do not finally determine, future activities: citizen challenges can be made only at the site-specific project level. Thus, the Service contends, the issues are not ripe and citizens lack standing to question plans.⁷⁷ The courts are presently split three-to-two in favor of permitting challenges to forest plans.⁷⁸

But citizen access to the courts is a critical aspect of democratization, and the Forest Service's argument against judicial review of forest plans is backward-looking. If the Service does somehow prevail, it will find that citizen participation in planning will decline precipitously and so will the agency's credibility. Why would busy people spend their scarce hours in a process that has no real impact on the ground and that cannot be challenged? Congress intended that NFMA planning would have exactly the same effect as local land-use planning—the plans would be binding on future agency actions and enforceable in court⁷⁹—and it is in the enlightened self-interest of the Forest Service not only to accept that fact, but to advocate it.

For me, the last area of change in the national forests is at once the most significant, and perhaps the least studied and understood. That is the matter of how the land itself has fared over the course of the past twenty years. Should not any discussion of amending the NFMA begin with an assessment of whether, and how, land health has improved or diminished under the existing legal structure?

77. See Beth Brennan & Matt Clifford, *Standing, Ripeness, and Forest Plan Appeals*, 17 PUB. LAND L. REV. 125 (1996); John P. Hogan, *The Legal Status of Land and Resource Management Plans for the National Forests: Paying the Price for Statutory Ambiguity*, 25 ENVTL. L. 865, 881-90 (1995); see also cases cited *infra* note 78.

78. Compare *Sierra Club v. Thomas*, 105 F.3d 248, 250 (6th Cir. 1997) (holding that citizens have standing to challenge forest plan and case is ripe), *Sierra Club v. Marita*, 46 F.3d 606, 613-14 (7th Cir. 1995) (same), and *Resources Ltd. v. Robertson*, 8 F.3d 1394, 1398 (9th Cir. 1993) (same), with *Sierra Club v. Robertson*, 28 F.3d 753, 758 (8th Cir. 1994) (denying citizens standing to challenge forest plan) and *Wilderness Soc'y v. Alcock*, 83 F.3d 386, 391 (11th Cir. 1996) (holding that case is not ripe).

79. See WILKINSON & ANDERSON, *supra* note 7, at 69-75.

I imagine, despite the issue's centrality, that most of us feel uncertain about the answers. I know I do. I will venture some tentative thoughts. We certainly lost a great amount of forest health in the Pacific Northwest between 1976 and 1989, when the national and regional harvests finally began to move down from the all-time highs that had been in place for a full quarter of a century.⁸⁰ Many species are in jeopardy, including the Pacific salmon, for which high-yield forestry was a significant factor, although a much smaller one than the dams.⁸¹ My guess is that, during the same period, logging has had detrimental impacts on wildlife and forest health in the Yellowstone Ecosystem and other Rocky Mountain areas. On the other hand, my sense is that we are seeing some healing since 1989, when the national timber cut gradually dropped from eleven billion board feet to the current level of between four to five billion board feet.⁸²

The situation is probably better in the case of grazing, where, with localized exceptions, both riparian and upland acres seem to be healing since the passage of the NFMA and FLPMA, which affects Forest Service grazing regulations.⁸³ Many ranchers deserve credit for adopting improved grazing practices. Other areas, such as water development and mining, are harder to assess. The Forest Service has begun to exercise some control, but the agency's work on both water and hardrock mining is still tentative,⁸⁴ due to stiff political opposition in the Rocky Mountains on water issues and due simply to being cowed by the Mining Law of 1872⁸⁵ everywhere there is hardrock mining. It is hard to understand, for example, why the Forest Service has been so slow to come around, if indeed it has, on the New World Mine near Yellowstone.

80. See generally FOREST SERV., U.S. DEP'T OF AGRIC., REPORT OF THE FOREST SERVICE (1977-present) (reporting the annual harvest in the National Forests).

81. See WILKINSON, *supra* note 56, 175-218.

82. See U.S. DEP'T OF AGRIC., 1995-96 AGRICULTURAL STATISTICS XII-27.

83. See 36 C.F.R. § 222.2(b) (1996) (implementing FLPMA's provision for allotment management plans, 43 U.S.C. § 1752(d) (1994)).

84. See, e.g., Clouser v. Espy, 42 F.3d 1522, (9th Cir. 1994) (upholding authority of Forest Service to regulate mining activities); see also JOHN D. LESHY, THE MINING LAW: A STUDY IN PERPETUAL MOTION 195-99 (1987); Joel A. Ferre, *Forest Service Regulations Governing Mining: Ecosystem Preservation Versus Economically Feasible Mining in the National Forests*, 15 J. ENERGY NAT. RESOURCES & ENVTL. L. 351 (1995).

85. Act of May 10, 1872, ch. 152, 17 Stat. 91 (codified as amended in scattered sections of 30 U.S.C. (1994)).

Probably a person's assessment on the health of the forests today compared with twenty years ago will, even when we have more data, come down to an individual decision on the worth of biodiversity. We are never going to be able to quantify satisfactorily the value of species or the costs of their loss. These are ultimately moral questions. Over just one generation, our society's sensitivity to the worth of biodiversity has risen dramatically. For many of us, biodiversity is the single best measure of land health, of Earth's health, of our own species' health in the long term and perhaps even in the mid-term. For those who count the value of biodiversity high, and I am one who does, some recent developments show promise, but the changes in the land since 1976 have been grievous.

IV. THE NFMA AND FLEXIBILITY

Yet there have been currents of progress under the NFMA regime since 1976, and they speak very well for the statute. They respond directly to the turbulent times, evolving attitudes, and scientific advancements of the past generation. A good law ought to be sufficiently specific to resolve known problems but also broad-textured so as to account for new developments, for the march of time. The NFMA seems to have had considerable elasticity to respond to future needs.

Without question, the largest series of events on the federal public lands during the past twenty years has taken place in the Pacific Northwest, where the devastation of salmon runs and ancient forests have intersected as public issues. Now, for more than a decade, citizens of the Northwest have engaged in a debate and active response that amounts to the most ambitious exercise in sustainability ever undertaken. Inevitably, the national forests have been at the center of it: Region Six, the Pacific Northwest Region of the Forest Service, has traditionally produced half of the total national forest cut,⁸⁶ or about ten percent of the nation's supply of softwood.⁸⁷ To understand

86. See FOREST SERV., U.S. DEPT OF AGRIC., REPORT OF THE FOREST SERVICE (1977-present) (reporting total timber harvest in the National Forest and timber harvest by region).

87. Compare *id.*, with FOREST SERV., U.S. DEPT OF AGRIC., AN ANALYSIS OF THE TIMBER SITUATION IN THE UNITED STATES: 1952-2030, at 139 (1982) (reporting removal of softwood sawtimber).

national forest policy, you need to watch the rise and fall of the cut. The Forest Service uses good forest practices—the best. The question is not the quality of the cut, but the quantity. Whether it is the ranger district, forest, region, or nation, nothing tells you more about timber domination than the level of the cut.

After years of litigation in the Northwest under the ESA, the NFMA, and NEPA, President Clinton held the Timber Summit in Portland on April 2, 1993. The Secretaries of Agriculture and Interior then appointed the Forest Ecosystem Management Assessment Team (“FEMAT”), a blue-ribbon, interdisciplinary, interagency team of biologists, economists, sociologists, and other experts. Chaired by Jack Ward Thomas, FEMAT was convened under the authority of the NFMA and FLPMA.⁸⁸

FEMAT recommended ten alternative management plans for seventeen national forests within the range of the Northern spotted owl—the “west-side” forests on the wetter side of the Cascades and Northern Sierra. The Clinton Administration selected “Option Nine.” Both environmentalists and industry challenged Option Nine, but the Ninth Circuit upheld it.⁸⁹ Option Nine, now the Northwest Forest Plan, includes many protections for old-growth stands and riparian zones while also permitting an estimated timber harvest of about 1.2 billion board feet.⁹⁰ Before the spotted owl and salmon controversies, these lands had produced approximately five billion board feet annually.⁹¹

I believe that the FEMAT process, both on its own account and as a precedent, is a monumental event in national forest and natural resource history generally. The driving objective was to achieve sustainability. This is not the old sustained-yield

88. For more on the work of FEMAT, see generally *Seattle Audubon Soc’y v. Lyons*, 871 F. Supp. 1291 (W.D. Wash. 1994); FOREST ECOSYSTEM MGMT. ASSESSMENT TEAM, *FOREST ECOSYSTEM MANAGEMENT: AN ECOLOGICAL, ECONOMIC, AND SOCIAL ASSESSMENT* (1993); Michael C. Blumm, *Ancient Forests, Spotted Owls, and Modern Public Land Law*, 18 B.C. ENVTL. AFF. L. REV. 605 (1991); H. Michael Anderson, *Reforming National Forest Policy*, *ISSUES IN SCI. AND TECH.*, Winter 1993-1994, at 40.

89. See *Seattle Audubon Soc’y v. Moseley*, 80 F.3d 1401 (9th Cir. 1996); see also *Northwest Forest Resource Council v. Espy*, 846 F. Supp. 1009 (D.D.C. 1994).

90. See Daniel S. Reimer, Comment, *The Role of “Community” in the Pacific Northwest Logging Debate*, 66 U. COLO. L. REV. 223, 250 (1995).

91. See THE SCIENTIFIC PANEL ON LATE-SUCCESSIONAL FOREST ECOSYSTEMS, *ALTERNATIVES FOR MANAGEMENT OF LATE-SUCCESSIONAL FORESTS OF THE PACIFIC NORTHWEST*, reprinted in H.R. REP. NO. 102-1039 pt. 1, app. III, at 11 (1992) (indicating that between 1980 and 1989, 34 percent of the annual harvest of 14.5 billion board feet came from the area affected by Option Nine).

formulation, which focused on commercially measurable outputs such as board feet, acre-feet, annual unit months, and kilowatts. Rather, FEMAT aimed at a more encompassing sustainability of biological, economic, and cultural values, focusing, among other things, on biodiversity, community stability, and timber output.

To achieve this, FEMAT used an ecosystem approach. Judge Dwyer, whose opinion was upheld by the Ninth Circuit, squarely affirmed the approach, holding that the "NFMA requires 'planning for the entire biological community—not one species alone.'"⁹² The FEMAT report applied ecosystem management on two levels, assessing conditions within the entire study area but making specific recommendations targeted at "reserve areas" of owl habitat and "key watersheds" for conserving aquatic species.⁹³

You hear that sustainability and ecosystem management are vague terms without substance. Absolutely—if you try to describe them abstractly in a classroom or in a cocktail conversation. But sustainability and ecosystem management, like free speech and procedural due process, are broad formulations that guide our conduct by their symbolism, and that then gain specific meaning when they are applied in discrete contexts. Read the Northwest Forest Plan and talk to the many people who are affected by it. They may or may not like the Plan, but I doubt that they will say that sustainability or ecosystem management are vague and abstract in the context of the Northwest Forest Plan.

In a major set of developments, the Forest Service is now assessing sustainability and moving toward implementing ecosystem management in other regions with different biological, economic, and cultural characteristics. In the Columbia Basin, the Forest Service will soon release a regional study similar in concept to FEMAT.⁹⁴ The option that the Forest Service adopts will then guide the planning process for some thirty national forests. In the Eastern Region, the Southern Appalachian Assessment will be used in the development of eight forest plans.⁹⁵ The much-watched SNEP report, released this past June,

92. *Seattle Audubon Soc'y v. Lyons*, 871 F. Supp. at 1310 (quoting *Seattle Audubon Soc'y v. Mosely*, 798 F. Supp. 1473, 1483 (W.D. Wash. 1992)).

93. *Seattle Audubon Soc'y v. Lyons*, 871 F. Supp. at 1304-06.

94. For more on the Interior Columbia Basin Ecosystem Management Project, see *Columbia Basin Plan Staggers Home*, HIGH COUNTRY NEWS, Feb. 3, 1997, at 7.

95. See THE SOUTHERN APPALACHIAN ASSESSMENT SUMMARY REPORT (1996).

examined the Sierra Nevada and made recommendations.⁹⁶ In all of these cases, and others, as with FEMAT, the panels examined large ecoregions to understand the broad pictures and made recommendations for smaller, site-specific areas, usually watersheds.

I believe that the Clinton Administration is serious about this. In August 1996, it took the rare step of directing the Regional Forester in California to pull back an about-to-be released plan for the Sierra Nevada and to make a reassessment of the proposed timber harvest, using a scientific team and incorporating the findings and recommendations of the SNEP.⁹⁷ I cannot prove it, but I think Arnie Bolle, who apparently developed the first interdisciplinary, integrated-resource curriculum in the nation's forestry and natural resource schools, probably smiled and lifted a toast to that one.

V. CONCLUSION: AMENDING THE NFMA

Undoubtedly, there are technical amendments that should be made to the NFMA, but it is not clear to me that this is the time for any major changes. I believe in the ideas of sustainability and ecosystem management, a term I take to mean planning and resolving natural resource problems (a) with planning based on natural areas (which can include landscapes such as watersheds and bays, as well as true ecosystems), (b) with open, collaborative processes, and (c) with the overriding goal of achieving sustainability, defined in a broad-gauged way to include biological, economic, and cultural objectives. I believe that kind of approach will be the dominant problem-solving method during the next generation. It was probably at Yellowstone, such a bright and understandable symbol, that we learned the logic and efficiency of proceeding by natural areas and have extended that lesson to many areas in just a few years, including the Chesapeake Bay, Lake Tahoe, the Truckee River, the Sacramento Bay Delta, the several areas I have already mentioned, and others, including the

96. SIERRA NEVADA ECOSYSTEM PROJECT, STATUS OF THE SIERRA NEVADA: SUMMARY OF THE SIERRA NEVADA ECOSYSTEM PROJECT REPORT (1996).

97. See Frank Clifford, *White House Kills Logging Compromise*, L.A. TIMES, Aug. 24, 1996, at A17; *Administration Rejects Looser Curbs on Logging*, WASH. POST, Aug. 25, 1996, at A15.

watersheds around which the newly conceived watershed councils have organized.⁹⁸

The Forest Service, sometimes on its own initiative, sometimes moving haltingly, sometimes dragged kicking and screaming, seems to have embraced this new kind of management. 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.

To believe in what I do and to think that statutory amendments are not needed, you have to believe that the new faces and ideals in the Forest Service are taking hold and that the progress will continue. You also have to believe that larger social forces will help move the agency in a direction that will, in a sensible way, assure greater land and species health. Those premises may be wrong. But I would give some more time for legitimately significant new directions to play out.⁹⁹ If they do not, then I hope the NFMA will be amended to eliminate timber domination, just as Congress intended to do in 1976, perhaps this time by expressly providing that biodiversity will be the primary, though of course not exclusive, goal of the national forests.

There are people who would like to do away with planning, or nearly so. To be sure, planning has at times been too elaborate and too expensive, but let it be said that planning for the national forests needs to exist, to be extensive, and, yes, to be elaborate and expensive. How could it be otherwise? Any corporation owning 191 million acres would engage in elaborate and expensive planning or it would not own those acres for long. And running that amount of land for public, rather than corporate, purposes makes it harder, not easier, because the public's mission is so diffuse.

The public wants beauty, recreation, and wildlife, and also commercial outputs, from the national forests. Almost incredibly, in just a few years we have reached a national commitment to preserve endangered and threatened species, hundreds of which

98. See, e.g., Natural Resources Law Ctr., Univ. of Colo. Sch. of Law, *The Watershed Source Book: Watershed-Based Solutions to Natural Resource Problems* (Feb. 1996) (available from the Natural Resources Law Center, University of Colorado School of Law).

99. For suggestions on new economic directions for the National Forests, see generally O'TOOLE, *supra* note 46.

live in the national forests. The public also wants its commercial timber from these same lands. Suppose the national cut drops another one billion board feet, to three billion annually. That amount of timber will fill 600,000 logging trucks and build 300,000 new homes. How can we possibly address issues of that magnitude, and achieve an acceptable mix of all the many commodity and non-commodity values, without extensive planning?

So, I would expect more from the Forest Service and the other public offices that affect the national forests, but I would at this moment be inclined to leave the NFMA as it is. That does not for a moment detract from the most essential fact of all, which is that this is sacred ground and we need to do better by it. We are not dealing in abstractions or legalisms. We are dealing with Arnie Bolle's Bitterroot Range, with the River of No Return country of Idaho which, like the Bitterroot, once again hears the shrill calls of the wolves. We are dealing with the Yellowstone forests; with the Black Hills of the Sioux; with the Pawnee Grasslands; with the Continental Divide country up above the Colorado Front Range; with the Carson National Forest that Aldo Leopold rode as a ranger; with the Toiyabe of Nevada; with John Muir's Range of Light; and with the thick groves and deep rivers of the Cascades. It would be a sad legacy for our generation if, twenty years from now, we cannot say, "Yes, we finally turned the corner sometime in the 1990s; yes, land health in the national forests is clearly improving; and, yes, land health in the national forests is clearly good."