

A "HARD LOOK" AT BIODIVERSITY AND THE NATIONAL FOREST MANAGEMENT ACT

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I. INTRODUCTION

The greenhouse effect and the depletion of the ozone layer are environmental issues the public has become familiar with through increasing exposure in the media. However, there is a third issue that is rising to the forefront of the environmental debate in the public arena. That issue is the loss of biological diversity or biodiversity. Biodiversity relates to the interdependency of all plant and animal life on this planet. The United States Office of Technology Assessment (OTA) has defined the term as "the variety and variability among living organisms and the ecological complexes in which they occur."¹

Some leading scientists believe that the biodiversity of the United States and the world has not been as seriously threatened

1. OFFICE OF TECHNOLOGY ASSESSMENT, TECHNOLOGIES TO MAINTAIN BIOLOGICAL DIVERSITY, U.S. CONGRESS 3 (1987) [hereinafter 1987 OTA Report].

in 65 million years,² and that the current extinction rate of plant and animal species rivals that of the dinosaurs.³ In the United States, there are almost 600 species of plants and animals on the federal endangered species list; another 4000 species are considered to be at risk of extinction.⁴

The national forests of the United States harbor ecosystems crucial to the maintenance of national and global biodiversity.⁵ However, the national forest management program is not focused on the preservation of biodiversity. Biodiversity is given cursory treatment in the current Resource Planning Act Program [hereinafter RPA Program].⁶ This comment provides an overview of the concept, examines legal arguments tied to the concept, and concludes with an analysis of the national forest management system and its role in the preservation of biodiversity. In part I of this comment, the concept of biodiversity will be viewed from a biological perspective. A case germane to the concept, *Marble Mountain Audubon Society v. Rice*,⁷ is examined in part II. The utility of the Endangered Species Act (ESA) and the Migratory Bird Treaty Act (MBTA) in preserving biodiversity is also discussed in part II.⁸ In the final portion of this comment, the concept's definition and mandate under the National Forest Management Act (NFMA) are addressed. The Forest Service's implementation of NFMA is then reviewed and the legality of the 1990 RPA Program (the current national forest management program) is challenged.

II. THE BIOLOGICAL PERSPECTIVE

A. *The Importance of Biodiversity to Human Existence*

Why does it matter that we are losing species or that the conservation community is chanting a strange mantra known as biodiversity? While there are numerous philosophical and moral reasons for concern, there are economic reasons which depict

2. Declaration of Dr. Reed Noss in support of plaintiffs in *Marble Mountain Audubon Soc'y v. Rice*, 914 F.2d 179 (9th Cir. 1990) [hereinafter *Noss declaration*].

3. *Id.*

4. KEYSTONE CENTER, BIOLOGICAL DIVERSITY ON FEDERAL LANDS, REPORT OF A KEYSTONE POLICY DIALOGUE 9 (1991) (hereinafter KEYSTONE).

5. *Id.* at 10.

6. U.S. Forest Service, 1990 Forest & Rangeland Renewable Resource Planning Act Program, at 5-6, 5-7 [hereinafter 1990 RPA Program].

7. 914 F.2d 179 (9th Cir. 1990).

8. Endangered Species Act, 16 U.S.C. § 1531 (1988); Migratory Bird Treaty Act, 16 U.S.C. § 703 (1988).

simple human self interest: biodiversity provides immediate and potential economic value and priceless environmental services.⁹

Sustaining biodiversity makes sound economic sense, as many industries are directly dependent on nature. One of the most important of these is the pharmaceutical industry. Nearly half of all prescription medicines are derived from living biota.¹⁰ Biologists believe that the total number of species of life ranges between 10 and 30 million.¹¹ But only 1.4 million species have been named and, of this number, only a fraction have been tested for usefulness.¹² In all probability, there are many species not yet identified which contain unique and important medicinal properties. The history of the Pacific yew tree is illustrative of this dilemma. An extract from the bark of the Pacific yew has been found to be effective in treating various types of cancer in humans.¹³ Until very recently, the United States Forest Service (USFS) and Bureau of Land Management (BLM) treated the yew as a weed tree.¹⁴ With the discovery of its medicinal property, however, the Pacific yew has become a valued commodity.¹⁵ The Forest Service's failure to consider biodiversity in their management of national forests nearly led to the eradication of the Pacific yew in this country.¹⁶ Had the Forest Service succeeded in eradicating the Pacific yew population, our society would never have benefited from what promises to be a very important drug.¹⁷ There are, and will be, many cancer patients glad that the Pacific yew has survived.

The maintenance of biodiversity also insures the successful interaction of species within our ecosystem. Bees pollinate our fruitbearing trees. Countless bacteria, molds, mites, and worms decompose garbage. Soil bacteria turn nitrogen from the air into

9. Donella Meadows, *THE REGISTER GUARD* (Eugene, Or.) § B, at 1 (May 1990).

10. KEYSTONE, *supra* note 4, at 8.

11. Cynthia Carlson, *NEPA and the Conservation of Biological Diversity*, 19 ENVTL. L. 15, 18 (1988).

12. *Id.*

13. See generally Doug Heiken, *The Pacific Yew: Federal Management of an Emerging Resource*, J. ENVTL. L. & LITIG. Not available on Lexis. Our copies at bindery. (1992).

14. On some lands managed by the Bureau of Land Management (BLM), the yew was purposely eliminated during logging, thinning, and vegetation management activities. On other lands, the yew was simply ignored (neither conserved nor destroyed) and never replanted or managed as a valuable resource. *Id.* at 4 n.8.

15. Heiken, *supra* note 13, at 4.

16. See generally Heiken, *supra* note 13.

17. Heiken, *supra* note 13, at 4-7.

nitrogen fertilizer for plants. Plants consume carbon dioxide and produce oxygen. The list goes on. However, as the biodiversity of our planet declines, these free ecological arrangements which support human life are jeopardized. Furthermore, the scientific community knows even less about specie's interactions than they do about the actual number of species our planet sustains.¹⁸ The eradication of one species may irreparably affect the well being of other dependent species.¹⁹

B. Levels of Biodiversity and the Effect of Habitat Fragmentation

The concept of biodiversity may be addressed on numerous levels. The most basic level of biodiversity is genetic diversity.²⁰ Species diversity is a more easily recognizable level of biodiversity. Associations of species form a third level of biodiversity. Such associations "form the biotic parts of ecosystems."²¹ The diversity of an ecosystem is reflected by the diversity of plant and animal species present in that ecosystem. Federal lands are comprised of numerous ecosystems which sustain biodiversity in the United States. Federal agencies managing these lands should, therefore, play a key role in the preservation of biodiversity in the United States.²²

In fact, the richest forests of the United States are on the verge of ecological collapse.²³ In the Pacific Northwest, "[a] great conifer forest once covered the western parts of Washington, Oregon and Northern California."²⁴ Today, less than 10% of this forest remains.²⁵ An even smaller percentage remains protected from logging, and the Ninth Circuit has recently ruled that this land is not sufficient to support 32 endangered animal species (including the Northern Spotted Owl).²⁶

The logging of the national forests of the United States plays a leading role in the degradation of biodiversity. As forests are entered for timber, habitat islands form, surrounded by

18. Carlson, *supra* note 11, at 18-19.

19. Carlson, *supra* note 11, at 19.

20. THE KEYSTONE CENTER, BIOLOGICAL DIVERSITY ON FEDERAL LANDS 6 (Colo. 1991).

21. *Id.*

22. *Id.* at 10-12.

23. Timothy Egan, N.Y. TIMES, June 11, 1992, at A13.

24. Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1088 (W.D. Wash. 1991).

25. *Id.*

26. Seattle Audubon Soc'y v. Moseley, 798 F. Supp. 1484, 1490 (W.D. Wash. 1992).

clearcuts, roads, and monocultural tree plantations.²⁷ In the recent words of NASA scientists addressing satellite photos of the Pacific Northwest, "[i]t appears that much of the forest has been literally cut to pieces."²⁸ The fragmented landscape caused by modern forestry threatens numerous species of plants and animals with extinction. Species stranded on these "habitat islands" suffer from genetic deterioration brought on by inbreeding; "even if a forest fragment has suitable habitat to support a population of forest species, there is no assurance that it will remain viable if it is isolated from other populations."²⁹

Wilderness areas, designated by the federal government, are the only areas immune from logging and the resultant ecosystem fragmentation. However, "of the 90 million acres designated as wilderness in the United States, only 34 million acres are located outside of Alaska."³⁰ Moreover, only 8% of the total land area of the United States, outside of Alaska, remains roadless and undeveloped. Of that percentage, only 2% is designated as wilderness.³¹ The wilderness areas that remain are small. Most can be crossed on foot in a day.³² The litigation in *Marble Mountain Audubon Society v. Rice* centered on a "biological corridor" that links two of these rare wilderness areas together.³³

III. BIODIVERSITY AND THE LAW

A. Marble Mountain Audubon Society v. Rice

Biological corridors become increasingly important as forest ecosystems are fragmented. They allow both plant and animal species to migrate, thereby curtailing the adverse effects of fragmentation and the ensuing loss of biodiversity.³⁴ The corridor addressed in *Marble Mountain* is known as Grider Creek Drainage, located on Klamath National Forest (which extends across the borders of Oregon and California). The Grider Creek

27. See Declaration of Dr. Larry D. Harris in support of Plaintiffs' Motion for preliminary injunction in *Marble Mountain Audubon Society v. Rice*, at 1-2 [hereinafter *Harris declaration*]. See also Elliot A. Noose et al., *Conserving Biological Diversity In Our National Forests*, WILDERNESS SOC'Y, June 1986, at 37-51.

28. Egan, *supra* note 23, at A13.

29. Harris declaration, *supra* note 27, at 3.

30. See Mary K. Ishee, *Review and Management of Roadless Lands in Wilderness Planning*, NAT. RESOURCES & ENV'T 4 (1991).

31. The Wilderness Act, 16 U.S.C. § 1133 (1985).

32. Ishee, *supra* note 30, at 3.

33. Harris declaration, *supra* note 27, at 4-5.

34. Noss declaration, *supra* note 2, at 17-21.

Drainage connects the Marble Mountain and Red Butte wilderness areas. After fire damaged portions of this drainage, the Forest Service proposed a *salvage sale* (a timber sale calling for the harvest of both live and dead trees).³⁵ Plaintiffs, represented by the Natural Resources Defense Council (NRDC), brought suit seeking to enjoin the Forest Service from carrying out this sale.

Plaintiffs lost their motion for a preliminary injunction at the federal district court level. On appeal to the Ninth Circuit, however, plaintiffs prevailed on all counts. The most important, for purposes of this comment, is that the Environmental Impact Statement (EIS) prepared by the Forest Service did not adequately address the effects of the proposed timber sale on the biodiversity of the region affected by the sale. Specifically, the *Marble Mountain* court held that the Forest Service failed to "take a 'hard look' at the impact of the selected salvage and harvest alternative on the Grider drainage biological corridor," as required under the National Environmental Policy Act (NEPA).³⁶ By finding that the Grider Project violated NEPA, the *Marble Mountain* court confirmed the plaintiffs' claim that biological corridors *are* environmentally important elements in the maintenance of regional biodiversity.

There are no federal cases directly relevant to the issues (biodiversity and biological corridors) addressed in *Marble Mountain*. In arriving at its decision, the court relied on cases which provide pertinent interpretations of NEPA. The court cited *Jones v. Gordon*, holding that "[a]n agency must set forth a reasoned explanation for its decision and cannot simply assert that its decision will have an insignificant effect on the environment."³⁷ The court also relied on a series of cases holding that the Forest Service must take a "hard look" at the environmental impacts of its actions.³⁸

The *Marble Mountain* court's holding marks a significant advance in natural resource case law. The courtroom recognition of the concept of biodiversity and the value of biological corridors is unprecedented. The case should provide a new han-

35. *Marble Mountain*, 914 F.2d at 180.

36. *Id.* at 182.

37. *Id.* (citing *Jones v. Gordon*, 792 F.2d 821, 828 (9th Cir. 1986)).

38. Specifically, the *Marble Mountain* court cited: *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21, 96 S.Ct. 2718, 2730 n.21, 49 L.Ed.2d 576 (1976); *State of Cal. v. Block*, 690 F.2d 753, 761 (9th Cir. 1982).

dle for those interested in the preservation of ecosystems and biodiversity in general. On its face, the court's ruling is not necessarily limited to old-growth forests. *Marble Mountain* should, therefore, be applicable wherever biologically diverse ecosystems are threatened by an agency's actions.

B. *Alternative Legal Arguments*

In terms of protecting the biodiversity of forest ecosystems, there are other statutory arguments which have merit. In *Marble Mountain*, NRDC won its suit on a NEPA based claim. Given time, however, the Forest Service will find ways to circumvent this approach by incorporating the requisite rhetoric concerning issues related to biodiversity in their management proposals. The Forest Service often claims to be improving the biodiversity of a forest ecosystem through its management practices.³⁹ The Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), and the National Forest Management Act (NFMA) may be useful in refuting such claims.

ESA and MBTA may be invoked where the Forest Service claims to be enhancing biodiversity through forest management. The purpose of ESA is to provide a program for the conservation of threatened and endangered species of plants and animals and the habitats in which they are found.⁴⁰ Under ESA, the Forest Service must ensure that "any action authorized . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction . . . of habitat of such species which is determined by the Secretary . . . to be critical. . . ."⁴¹ Where such a species or its habitat may be affected by a proposed action, the Forest Service must conduct a lengthy and complex interagency consultation process with the U.S. Fish and Wildlife Service (USFWS) culminating in a jeopardy or non-jeopardy opinion by that service.⁴²

Under ESA, the Forest Service must ensure that any actions designed to "enhance the biodiversity of a forest" do not jeopardize plant and animal species which USFWS has selected as deserving of protection.⁴³ For example, the Forest Service may not claim to be enhancing forest biodiversity by creating

39. 1990 RPA Program, *supra* note 6, at 5-7.

40. 16 U.S.C. § 1531(b).

41. *Id.* § 1536(a)(2).

42. 50 C.F.R. § 402 (1991).

43. *Id.*

habitat for pigeons at the expense of spotted owl habitat (a species recognized by USFWS as endangered). In fact, ESA has been useful in litigation surrounding the spotted owl controversy in the Pacific Northwest. The Ninth Circuit recently issued a permanent injunction, barring logging on all Forest Service lands that provide suitable habitat for spotted owls.⁴⁴

While spotted owl litigation in the Pacific Northwest has successfully prevented the destruction of old-growth forest ecosystems, protecting ecosystem biodiversity under ESA is difficult. To protect a given ecosystem, you must have an endangered species (like the spotted owl) which is determined by USFWS to be dependent on that ecosystem.⁴⁵ After the species is listed as threatened or endangered, USFWS must determine that a proposed action will jeopardize the species at issue.⁴⁶ Finally, an "Endangered Species Committee" may be formed under ESA to consider exempting agencies from the Act's prohibitions.⁴⁷ Such a committee recently formed in order to consider the fate of the spotted owl on Bureau of Land Management forest land.⁴⁸

MBTA also serves as a constraint on Forest Service activities. MBTA, enacted in 1918, is a criminal statute which bars the taking of any bird identified by the Secretary of the Interior as migratory.⁴⁹ While the Act was initially intended to protect a small number of birds (e.g. ducks and geese), this protection was extended to virtually every North American bird by the Secretary of the Interior in 1971.⁵⁰ Under MBTA, it is a federal crime to kill any of these birds or to cut down a nest tree. Thus, it may

44. *Moseley*, 798 F. Supp. at 1493.

45. 55 Fed. Reg. 26189, 26190 (1990).

46. See Donald Barry et al., *For Conserving Species, Talk is Cheaper than We Think: The Consultation Process Under the Endangered Species Act*, WORLD WILDLIFE FUND 3 (Feb. 1992). This study also indicated that, of the 2000 formal consultations that occurred from fiscal year 1987 to fiscal year 1991, USFWS issued only 350 jeopardy opinions; this constitutes 17.5% of all formal consultations. *Id.* at 4. Exacerbating this situation is the fact that the source of a majority of these 350 opinions stemmed from Bureau of Land Management (BLM) timber sales in the Pacific Northwest. *Id.* at 5-6.

47. 16 U.S.C. § 1536(e)(1).

48. While this committee, commonly known as the "godsquad," recently voted to exempt BLM timber sales from ESA requirements, these sales were subsequently enjoined for violating NEPA. *Portland Audubon Soc'y et al. v. Lujan*, 784 F. Supp. 786 (D. Or. 1992).

49. 16 U.S.C. § 703.

50. Birds protected under MBTA include the blackbird, bluebird, chickadee, crow, hawk, jay, meadowlark, oriole, robin, sandpiper, sparrow, warbler, and wren. See generally 50 C.F.R. § 10.13 (1991).

be arbitrary and capricious for the Forest Service to initiate timber harvesting in violation of MBTA.⁵¹

Plaintiffs seeking to enjoin timber harvesting on their local forests have argued for a broad interpretation of MBTA. In *Portland Audubon Society v. Lujan* and *Seattle Audubon Society v. Robertson*, litigants asserted that regulations under ESA prohibiting the modification of essential habitat also apply to the habitat of birds on the migratory bird list.⁵² Under this interpretation of MBTA, it would be illegal to cut down any tree which provides habitat for any bird listed under the Act. No court has yet recognized such a broad interpretation of MBTA, but such a holding would likely halt logging on both public and private lands.

From a policy perspective, it is interesting to note that when environmental attorneys advance arguments under ESA and MBTA, they are acting in a manner quite similar to that of the Forest Service and its management practices. Simply stated, when environmental attorneys advance claims based on the taking of a single or limited number of species, they are, to some extent, mimicking the myopic management practices of the Forest Service. The argument might be made, therefore, that environmental attorneys are similarly disregarding the importance of managing our forests, regions, and national ecosystems to sustain and enhance biodiversity. In a moral sense, such a charge may be valid; however, until national forests are managed for biologically diverse values, this vicious cycle will likely continue.

From a practical perspective, it seems logical that a greater number of species could be saved by shifting the emphasis from the protection of individual species "to a more broad based ecosystem approach aimed at preventing species from becoming endangered."⁵³ As one commentator has noted, "in terms of protecting biodiversity, the bottom line is not whether we are able to recover a handful of species that are currently on the endangered species list, but the overall richness of our flora and fauna."⁵⁴ It also makes economic sense to protect intact, func-

51. 5 U.S.C. § 706(2)(A) (1988).

52. *Portland Audubon Soc'y v. Lujan*, 784 F. Supp. 786 (D. Or. 1992); *Seattle Audubon Soc'y v. Robertson*, No. 89-160 (W.D. Wash. Mar. 24, 1989).

53. See J. Michael Scott, *Beyond Endangered Species: An Integrated Conservation Strategy for the Preservation of Biological Diversity*, ENDANGERED SPECIES UPDATE 43 (Aug. 1988).

54. *Id.*

tioning ecosystems, rather than creating habitats for individual species as they become endangered.⁵⁵

For an environmental attorney, protecting and enhancing biodiversity through a broad based ecosystem approach raises difficult substantive and procedural questions. First, one must find a workable legal mandate for the protection of "biodiversity." Assuming this is possible, one must then determine how such a mandate is to be applied through federal management practices. In the following section of this paper, NFMA will be examined to address these questions.

IV. BIODIVERSITY AND NATIONAL FOREST MANAGEMENT

A. *The National Forest Management Act*

The Forest Service conducts forest planning pursuant to the Forest and Rangeland Planning Act of 1974 (RPA) as amended by the National Forest Management Act of 1976 (NFMA).⁵⁶ NFMA is largely the product of litigation interpreting provisions of the Forest Service Organic Act of 1897.⁵⁷ In *West Virginia Division of the Izaak Walton League v. Butz* (the *Monongahela* decision),⁵⁸ the court held that, under the Organic Act of 1897, the Secretary of Agriculture was only permitted to sell trees which were "dead, matured or large growth."⁵⁹ This decision was subsequently used by various environmental groups to challenge timber sales where the harvest method proposed would include clearcutting.⁶⁰ Under *Monongahela*, clearcutting was prohibited where it would result in the harvest of trees other than those which were dead, mature, or large growth.

As a result of the *Monongahela* decision and other cases like it, the Forest Service was forced to halt numerous timber sales on national forest lands.⁶¹ In reaction, the Senate recognized that "[r]ecent developments have underscored the need for legislative changes to enable the Forest Service to perform its

55. Scott, *supra* note 53, at 43.

56. National Forest Management Act of 1976, 16 U.S.C. § 1600 (1988).

57. Forest Service Organic Act of 1897, 16 U.S.C. § 476, *repealed by* National Forest Management Act of 1976, 16 U.S.C. § 1600.

58. *West Virginia Div. of Izaak Walton League, Inc. v. Butz*, 522 F.2d 945 (4th Cir. 1975).

59. 16 U.S.C. § 476.

60. *See generally* Zieske v. Butz, 406 F. Supp. 258 (D. Alaska 1975).

61. Tom Barlow, *Evolution of the NFMA of 1976*, 8 ENVTL. L. 539, 545 (1978).

proper role of management.”⁶² The Senate further asserted that advances in forest management techniques rendered the provisions of the Organic Act, interpreted by the courts as a bar to clearcutting, unduly prescriptive.⁶³ The Senate concluded that:

It is, therefore, time for Congress to act in order to ensure that the resources found in our National Forests can be used and enjoyed by the American public, now and in the future. Only by managing National Forest System lands in a manner aimed at maximizing all the renewable resources, air, soil, and water, can this objective be achieved.⁶⁴

With these stated objectives, Congress repealed the Forest Service Organic Act and made the National Forest Management Act into law.

B. NFMA and Biodiversity Mandate

To the suspicious legal mind, it appears that the Senate's stated objectives merely grant the Forest Service the right to continue clearcutting practices. There are, however, provisions incorporated within NFMA which should temper the skeptic and reward the environmentalist. It should be recognized, at the outset of this analysis, that the Senate could have adopted a bill which legislated national prescriptions for timber harvests. In making their recommendations to the Senate, the Committee on Agriculture and Forestry concluded that because of the natural diversity present throughout the National Forest System, such an approach would be unwise.⁶⁵ To preserve this natural diversity, NFMA calls for the development and adoption of management plans for units of the Forest Service, under the principles of "multiple-use" and "sustained-yield," and requires the Secretary of Agriculture to adopt guidelines for all such plans.⁶⁶ The evolution of these plans will be examined in the following section. At this stage, it is important to note that, under the law, management plans must be in keeping with the principles of "multiple-use" and "sustained-yield."⁶⁷

The terms "multiple-use" and "sustained-yield" derive

62. LEGISLATIVE HISTORY OF THE NFMA, S. REP. NO. 893, 94th Cong., 2d Sess. 9, reprinted in 1976 U.S.C.A.N. 6662, 6669 (1976).

63. *Id.*

64. *Id.* at 6671.

65. *Id.* at 6685.

66. 16 U.S.C. § 1604(g).

67. *Id.*

from the Multiple-Use Sustained-Yield Act of 1960 (MUSY).⁶⁸ MUSY declares that national forests "shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."⁶⁹ While the purpose of the Act is broad,⁷⁰ NFMA and management guidelines require compliance with MUSY.⁷¹ In recognition of multiple-use and sustained-yield principles, section 1604(g)(3)(B) of NFMA requires the promulgation of:

guidelines for land management plans developed to achieve the goals of the Program which . . . 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, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide where appropriate, to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the plan.⁷²

The word "diversity," as used in this subsection of NFMA, means "[t]he distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan."⁷³ Furthermore, the final clause of this section should prevent the Forest Service from creating forests of nonindigenous species.

As noted by the court most recently in *Seattle Audubon Society v. Moseley*:

[W]hen the section is read in light of the historical context and overall purposes of the NFMA, as well as the legislative history of the section, it is evident that section 6(g)(3)(B) requires Forest Service planners to treat the wildlife resource as a controlling, co-equal factor in forest management and, in particular, as a substantive limitation on timber production.⁷⁴

Consistent with this section of NFMA, the implementing regulations provide that "[f]ish and wildlife habitat shall be managed

68. 16 U.S.C. §§ 528-531 (1982).

69. *Id.* § 531.

70. *Perkins v. Bergland*, 608 F.2d 803, 806 (9th Cir. 1979) (the court, citing *Strickland v. Morton*, 519 F.2d 467, 469 (9th Cir. 1975), stated that "MUSY breathes discretion at every pore.").

71. Barlow, *supra* note 61, at 546.

72. 16 U.S.C. § 1604(g)(3)(B) (emphasis added).

73. 36 C.F.R. § 219.3 (1990).

74. *Seattle Audubon Soc'y v. Moseley*, No. C92-479WD, Memorandum Decision and Injunction (W.D. Wash. 1992) (citing Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 296 (1985)).

to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.”⁷⁵ In *Seattle Audubon Society v. Evans*, the court held that this duty “requires planning for the entire biological community—not for one species alone.”⁷⁶

When the espoused goals of the drafters of NFMA are considered in conjunction with its implementing regulations and subsection 1604(g)(3)(B) (mandating the consideration of biodiversity in management plans), it is reasonable to conclude that NFMA recognizes the value of biodiversity in our national forest system. The fact remains, however, that the biodiversity of the national forests is declining. To understand why NFMA is failing to sustain biodiversity, it is necessary to examine the evolution of management plans.

C. *Where Does the Consideration of Biodiversity Fit? The Evolution of Management Plans Under NFMA: “Top-Down”*

Forest management plans are developed through national, regional, forest, and administrative planning levels.⁷⁷ According to NFMA’s implementing regulations, “[p]lanning requires a continuous flow of information and management direction among the three Forest Service administrative levels.”⁷⁸ At the national level, there exists, in theory if not in practice, what has been described as a “master plan.”⁷⁹ This master plan is comprised of various components, the most important of which are the Renewable Resource Assessment and the Renewable Resource Program.⁸⁰ The Renewable Resource Assessment is prepared by the Chief of the Forest Service (under the supervision of the Secretary of Agriculture) every ten years. The most recent was published in 1990. Congress has stated that the assessment is to be prepared in recognition “of the necessity for a long term perspective in planning.”⁸¹ The contents of the assessment, as described in NFMA, include, *inter alia*:

75. 36 C.F.R. § 219.19.

76. *Seattle Audubon Soc’y v. Evans*, 798 F. Supp. at 1483, citing *Seattle Audubon Soc’y*, No. C-89-16OWD, Order on Motions for Summary for Judgment at 12.

77. 36 C.F.R. § 219.4(a).

78. *Id.*

79. *National Wildlife Fed’n v. United States*, 626 F.2d 917, 919 (D.C. Cir. 1980).

80. 36 C.F.R. § 219.4(b).

81. 16 U.S.C. § 1601(a).

1) an analysis of present and anticipated uses and demand for, and supply of renewable resources; 2) an inventory of present and potential renewable resources, and an evaluation of opportunities for improving their yield, with estimates of costs and benefits; 3) a description of Forest Service programs; and 4) a discussion of important considerations which might affect the use, ownership and management of federal lands.⁸²

In the words of Chief Forester F. Dale Robertson, the RPA *Assessment* "provides the factual basis to formulate possible renewable resource management programs for the future, including the 1990 RPA Recommended Program."⁸³

The RPA *Program* is also prepared by the Chief of the Forest Service (again, under the supervision of the Secretary of Agriculture) and is designed to provide for the protection, management, and development of the national forest system.⁸⁴ These programs are prepared every five years. The first was published in 1975 and the most recent in 1990. Alternatives considered in adopting a program must include "national renewable resource goals and quantified objectives for resource outputs."⁸⁵ When completed, the program is submitted to the President and may include the alternatives considered.⁸⁶ The submitted program must include, *inter alia*:

1. an inventory of specific needs and opportunities for both public and private program investments; 2. specific identification of program outputs, and an analysis of program costs and benefits; 3. a discussion of priorities for accomplishing goals; . . . 5. Program recommendations which - (A) evaluate objectives for the major forest service programs in order that multiple-use and sustained-yield relationships among and within the renewable resources can be determined, . . . (C) recognize the fundamental need to protect soil, air and water, (D) state national goals that recognize the interrelationships between and interdependence within the renewable resources, and (E) evaluate the impact of raw log exports.⁸⁷

Finally, "[a] portion of each national objective developed in the RPA Program shall be distributed to each region and be incor-

82. *Id.*

83. *Id.*

84. *Id.*

85. 36 C.F.R. § 219.4(b)(ii).

86. 16 U.S.C. § 1602.

87. *Id.*

porated into each regional guide."⁸⁸

The final document required by the Renewable Resources Act is designed to tie the RPA Assessment, the RPA Program and other studies conducted by the Department of Agriculture together. This document is a statement from the President which expresses "in qualitative and quantitative terms the extent to which the programs and policies projected under the budget meet the policies approved by . . . Congress."⁸⁹ The statement of the President is deemed ratified by Congress if neither chamber disapproves of it within 90 days of its issuance.⁹⁰

The above described elements form the "master plan" which is intended to "guide all natural resource management activities and establish management standards and guidelines for the [n]ational [f]orest [s]ystem."⁹¹ The next level in the chain of forest management is the regional level.⁹² Regional foresters must develop guides which reflect the goals of the RPA Program and include a description of the existing management situation, major issues, and management concerns which need to be addressed to facilitate forest planning.⁹³ "Public participation and coordination, [the current RPA] Program the current RPA Assessment, and the existing forest and resource plans shall be used as sources of information in meeting [these] requirements."⁹⁴

The final level of forest management is that of each individual national forest.⁹⁵ At the forest level, each "forest supervisor" must develop a forest plan for administrative units of the forests for which they are responsible.⁹⁶ Such plans must include alternatives which meet the RPA Program goals.⁹⁷ "Local planners draft and refine unit plans in accordance with . . . [RPA] regulations to serve the goals outlined in the presidential Statement[s] of Policy."⁹⁸ The regional forester must approve the forest plans but is free to incorporate adjustments to

88. 36 C.F.R. § 219.4(b)(1)(ii).

89. 16 U.S.C. § 1606(b).

90. *Id.* § 1606(a).

91. 36 C.F.R. § 219.1(b).

92. *Id.* § 219.4(b)(2).

93. *Id.*

94. *Id.* § 219.8(a).

95. *Id.* § 219.4(3).

96. 36 C.F.R. § 219.4(3).

97. *Id.*

98. George Cameron Coggins, *The Developing Law of Land Use Planning On the Federal Lands*, 61 U. COLO. L. REV. 307, 337 (1990).

the RPA Program upon approval of the Chief of the Forest Service.⁹⁹

With the exception of the regional forester's ability to incorporate adjustments to the RPA Program upon approval of forest plans, it is clear that the Chief Forester is dictating management plans from the top down. In NFMA's implementing regulations, the claim is made that the "planning process is essentially iterative in that information from the forest level flows up to the national level where, in turn, information in the RPA Program flows back to the forest level."¹⁰⁰ In practice, it appears that the downward flow has a far greater velocity.¹⁰¹ While regional foresters and forest supervisors are free to consider economic "issues," which should theoretically include biodiversity, their plans must conform to the RPA Program.¹⁰² Thus, the Chief of the Forest Service is the individual who, under the current "top-down" approach to forest management, is most able to affect changes in forest management practices through the implementation of his "master plan."

The RPA Program is drafted to address national management issues, whereas the remaining provisions of NFMA provide more detailed local requirements.¹⁰³ The RPA Program, however, as filtered through the President's Statement of Policy, forms the basis for the more detailed Regional and Forest Plans mandated by NFMA.¹⁰⁴ In practice, it is clear that national and local planning efforts have not always meshed effectively.¹⁰⁵ While the "iterative" planning process may offer the benefits of flexibility and administrative efficiency, this type of decision making process is highly unpredictable and frustrating to lawyers from all camps.¹⁰⁶ One critic of the "iterative" process has noted that "decisions that merely emerge are more difficult to comprehend and apply because their origins and bases are uncertain."¹⁰⁷

The RPA planning process is failing, and its failure has

99. 36 C.F.R. § 219.4(b)(2).

100. *Id.* § 219.4(a)(3).

101. See generally Thomas R. Lundquist, *Providing the Timber Supply from National Forest Lands*, NAT. RESOURCES & THE ENV'T, 6-10 (Winter 1991).

102. 36 C.F.R. § 219.4(b)(ii).

103. Coggins, *supra* note 98, at 336.

104. Coggins, *supra* note 98, at 336.

105. See OTA discussion *infra* note 108.

106. See OTA discussion *infra* note 108.

107. See OTA discussion *infra* note 108.

been acknowledged by Congress most recently in an assessment from the Office of Technology Assessment [hereinafter OTA assessment] (prepared prior to the promulgation of the 1990 RPA documents).¹⁰⁸ The OTA assessment begins with the recognition that "[t]he RPA Assessments have provided useful resource data and analysis but have been incomplete, while the RPA Programs and Presidential Statements of Policy have not sufficiently addressed timely issues, guided budget deliberations, or assured sustainable resource management."¹⁰⁹ The major finding of the OTA assessment is that the current RPA process has not conformed with the congressional intent of developing a strategic planning process.¹¹⁰ The OTA assessment goes on to prescribe various administrative cures for improving the RPA process. At the heart of all these remedies, however, is a sense that the National Planning Process must provide a more coherent set of directions for forest management.¹¹¹ With these criticisms in mind, the 1990 RPA Program will now be examined.

D. 1990 RPA Program

The 1990 RPA Program differs from the three previous programs in significant ways. First, the Forest Service has stated that, unlike the previous three programs, the 1990 Program provides "general guidance" for national forest system management.¹¹² Second, the 1990 Program is the first to be put forward without the development of an Environmental Impact Statement (EIS). (The Forest Service's failure to prepare an EIS will be discussed in detail below.) One reason for this change in policy may be attributed to a third significant difference between the 1990 Program and its predecessors; the 1990 Program does not allocate resource output targets. As noted above, resource output targets are required to be included in the RPA Program under NFMA and its implementing regulations.¹¹³ The previous

108. OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, FOREST SERVICE PLANNING: SETTING STRATEGIC DIRECTION UNDER RPA, iii OTA-F-441 (1990) [hereinafter *Forest Service Planning*].

109. *Id.*

110. *Id.* at 13.

111. See generally *Forest Service Planning*, *supra* note 108, at 13-14.

112. Joint Oversight Hearing on The National Forest Planning Process as Provided in the National Forest Management Act of 1976: Joint Hearing Before the Comm. on Agriculture, Nutrition and Forestry, and the Comm. on Energy and Natural Resources, 101st Cong., 1st Sess. 111 (1989) [hereinafter *S. Hrg. 101-553*].

113. See 16 U.S.C. § 1606(a); 36 C.F.R. § 219.1(b); 36 C.F.R. § 219.4(b)(2).

programs all incorporated aggregate resource output targets which were then disaggregated among the regional and local forests.

The Forest Service maintains that general program guidance is preferable to the output targets of previous programs; "[t]he general guidance will provide a more flexible and realistic linkage between the national RPA Program and the local forest plan."¹¹⁴ This statement indicates that the Forest Service has chosen a management direction which seems, on its face, to contradict the analysis and recommendations embodied in the OTA assessment.¹¹⁵ As a "general guidance document," it is not clear what role, if any, the RPA Program should play in the management of the national forest system. Indeed, if the term "guidance document" is not ambiguous enough, the preface to the 1990 RPA Program describes the document as a "beaconing device to set the direction for the future."¹¹⁶ What regional foresters and forest supervisors intend to do with this "beaconing device" is less than clear.

The fact that this program was prepared without the traditional EIS is a further sign that the National Planning Process has become a meaningless exercise. NFMA is silent on the issue of whether or not an EIS is required to promulgate the RPA Program. It is evident from prior RPA Programs, however, that the Forest Service has believed in the past that an EIS is required. In discussions with RPA planning officers, the concession has been made that this requirement falls within a "grey area."¹¹⁷ Significantly, the Forest Service intends to prepare an EIS with the next RPA Program due in 1995.¹¹⁸

E. Is an EIS a Necessary Component of the RPA Program?

The 1990 RPA Program is legally vulnerable. Each RPA Program must include quantified objectives for resource output targets;¹¹⁹ the 1990 RPA Program does not include any such targets.¹²⁰ Moreover, the decision not to publish an EIS for the 1990 RPA Program is legally suspect. While NFMA does not

114. *S. Hrg. 101-553, supra* note 112, at 111.

115. 36 C.F.R. § 219.4(b)(2).

116. *1990 RPA Program, supra* note 6, at 1.

117. Personal discussions with RPA staff.

118. *Id.*

119. 36 C.F.R. § 219.4(b)(1)(ii).

120. *1990 RPA Program, supra* note 6, at 2-4.

explicitly require the preparation of an EIS, the Program also does not call for a "guidance document," as the Forest Service is seeking to define its RPA Program. Rather, NFMA calls for the promulgation of a "Renewable Resource Program."¹²¹ The Forest Service's treatment of the 1990 RPA Program as a "guidance document" is contrary to the plain language of NFMA and the congressional intent that RPA planning provide a strategic program for national forest management.¹²²

Having established that the 1990 RPA Program should, indeed, be construed as a strategic program, an argument may be made that NEPA mandates the drafting of an EIS. While the Forest Service will argue that an EIS is not required under NFMA, the RPA Program must also comply with NEPA.¹²³ Under NEPA, an EIS must be prepared for all "major federal actions significantly affecting the quality of the human environment."¹²⁴ "Federal Actions" are defined broadly to include agency recommendations, reports, and proposals.¹²⁵ Actions which may be highly controversial, or for which a cumulative significant impact will result, are specifically recognized as requiring the development of an EIS.¹²⁶

An attorney for the Department of Agriculture has made the following analogy regarding the necessity of the preparation of programmatic EISs:

A proposal seldom stands alone . . . [u]sually it is part of a larger program, a branch in a tree of planned actions. A given action may be closely linked with concurrent actions at the same level of the tree, or linked to divergent branches (future actions). Agency actions at the top of the tree tend to be definite and site-specific, while the actions represented by the trunk are general and broad in scope, requiring a programmatic EIS.¹²⁷

While the pun this quote presents is unintended, it does describe the national forest planning process accurately. The RPA Program should form the trunk of the national forest management

121. 16 U.S.C. § 1602.

122. *Forest Service Planning*, *supra* note 108, at 13.

123. 42 U.S.C. § 4321 (1988).

124. *Id.* § 4322(c).

125. 40 C.F.R. § 1500.6 (1990).

126. *Id.*

127. Peter Hapke, *Thomas v. Peterson: The Ninth Circuit Breathes New Life into CEQ's Cumulative and Connected Action Regulations*, 15 ENVTL. L. REP. 10289 (1985).

program. As a "guidance document," however, the RPA Program lacks the strength of a sapling.

Were the RPA planning process followed according to the plain language of NFMA and in accordance with congressional intent, an EIS would be prepared for the RPA Program. The Forest Service has attempted to avoid its obligations under RPA, NFMA and NEPA by terming the 1990 Program a "guidance document" which incorporates nonbinding guidelines. If the Forest Service is heard to claim that the RPA Program has no significant effects on the human environment, it is difficult to understand why the planning process is pursued at all. Clearly, the RPA Program does affect national forest planning, even if it does so by silence on important issues such as biodiversity. Regional foresters and forest supervisors are receiving the implicit message that timber harvesting should be their ultimate goal.

By circumventing EIS requirements, the Chief of the Forest Service has denied the public the opportunity for comment which such a document would provide. The absence of resource output targets likewise bars challenges at the federal level.¹²⁸ In this way, the Forest Service can avoid criticism with regard to their treatment of issues such as biodiversity within the RPA Program. Hence, suits at the forest level, like that of *Marble Mountain*, are critical to the protection of biodiversity on national forests.

V. CONCLUSION

It is at the national level where the issue of biodiversity should receive initial consideration. As the opening section of this comment demonstrates, the concept of biodiversity may be viewed from three levels: 1) genetic, 2) species, and 3) ecosystem levels. Ecosystem diversity is the most encompassing level.¹²⁹ Thus, if the Forest Service were interested in managing national forests for biodiversity values, in keeping with the multiple-use, sustained-yield mandate, such management strategies would begin at the national level.

128. This type of agency maneuvering was recently denounced in *Portland Audubon Soc'y*, 784 F. Supp. at 786. In that case, the BLM's failure to complete a supplemental EIS on the effects of timber harvesting on the spotted owl habitat was condemned. BLM timber sales not awarded prior to 1992 that log suitable spotted owl habitat have been enjoined pending the BLM's preparation of a Supplemental Environmental Impact Statement.

129. See *supra* text accompanying notes 5-8.

In fact, as has been previously established, the Chief Forester is afforded the opportunity to consider the concept of biodiversity when drafting the RPA Assessment and the RPA Program. Under a valid RPA Program, were the Chief Forester to express even a general interest in the preservation of biodiversity, regional foresters and forest supervisors would be free to consider the concept as it applies to their particular forest area. Regional foresters would have the ability to consider biodiversity from the regional perspective. Forest supervisors could "fine tune" regional evaluations to meet the particular needs of a forest or forest unit. Regional foresters and forest supervisors would be free to develop management strategies sustaining biodiversity in keeping with the RPA Assessment and the RPA Program and, therefore, without political pressure, were the Chief Forester to initiate the inquiry.

Judge Dwyer of the Federal District Court of Washington correctly identified the cause of the Forest Service's failure to effectively manage national forests in accordance with NFMA when he stated that: "More is involved here than a simple failure by the agency to comply with its governing statute. . . . This is not the doing of the scientists, foresters, rangers, and others at the working levels of these agencies. It reflects decisions made by higher authorities in the executive branch of government."¹³⁰ Were NFMA implemented faithfully, the national and global decline in biodiversity would be significantly redressed.

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130. *Seattle Audubon Soc'y*, 771 F. Supp. at 1090.