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Judicial Review of Forest Service Decisions Made Pursuant to the National Forest Management Act's Substantive Requirements: Time for a Science Court?

Kristen Potter*

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Judicial review of U.S. Forest Service (Forest Service) decisions made under the National Forest Management Act (NFMA) plays an essential role in the protection of one of the nation's most precious resources, National Forests.¹ Absent judicial oversight, the Forest Service would go unchecked and could violate NFMA with little consequence. Traditionally, the Forest Service decisions

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1. This article's focus on NFMA is not meant to overlook the significant impact of other laws, such as the Endangered Species Act, the National Environmental Protection Act, or the Clean Water Act on the management of national forests.

enjoyed great deference by the courts. Many hoped the structure and substance of NFMA and its regulations would provide a much less deferential role for the courts. However, it is unclear whether this has uniformly been the effect. Additionally, courts struggle in reviewing issues steeped in the continuously evolving science of forest ecosystems and management, leaving many critical of the excessive deference afforded to the agency. As a result, critics proposed creating specialized or science courts, better versed in the technical aspects of forest ecosystems. However, even with all the valid criticisms of the present system, a specialized court does not provide a satisfactory solution.

This article is divided into five sections. Section I reviews the legal and historical background of forest law, culminating in NFMA, and establishes why many believe that the NFMA provides a greater role for courts. Section II presents the underpinnings of judicial review and deference to administrative agencies, such as the Forest Service. Section III provides examples of the deference applied in challenges to the Forest Service's attempted compliance with NFMA's diversity requirements. Section IV discusses the benefits and shortcomings of a specialized court in addressing the criticisms of the present system. Section V concludes that a specialized court is not the best remedy.

I. HISTORY OF FOREST LAW AND MANAGEMENT

A. *Legislation Before 1976*

In 1891, Congress passed the Creative Act, authorizing the President to create forest reserves by setting aside lands in the public domain.² As a result, approximately thirteen million acres were set aside as reserves over the next several years.³ However, no funds were appropriated to allow for federal management of the newly reserved lands.⁴

2. See Creative Act, ch. 561, § 24; OR. REV. STAT. § 1095, 1103 (1891) (repealed by OR. REV. STAT. § 2792 (1976)); see also Charles F. Wilkinson & Michael H. Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 17-18 (1985).

3. See Wilkinson & Anderson, *supra* note 2, at 18.

4. Jack Tuholske & Beth Brennan, *The National Forest Management Act: Judicial Interpretation of a Substantive Environmental Statute*, 15 PUB. LAND L. REV. 53, 58 (1994).

Not until Congress passed the Organic Administration Act⁵ (Organic Act) in 1897 did it authorize and provide direction for forest management and provide appropriations therefor.⁶ The Act's foci were timber harvest and protection of water quality and quantity, as evidenced by the purposes it established for the national forests: "to improve and protect the forests within the boundaries, or for the purpose of securing favorable conditions of water flows, and . . . a continuous supply of timber" ⁷ Nevertheless, the purposes provided little more than vague guidance which instilled the Forest Service with broad discretion to manage as it deemed appropriate.

The Organic Act remained the primary controlling legal authority for forest management until Congress passed the Multiple-Use Sustained-Yield Act (MUSYA) in 1960.⁸ MUSYA changed the Forest Service's management mandate by broadening the purposes from timber production and protection of water quality and quantity to include the promotion and protection of recreation, wildlife, and fish and range resources.⁹ While the MUSYA's recognition of multiple uses for the nation's forests was significant, in practice the statute did not effectively shift the Service's narrow focus away from natural resource extraction and use such as timber production.¹⁰ Likely, the maintenance of the status quo resulted from the MUSYA's lack of substantive standards for decision making and incorporating multiple uses. The MUSYA merely required the Forest Service to give different resources "due consideration" in its management efforts.¹¹ As a result, no concrete standards existed which would allow parties to successfully bring legal challenges to Forest Service action. Consequently, the agency maintained significant discretion under the MUSYA and was extremely successful in the limited challenges brought pursuant to the act.¹²

5. Wilkinson & Anderson, *supra* note 2, at 18 n. 58.

6. Tuholske & Brennan, *supra* note 4, at 58.

7. 16 U.S.C. § 475 (1982).

8. See Pub. L. No. 86-517, § 1; 74 Stat. 215 (codified at 16 U.S.C. §§ 528-531).

9. See 16 U.S.C. § 528 (1982).

10. Tuholske & Brennan, *supra* note 4, at 59-60 (noting the increase in annual harvest from 8 billion board feet in 1959 to 12 billion board feet in 1966 as evidence of the Forest Service maintaining timber production as its priority); DAVID A. CLARY, *TIMBER AND THE FOREST SERVICE* 3, 156-63 (1986).

11. 16 U.S.C. § 529 (1982).

12. The oft-quoted passage from *Perkins v. Bergland*, 608 F.2d 803, 806 (9th Cir. 1979) (quoting *Strickland v. Morton*, 519 F.2d 467, 469 (9th Cir. 1975)), that the

In the mid-1960's, the environmental movement began to have increasing impacts on politics in the United States and specifically on Forest Service mandates and practices.¹³ The public, and ultimately Congress, began to express deep concern for federal forest practices including excessive clearcutting.¹⁴ As a result, the Bolle Report was issued in 1970 decrying the Forest Service's management practices.¹⁵ Specifically, the report criticized the Forest Service's emphasis on timber harvest while ignoring MUSYA's multiple use mandate.¹⁶ The report led to Senate investigatory hearings on the wisdom and use of clearcutting, which became known as the "Church Hearings."¹⁷ Like the Bolle Report, the Church Hearings focussed on the Forest Service's overemphasis on timber production and extensive reliance on clearcutting.¹⁸ The hearings resulted in the "Church Guidelines," which proposed a number of limitations on timber harvests, including a regeneration requirement, protection of soil and watersheds, and size of clearcuts.¹⁹ Congress did not immediately enact the Church Guidelines into law; however, they laid the groundwork for and NFMA and many of the specific limitations were ultimately incorporated almost verbatim into NFMA.²⁰

Beyond the substantive management oriented concerns expressed by the Bolle Report and the Church Hearings, Congress was also troubled by the Forest Service's lack of uniform planning for all resources.²¹ As a result, Congress passed the Forest Range-

MUSYA "breathes discretion at every pore" summarizes judicial review under the MUSYA. Tuholske & Brennan, *supra* note 4, at 60.

13. See generally Tuholske & Brennan, *supra* note 4 (discussing the environmental movement and its political and social force in the 1960s and 1970s).

14. The term "clearcutting" is used to describe various silvicultural practices in which all trees in a specific area are removed, allowing for seeding, artificial or natural, of a single-age stand of trees. SUBCOMM. ON PUBLIC LANDS OF THE SENATE COMM. ON INTERIOR AND INSULAR AFFAIRS, CLEARCUTTING ON FEDERAL TIMBERLANDS, 92d Cong. (2d Sess. Comm. Print 1972) [hereinafter CHURCH COMMITTEE HEARINGS].

15. At the request of Senator Metcalf (D-Montana), Arnold Bolle, then-dean of the Forestry School at the University of Montana, prepared the Bolle Report. Senator Metcalfe asked Bolle to investigate timber harvest practices on the Bitterroot National Forest. Arnold W. Bolle, *The Bitterroot Revisited: A University Review of the Forest Service*, 10 PUB. LAND L. REV. 1, 8 (1989).

16. See *id.*

17. CHURCH COMMITTEE HEARINGS, *supra* note 13. The late Senator Church (D-Idaho) chaired the hearings. Wilkinson & Anderson, *supra* note 2, at 138.

18. See Wilkinson & Anderson, *supra* note 2, at 141-45.

19. Tuholske & Brennan, *supra* note 4, at 62.

20. *Id.* at 63.

21. *Id.*

land and Renewable Resources Planning Act of 1974 (RPA).²² The RPA, in an attempt to improve funding to enable the Service to meet national goals for Forest Service Planning, requires the Forest Service to plan through the lens of nationwide goals and objectives.²³ To this end, the RPA requires a resource assessment,²⁴ a program setting long-term objectives and costs,²⁵ and annual reporting requirements.²⁶

Despite the Church Guidelines and the RPA, the public remained circumspect of the Service's clearcutting practices. This concern culminated in litigation involving the Monongahela National Forest in West Virginia in which the Fourth Circuit held that the Organic Act effectively prohibited clearcutting in national forests.²⁷ Recognizing that this declaration jeopardized the entire timber sale program, Congress responded with NFMA.²⁸

B. *The National Forest Management Act*

NFMA, passed in 1976, after nearly two years of extensive debate, contains not only procedural requirements, but also embodies several substantive requirements.²⁹ NFMA's procedural requirements expand the RPA's forest planning guidelines by requiring the Forest Service to develop and periodically revise forest plans for 156 separate units in the National Forest System.³⁰ Congress,

22. Pub. L. No. 93-378, 2d Sess. (1974), 88 Stat. 476 (codified as amended at 16 U.S.C. §§ 1600-1614).

23. Tuholske & Brennan, *supra* note 4, at 63.

24. 16 U.S.C. § 1601(a). The Renewable Resource Assessment must be prepared every ten years.

25. *Id.* § 1602. The Renewable Resource Program requires a planning document every five years.

26. *Id.* § 1606(c). The Annual Report compares the Forest Service's actual activities with those proposed under the Renewable Resource Program.

27. West Va. Div. Of the Izaak Walton League of Am. v. Butz, 522 F.2d 945 (4th Cir. 1975). See Fredrico Cheever, *Four Failed Forest Service Standards: What We Can Learn From the History of the National Forest Management Act's Substantive Timber Management Provisions*, 77 OR. L. REV. 601, 625-32 (1998) (discussing the Monongahela litigation in-depth).

28. Tuholske & Brennan, *supra* note 4, at 64; Wilkinson & Anderson, *supra* note 2, at 155.

29. Tuholske & Brennan, *supra* note 4, at 65. See also Cheever, *supra* note 27, at 633-43 (containing an in-depth discussion of the bills proposed and the Congressional hearings involving NFMA's passage).

30. 16 U.S.C. § 1604(a) & (c) (1994). While commonly called "forest plans," § 1604 refers to land and resource management plans. See George C. Coggins, *The Developing Law of Land Use Planning on Federal Lands*, 61 U. COLO. L. REV. 307, 336-44 (1990) (containing an overview of NFMA's planning scheme and requirements).

understanding that successful forest management requires the application of scientific knowledge to the needs the country seeks to meet through the National Forest System, overlaid the planning process with substantive provisions. The provisions include: that the Forest Service promulgate regulations specifying guidelines for Forest Plans that will maintain diversity of plant and animal communities,³¹ monitor and evaluate the effects of management practices,³² permit increased harvest under certain conditions,³³ determine suitable lands for harvest,³⁴ and impose limits on even-age management.³⁵

However, cognizant of its own lack of scientific expertise and that scientific principles relevant to forest management would continue to evolve, Congress refrained from including concrete definitions and methodologies within the substantive requirements. Instead, Congress obliged the Secretary of Agriculture to appoint a scientific advisory committee (Committee) to aid the Service in promulgating NFMA's implementing regulations.³⁶ Three years after NFMA passed, the Committee issued a final report on proposed regulations.³⁷ Taking direction from NFMA, the Committee focused on specific planning procedures.³⁸ It felt that the regulations should not be specific in regard to prescriptions for on-the-ground management.³⁹ Instead, the Committee entrusted the Service with discretion for specific management decisions, discretion it expected the agency to exercise consistent with contemporary scientific understanding.⁴⁰ The regulations implementing NFMA were finally completed in 1982.

In spite of the Committee's own recognition that NFMA and its regulations are deferential to the Forest Service, the overall scheme is a profound change from Congress' traditional attitude of

31. 16 U.S.C. § 1604(g)(3)(B).

32. *Id.* at § 1604(g)(3)(C).

33. *Id.* at § 1604(g)(3)(D).

34. *Id.* at § 1604(g)(3)(E).

35. *Id.* at § 1604(g)(3)(F). The Committee was required to be composed of scientists outside of the agency.

36. *Id.* at § 1604(h)(1).

37. National Forest System Land and Resource Management Planning, 44 Fed. Reg. 26,554, 26,599 (1979).

38. *Id.* at 26,609.

39. *Id.*

40. *Id.*; Greg D. Corbin, *The United States Forest Services Response to Biodiversity Science*, 29 ENVTL. L. 377, 388-98 (1999); Cheever, *supra* note 27, at 649-56.

almost absolute deference.⁴¹ Its passage was heralded as “the most adventurous congressional incursion into the on-the-ground activities of the United States Forest Service.”⁴² The substantive limitations and detailed procedural requirements give courts more law to apply, and therefore more ability to keep the Service in check.⁴³ However, as described below, well-settled principles of administrative law have dampened some of this effect.

II. JUDICIAL REVIEW OF THE FOREST SERVICE ACTION UNDER THE NATIONAL FOREST MANAGEMENT ACT

Citizen groups challenging Forest Service actions pursuant to NFMA’s substantive requirements face many obstacles. Initially, they must overcome the several procedural barriers, such as standing, exhaustion and ripeness, before the court will even review the substance of their claims.⁴⁴ Once a citizen group “gets into the courthouse door,” as compared to the Forest Service, it still faces significant disadvantages.⁴⁵ Among these disadvantages are the many investigators and other personnel of the Forest Service, gathering evidence, preparing documents, and providing testimony, and the representation of experienced Justice Department Attorneys.⁴⁶

Potentially more significant, though, are the deference and the limited scope of review that the courts often give to Forest Service actions. Even though Congress intention in enacting NFMA, was to rein in some of the discretion and deference previously granted to the Forest Service, in managing the national forests,⁴⁷ many courts continue to grant a high level of deference to Forest Service action. Several commentators have questioned the wisdom of this approach and the reasons for the agency discretion and deference.⁴⁸

41. See Tuholske & Brennan, *supra* note 4, at 54; Stephanie M. Parent, *The National Forest Management Act: Out of the Woods and Back to the Courts?*, 22 ENVTL. L. 699, 711 (1992).

42. Wilkinson & Anderson, *supra* note 2, at 7.

43. Parent, *supra* note 41, at 711.

44. See Tuholske & Brennan, *supra* note 4, at 106-20. Standing and ripeness are not just procedural barriers, but, importantly are also Constitutional requirements.

45. Tuholske & Brennan, *supra* note 4, at 106.

46. Edward C. Fritz, *Broadening Judicial Review Under the National Forest Management Act*, 3 WIS. ENVTL. L.J. 27, 28 (1996).

47. Wilkinson & Anderson, *supra* note 2, at 67-72.

48. See *infra* Section III.

A. Deference to Agency Decisions

The Administrative Procedure Act of 1946 (APA) contains rules that establish the relationship between reviewing courts and administrative agencies, such as the Forest Service.⁴⁹ Previous to and since the enactment of the APA, the appropriate deference afforded to agency decision-making has been "inexact and unexplained science."⁵⁰ However, as stated above, under modern administrative law, courts afford great deference to agency interpretation and exercise of its authority. Discussed below are a couple of reasons for this phenomenon and the application of discretion through § 706 of the APA.

1. Separation of Powers

First, the Separation of Powers doctrine can limit judicial review.⁵¹ Congress, through powers granted by the Constitution, has the authority to delegate rulemaking to agencies within the executive branch. As our government and society become increasingly complex, this delegation becomes increasingly necessary to successfully carry out governmental functions. Once Congress properly delegates authority to an agency, the agency, in a sense, takes on legislative functions. Congress' requirement that the Forest Service, with the advice and counsel of the Committee, promulgate rules and policy under NFMA is a clear example. Even without this kind of explicit delegation, courts find that Congress implicitly delegates discretion to agencies to make rules and policy.⁵² Similarly, agencies, such as the Forest Service, are located in the Executive branch. The Supreme Court has reasoned that while agencies are not directly accountable to the public, the Chief Executive and Congress are and thus it is appropriate that agencies make policy choices.⁵³ Therefore, under this theory, the courts should not impermissibly interfere with the other branches' constitutional and delegated functions. In essence, courts merely should ensure that

49. 5 U.S.C. § 551 (1996).

50. Sidney A. Shapiro & Richard E. Levy, *Heightened Scrutiny of the Fourth Branch: Separation of Powers and the Requirement of Adequate Reasons for Agency Decisions*, 1987 DUKE L.J. 387 (1987).

51. The Separation of Powers doctrine has also been construed by courts to broaden judicial review of agency decisions in the form of the Non-Delegation doctrine, which until recently was dead-letter, however.

52. See *Chevron, U.S.A. Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 844-45 (1984).

53. *Id.*

agencies are acting within the parameters of the congressionally delegated authority. As a result, agency decisions deserve judicial deference.

2. Agency Expertise

Second, agencies are considered specialized institutions that Congress empowers to make decisions due to their increased knowledge of the subject matter for which they are delegated responsibility. Therefore, deference is customary when the agency has technical and scientific expertise that is applied to complex management issues or rulemaking problems.⁵⁴ This reasoning is especially prevalent in environmental context such as forestry practices and management. The Supreme Court clearly enunciated the high level of deference agency action should be accorded in *Marsh v. Oregon Natural Resources Council*.⁵⁵ The Court stated, "because analysis of the relevant documents requires a high level of technical expertise," we must defer to "the informed discretion of the responsible federal agencies."⁵⁶ Courts have found that "expert" agencies are entitled to discretion even if the court determines that views of contrasting agencies are more persuasive.⁵⁷

3. Arbitrary and Capricious Review

The deferential standard which applies to judicial review of most claims under NFMA is articulated in section 706 of the APA: the "arbitrary and capricious" standard.⁵⁸ To determine whether the Forest Service action is arbitrary and capricious, the court must determine whether the Forest Service "consider[ed] [all] of the relevant factors and whether [or not] there was a clear error of judgment."⁵⁹ However, the courts should not simply rubberstamp the agency's determinations. Agency actions must be reversed when the agency fails to "examine the relevant data and articulate

54. Jon. A. Souder & Sally K. Fairfax, *Arbitrary Administrators, Capricious Bureaucrats and Prudent Trustees: Does it Matter in the Review*, 18 PUB. LAND & RESOURCES L. REV. 165 (1997).

55. 490 U.S. 360 (1989).

56. *Id.* at 377.

57. *Id.* at 378.

58. 5 U.S.C. § 706 (2)(a).

59. *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971) (*abrogated by Calitano v. Sanders*, 430 U.S. 99 (1977)).

a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'"⁶⁰

A deferential standard applies to the Forest Service's interpretation of regulations and statutes⁶¹ and to its methodology and factual determinations.⁶² Courts accord the greatest deference when reviewing the Service's choice of scientific methods by which it collects and generates data to use in decision making and to its ultimate factual determinations.⁶³ As referenced earlier, this deference is a result of the courts' unwillingness, as a body of generalist judges, to second-guess the agency's scientific and technical expertise, which is required in many areas of forest management.⁶⁴ Moreover, the Supreme Court stated that a court must be most deferential when reviewing an agency determination involving technical issues at the "frontiers of science."⁶⁵

B. Scope of Judicial Review

The foundation for judicial review is the record of the Service at the time that the decision under review was made.⁶⁶ Typically, courts should not look beyond the record by admitting new evidence.⁶⁷ The reasoning behind this limitation is similar to that upon which discretion is based: "consideration of evidence outside the record undermines the administrative process and opens the

60. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)).

61. Deference to legal interpretation of the Forest Service's own regulations is higher than that of the statutes.

62. Tuholske & Brennan, *supra* note 4, at 128.

63. *Id.*

64. See e.g. *Cronin v. United States Dep't of Agric.*, 919 F.2d 439, 444 (7th Cir. 1990) (characterizing forestry as a technical field requiring almost absolute deference by "generalist judges"); see also *supra* Section II.C.

65. *Baltimore Gas & Elec. Co. v. Nat'l Res. Def. Council (Vermont Yankee IV)*, 462 U.S. 87, 105-06 (1983).

66. *Overton Park*, 401 U.S. at 420.

67. There are exceptions to this general rule, but they are rare. For example, under NFMA, courts have accepted and considered additional evidence offered by citizen groups in order to assist the court in understanding complex environmental issues. See Tuholske & Brennan, *supra* note 4, at 122-24 (discussing a handful of cases in which courts have considered evidence outside the record). See also Ronald M. Levin, *Scope-of-Review Doctrine Restated: An Administrative Law Section Report*, 38 ADMIN. L. REV. 239, 273 (1986) (discussing the "substantial evidence" standard by which courts measure whether the evidence supports the administrative hearing conclusion).

door for the court to substitute its judgment for that of the agency.”⁶⁸

As a practical matter, limiting review to the record increases the advantages afforded to the Forest Service in defending its actions under NFMA in court. The record in Forest Service decisions is usually developed informally by line officers and field personnel.⁶⁹ Scientific studies and reviews critical of the Service’s decisions are sometimes only included in the record by way of the administrative appeals process.⁷⁰ Citizen groups involved in the administrative appeals process are not required to (and rarely do) have legal representation.⁷¹ The appeals process does not include a formal hearing, nor is the decision made after independent review by an administrative law judge.⁷² Furthermore, the time frame for an appeal is short, allowing little time for significant information gathering and development of studies and analysis.⁷³ Therefore, when the record reaches a reviewing court, the record is usually limited in scope and weighted heavily in favor of the materials prepared by the Forest Service to support its determinations.⁷⁴

III. EXAMPLES OF DEFERENTIAL REVIEW IN THE CONTEXT OF NFMA’S DIVERSITY REQUIREMENT

As stated above, judicial deference to the Forest Service is applied to almost every sort of decision, even to statutory interpretation,⁷⁵ which is typically within the province of the courts.⁷⁶

68. *Overton Park*, 401 U.S. at 416; see also Tuholske & Brennan, *supra* note 4, at 121 (“When the administrative record reaches the district court it can be fairly limited in scope, and is heavily weighted in favor of materials prepared by the Forest Service.”).

69. Tuholske & Brennan, *supra* note 4, at 121. The process by which the Forest Service typically makes decisions is informal in nature. It is hard to categorize the process as purely rulemaking or adjudication, however, typically it is more like the latter. In contrast, in formal adjudication the record is significantly more in depth because the process is an adversarial, trial-like proceeding in which the evidence is admitted and witnesses are heard and cross-examined.

70. See *id.*; see also 36 C.F.R. § 217 (1999) (governing administrative appeals of Forest Service decisions made pursuant to NFMA).

71. Tuholske & Brennan, *supra* note 4, at 121.

72. *Id.*

73. See *id.*

74. *Id.*

75. Unless, of course, it is clearly inconsistent with the plain meaning of the statutory language.

76. See *id.* The court will defer to “reasonable agency determination when the statutory language is broad or ambiguous.”

However, the willingness of courts to almost blindly defer to the agency's discretion without significant explanation is most pervasive when reviewing scientific methodological and factual determinations.⁷⁷ This is not to suggest that the Forest Service always avoids courts that are unwilling to restrict their discretion with respect to scientific decisions in light of NFMA's substantive requirements.⁷⁸ A review of cases involving challenges to the Service's compliance with NFMA's substantive provisions requiring biodiversity exemplifies the tensions between unquestioning deference, or rubberstamping, and a probing review requiring adequate explanations for decisions.⁷⁹

A. *Sierra Club v. Marita*

In *Sierra Club v. Marita*,⁸⁰ the plaintiffs challenged the Forest Service's plans regarding two National Forests in Wisconsin.⁸¹ Specifically, the plaintiffs criticized the agency's unwillingness to apply conservation biology principles⁸² in the forest plans.⁸³ Instead of providing for the "sufficiently large" blocks of contiguous habitat that the plaintiffs claim are required for biodiversity, and are championed by conservation biology, the Forest Service's plans created "a patchwork of different habitats."⁸⁴ The Forest Service relied on extrapolation of habitat information. Specifically, the agency used timber data to split the forest into different types of habitat and then determined the diversity of the wildlife by assessing diversity of habitat without actually assessing populations on the ground.⁸⁵ The plaintiffs' criticism of the Service's methodology was not made without significant support;⁸⁶ the court had over a hundred scien-

77. See Tuholske & Brennan, *supra* note 4, at 169, 129.

78. See *id.* at 129.

79. See *id.* at 128-29.

80. 46 F.3d 606, 609 (7th Cir. 1995).

81. See *id.*

82. Conservation biology principles require leaving large tracts of habitat areas to protect biodiversity. See generally Patricia Smith King, *Applying Daubert to the "Hard Look" Requirement of NEPA: Scientific Evidence Before the Forest Service in Sierra Club v. Marita*, 2 WIS. ENVTL. L.J. 147, 159-62 (providing an introduction to principles of conservation biology); Reed F. Noss, *Some Principles of Conservation Biology, As they apply to Environmental Law*, 69 CHI.-KENT L. REV. 893 (1994) (discussing the general principles of conservation biology).

83. *Marita*, 46 F.3d at 610.

84. *Id.* at 617.

85. See *id.*; see also Corbin, *supra* note 40, at 404-06 (citing WILLIAM S. ALVERSON ET AL., *WILD FORESTS: CONSERVATION BIOLOGY AND PUBLIC POLICY* 213-16 (1994)).

86. See *Marita*, 46 F.3d at 618.

tific articles, thirteen affidavits, and amicus briefs from well respected scientific institutions supporting the plaintiffs' position at its access.⁸⁷

The court in *Marita*, seemingly ignoring all of the information in front of it, found that the agency's action was not arbitrary and capricious.⁸⁸ The court avoided discussing the merits of conservation biology.⁸⁹ Rather, it accepted the agency's bare assertion that, although it had considered conservation biology as a method to meet its biodiversity mandate, the principles were uncertain as applied to the particular forests.⁹⁰ The plaintiffs, attempting to discredit this argument as an "adequate explanation" for ignoring the teachings, indicated to the court the basic nature of science inquiry always results in some level of uncertainty and can never be tested at every location.⁹¹ Furthermore, the amici scientific societies contend that, by allowing the Service to use this weak explanation, the court would, in effect, insulate the agency from ever considering scientific advances.⁹² This result is directly contrary to the Scientific Committee's intent in the regulations.⁹³ As a result, the court expanded the agency's discretion beyond what should be afforded to an "expert" agency, by seemingly rubberstamping the decision in the face of basic principles that suggested it was not consistent with fundamental principles widely accepted in conservation biology and a large part of the scientific community.

B. Inland Empire Public Lands Council v. United States Forest Service

In *Inland Empire Public Lands Council v. United States Forest Service*,⁹⁴ plaintiffs challenged eight timber sales in the Kootenai National Forest in Montana.⁹⁵ Plaintiffs urged that the Service violated NFMA because it did not provide an adequate population viability analysis for species recognized as sensitive in the forest

87. *See id.* at 618-22.

88. *Id.* at 621-24; *but see* King, *supra* note 82, at 162-67; Corbin, *supra* note 40, at 400-02 (describing how conservation biology principles were generally accepted at that time).

89. *See Marita*, 46 F.3d at 621.

90. *Id.*

91. *Id.* at 622.

92. *See id.*; *see also* Corbin, *supra* note 41, at 405-06 (summarizing plaintiff's and amicus argument regarding scientific uncertainty).

93. 36 C.F.R. § 219.19 (1999).

94. 88 F.3d 754 (9th Cir. 1996).

95. *Id.* at 758.

plan.⁹⁶ Specifically, the plaintiffs criticized the analysis because it did not include any estimation of species' population or related information or analysis, such as actual population size, trends within the population, and intra-population dynamics between bordering forests.⁹⁷ Instead, the Service relied on extrapolations of studies of a few sensitive species that simply included estimating the number of individuals in the population by calculating the acreage in the planning area.⁹⁸ The Forest Service defended its analysis as sufficient to meet NFMA requirements.⁹⁹ While the Forest Service's analysis may have been sufficient, current scientific norms suggested otherwise.¹⁰⁰

The court in *Inland Empire* initially recognized that NFMA's mandate included a substantive duty to protect biodiversity and that the viability requirement "applie[d] with special force to 'sensitive' species."¹⁰¹ Even so, the court concluded that the manner by which the Service satisfied the requirement was entitled to deferential review, especially because "questions of scientific methodology [were] involved."¹⁰² As a result, under the arbitrary and capricious standard, with scant discussion as to why the agency made a "reasonable assumption" that habitat acreage was directly related to population size absent actual measurement of population, the court deferred to the agency.¹⁰³ Additionally, the court found that it was not arbitrary and capricious for the Service to settle for a "less rigorous" analysis for species unlikely to be affected by management activities and to forego analysis of species' habitat requirements if the requisite data is not available.¹⁰⁴ This deference was accorded even though sensitive species were at

96. *Id.* (The species included lynx, boreal owl, flammulated owl, black-backed woodpecker, fisher, bull charr, and west-sloped cutthroat trout).

97. *Id.* at 758-60; *see also* Corbin, *supra* note 40, 399-400, n. 186 (supporting the assertion that studying biological populations requires an estimate of the population size).

98. *Inland Empire*, 88 F.3d at 759 (discussing the studies used by the Forest Service).

99. *See id.*

100. *Id.* at 759; *see also* Corbin, *supra* note 40, at 400.

101. *Inland Empire*, 88 F.3d at 759 (noting that the NFMA imposes substantive duties on the forest service.).

102. *Id.* at 760.

103. *Id.* at 761. The practical result of this decision is that the Service can rely on existing habitat data already in its possession, likely timber inventories, to make a calculation of individuals in a population absent actually counting the individuals. As a result, actual changes in the population may go undetected and viability will be assumed if a requisite amount of acres remain. Corbin, *supra* note 40, at 401.

104. *See Inland Empire*, 88 F.3d at 761-62.

stake, and even though NFMA contains specific monitoring requirements.¹⁰⁵

C. *Sierra Club v. Martin*

In *Sierra Club v. Martin*,¹⁰⁶ plaintiffs challenged multiple timber sales in two national forests in Georgia.¹⁰⁷ Plaintiffs argued that the sales would adversely affect wildlife, contrary to the Forest Service's determination.¹⁰⁸ Specifically, similar to *Inland Empire*, plaintiffs asserted that the agency violated NFMA by failing to obtain and consider population inventories and population trend data, instead relying on habitat monitoring to assess diversity and viability.¹⁰⁹ In contrast, the Service argued that the habitat data it collected was adequate to indicate that the sites of the timber sales either do not have a high potential for occupancy of species,¹¹⁰ or, in the alternative, demonstrated the continued viability of the species that do occupy the area.¹¹¹ Further, the Forest Service asserted that it was entitled to deference because it was within its discretion to make determinations of potential impacts relying on information other than population inventories.¹¹²

Unlike the courts in *Marita* and *Inland Empire*, the *Martin* court rejected the agency's arguments. The court reversed the action as arbitrary and capricious, finding that the Service failed to "examine the relevant data and articulate a satisfactory explanation" including no "rational connection between" the Service's determination that actual population data versus habitat extrapolation was required to form its viability assessment.¹¹³ This is significant because it seems to directly reject the deference afforded by the court in *Inland Empire*.¹¹⁴ However, it is important to note that the court did not overturn the agency's decision by necessarily ac-

105. *See id.*

106. 128 F.3d 1 (11th Cir. 1999).

107. *Id.*

108. *Id.* at 3.

109. *Id.* at 4.

110. Species, for this purpose, encompasses what the court called PETS, or proposed, endangered, threatened or sensitive species. *Id.*

111. *Id.*

112. *Id.*

113. *Id.* at 5.

114. *See id.* at 7, n.10 (stating that "we respectfully differ with the Ninth Circuit's conclusion . . . that habitat analyses suffice to satisfy the requirements of 36 C.F.R. § 219.19." However, the court did go on to note that the *Inland Empire* court was faced with a "very different set of facts").

cepting or rejecting the science and methodology used by the agency in light of proposed superior science and methodology per se. Rather, the court was very careful in basing its decision on interpretation of NFMA, its regulations, and the forest plans themselves.¹¹⁵

IV. IS THE SOLUTION A SCIENCE COURT?

In light of discrepancies like those outlined in the cases above, between both the Forest Service scientists and outside scientists, and widely accepted principles and the potential outcomes in different courts, one wonders if things need to be changed. Some commentators feel that the deference afforded to the Forest Service by the courts, even keeping the widely-held criticism by others in the scientific community in mind, is entirely appropriate and a necessary part of the administrative governmental system. As discussed above in section II(A), the Forest Service, not the courts, are charged with creating policy for the management of national forests. That policy often includes a determination of the risks and the uncertainties, which the agency charged with managing the forests, is willing to accept.

Further, contrary to the general population's belief that science is exact, neutral, and can produce a single "right answer" on how the forest should be managed,¹¹⁶ ecosystems are "more complex than we think" and scientific knowledge is constantly advancing.¹¹⁷ Additionally, some urge that excessive intrusiveness of the courts limits the Forest Service's ability to carry out its mandate in a timely and efficient fashion because it impedes long-term planning and priority-setting.¹¹⁸

115. See *id.* at 5 (pointing to several instances where the Forest Service ignored its own conclusions and the clear language of the forest plan).

116. See Jane Maienschein, *Biology and Law: Challenges of Adjudicating Competing Claims in a Democracy*, 38 JURIMETRICS J. 151, 158-64 (1998) (discussing the changing nature of science in relation to the law).

117. See Julie A. Weis, *Eliminating the National Forest Management Act's Diversity Requirement as a Substantive Standard*, 27 ENVTL. L. 641, 653-54 (citing Reed F. Ross, *Some Principles of Conservation Biology, As they Apply to Environmental Law*, 69 CHI.-KENT L. REV. 893, 898 (1994)). To emphasize this point, Ross stated that "ecosystems are not only more complex than we think, but more complex than we can think" and "while understanding ecosystem structure and function is a difficult enough task to humble the finest scientist, it seems more daunting to the finest legal minds." *Id.* at 653-54.

118. See Richard N.L. Andrews, *Long-Range Planning in Environmental and Health Regulatory Agencies*, 20 ECOLOGY L.Q. 515, 545-46 (1993); see also Patricia

On the other hand, many are disenchanted with the Forest Service's actions and the courts' deference thereto, as is readily made apparent by the vast amount of legal challenges brought against the Service each year. This may be based on several factors, including: the track record of the Forest Service in the past, the pervasiveness of the one-time largely predominant focus on timber production and resource extraction at the expense of wildlife and aesthetics, the level in the Forest Service at which significant decisions are actually made,¹¹⁹ and political factors such as the influence of powerful timber companies on the processes. This is exacerbated by the advantages, beyond deference, which the Forest Service enjoys when litigating the challenges.¹²⁰

In the face of similar criticisms in other areas of environmental and administrative law, some have proposed the creation of specialized or science courts, institutions designed to deal with factual technical issues.¹²¹ While specialized courts present an appealing option for those disenchanted with the present system, the wisdom and practicality of such courts have often been criticized, as discussed below. Several different forms of courts have been proposed. For my purposes, I limit my analysis to Article III Courts for which a judge or panel is appointed based on his or her special background knowledge in the science involved in forestry and ecosystem management.

A. *Benefits and Shortcomings of a Science Court*

There are several arguments in favor of specialized review of administrative action. First, proponents maintain that a specialized

Wald, *Regulations at Risk: Are Courts Part of the Solution or Most of the Problem*, 67 S. CAL. L. REV. 621, 625-29 (1994) (discussing the theory that the extensive requirements substantially slow the agency's progress).

119. Specifically, local managers are responsible for forest plans and some argue that the local influence of the communities dependent upon the resources play too significant a role.

120. See *supra*, Section II.

121. See Arthur Kantrowitz, *Controlling Technology Democratically*, 63 AM. SCIENTIST 505 (1975); Joel Yellin, *Science, Technology, and Administrative Government: Institutional Designs for Environmental Decisionmaking*, 92 YALE L.J. 1300, 1301 n.3 (1983) (stating that reformers believed that social and economic welfare would be promoted by "expert" decision-making); Harold H. Bruff, *Coordinating Judicial Review in Administrative Law*, 39 UCLA L. REV. 1193 (1992) (discussing five possible methods for reducing the disadvantages of decentralization without increasing the need for Supreme Court intervention, including the creation of a specialized Administrative Court).

court will promote consistency and uniformity of decisions.¹²² Because the Forest Service is a centralized, hierarchical agency, this is particularly compelling.¹²³ In taking action, the Service need not tailor its policy and decision-making processes in order to conform to what any given judge, district or circuit may require.¹²⁴ Additionally, forum shopping by those challenging the agency's decisions would be eliminated.¹²⁵ In the same vein, a specialized court would result in coherence in NFMA's scheme.¹²⁶ Different from consistency, coherence demands not uniformity of legal rules, but rather a unitary vision of NFMA and its goals.¹²⁷ Both consistency and coherence would promote the efficiency and uniformity that Congress envisioned for the management of the national forests.¹²⁸

Second, a specialized court will produce expeditious decisions while decreasing the caseload burdens of other courts.¹²⁹ Major challenges to Forest Service actions can impose exceptional burdens on the courts.¹³⁰ No one disputes that there has been a sharp increase in the volume of litigation against the Forest Service since Congress passed NFMA. Typically, the cases are very long, beginning with a request for preliminary injunctive relief and often continuing for years. A court well versed in the specialized issues surrounding the litigation would be able to quickly resolve the challenge, while allowing the Service to continue its management efforts.

Finally, and likely the strongest argument in favor of a specialized court, is the potential for more accurate results in complex areas of scientific facts and methodologies that face courts reviewing Forest Service decisions. Similar concerns prompted Congress, when it passed the Clean Water Act, to request a study of the feasibility and desirability of establishing a specialized court with jurisdiction over environmental matters.¹³¹ As evidenced by the cases

122. David P. Currie & Frank I. Goodman, *Judicial Review of Federal Administrative Action: Quest for the Optimum Forum*, 75 COLUM. L. REV. 1, 65 (1975).

123. See Bruff, *supra* note 121, at 1195-97.

124. *Id.* at 1205-07.

125. Richard L. Revesz, *Specialized Courts and the Administrative Lawmaking System*, 138 U. PA. L. REV. 1111, 1116 (1990).

126. *Id.* at 1117.

127. *Id.*

128. See *supra*, Section I.

129. See Bruff, *supra* note 121, at 1228; see also Revesz, *supra* note 125, at 1120.

130. See Revesz, *supra* note 125, at 1120.

131. Such a court was never established. Scott C. Whitney, *The Case for Creating a Special Environmental Court System*, 14 WM. & MARY L. REV. 473, 475-504 (1973).

described in section III, generalist judges are typically unwilling to even look at the merits of scientific challenges to Forest Service action. However, judges with technical backgrounds are more likely to review challenges and underlying actions more critically, with competence and confidence.

For all the positives that a proposed science court may offer, there are potentially more compelling shortcomings. First, there is significant commentary that suggests that a specialized court could exhibit stronger biases than other generalist courts, particularly toward the Forest Service.¹³² Much of the potential bias flows from the mechanism by which federal judges are appointed.¹³³ While the methods of appointing federal judges have been criticized because of the hazards of political influence, this would be aggravated with respect to specialized appointments.¹³⁴

The President, with advice and consent of the Senate, appoints judges.¹³⁵ The Committee on the Judiciary has the responsibility for reviewing nominees for generalist federal judgeships.¹³⁶ Additionally, the American Bar Association formally evaluates nominees.¹³⁷ In both instances, the reviewing bodies draw on members from a broad spectrum of the legal profession. However, in the case of a specialized court, the bar groups concerned with the court's jurisdiction will play the largest role in the recommendation and appointment process.¹³⁸ As the groups with interest in cases that fall within jurisdiction of a special court for reviewing forest management decisions, both environmental and timber, represent a narrow segment of the legal profession, "capture" of the court is a greater possibility.¹³⁹ This is exacerbated by the fact that capture of a specialized court has greater potential impact than capture of a single court in the generalist, multi-circuit system.¹⁴⁰

132. See Bradford C. Mank, *Protecting the Environment for Future Generations: A Proposal for a "Republican" Superagency*, 5 N.Y.U. ENVTL. L.J. 444, 472 (1996) (citing several articles discussing the considerable debate over whether the Tax Court is biased in favor of the government). *Id.* at n.147.

133. Paul D. Carrington, *Crowded Dockets and the Courts of Appeals: The Threat to the Function of Review and the National Law*, 82 HARV. L. REV. 542, 606-07 (1969).

134. *Id.*

135. U.S. CONST. art. II, § 2, cl.1.

136. Revesz, *supra* note 125, at 1148 (citations omitted).

137. *See id.*

138. *See id.*; see also Ellen R. Jordan, *Specialized Courts: A Choice?*, 76 NW. U. L. REV. 745, 748 (1981).

139. Revesz, *supra* note 125, at 1148-49.

140. *See id.*

Moreover, there would likely be a similarity between the process of nominating an agency head and of a specialized judge that will ultimately review the agency head's decision.¹⁴¹ Therefore, those interests that are able to influence the appointment of Forest Service officials would likely have the same successes with respect to judges. As a result, review could prove to be a relatively empty gesture. Further, because the Forest Service is within the Executive Branch, the Justice Department has an incentive to secure nomination of judges sympathetic to the Forest Service enhancing Justice's effectiveness as a lawyer for the agency.¹⁴² Therefore, any resulting bias will likely flow toward the Forest Service.¹⁴³ Consequently, disenchantment with the present system based on the deference generalist judges accord the agency would not be remedied.

Further, the theory behind the success and utility of a specialized science court is premised on the notion that it is possible to separate scientific facts from political, normative, and legal issues.¹⁴⁴ But, as alluded to earlier, "there is a 'large gray area between pure science and pure policy' that cannot be addressed purely by scientific analysis because of scientific uncertainty or the presence of economic or social factors."¹⁴⁵ It is in this "gray area" that the Forest Service largely performs its duties, makes its decisions, and takes action. Further, due to this complexity Congress delegated rulemaking authority to the Forest Service.¹⁴⁶ Were judges in specialized courts to unrealistically attempt to separate the unseparable scientific, political, and legal issues, the foundation of Separation of Powers may be disturbed. Scientific "experts" within the agency are not restricted to technical matters, nor are generalist decision makers restricted to purely legal and normative issues.¹⁴⁷ Real decisions within the Forest Service can be the result of compromise between competing interests and can occur from

141. *See id.* at 1151.

142. *Id.* at 1151-52.

143. *See id.* at 1152-53 (discussing the fact the Congress had similar fears about the Government's influence over the Tax Court and, as a result, repeatedly considered prohibiting formal officials from serving on the court); *see also* Mank, *supra* note 132, at 472.

144. Abraham D. Sofaer, *The Science Court: Unscientific and Unsound*, 9 ENVTL. L. 1, 5-6 (1978); *see also* Yellin, *supra* note 121, 1305-08.

145. Mank, *supra* note 132, at 471 (quoting William Allen, Note, *The Current Federal Regulatory Framework for Release of Genetically Altered Organisms Into the Environment*, 42 FLA. L. REV. 531, 537-38 (1990)).

146. *See supra*, Sections I.B & II.A.1.

147. Yellin, *supra* note 121, at 1313.

the top down. Scientific and technical advice can vary depending on how the questions are asked. Therefore, the primary premise is for a specialized court is false, making it a disappointing solution to existing problems.

V. CONCLUSION

The creation of a science court has been widely criticized, contains many potential downfalls, and the likelihood that a specialized court would ever be established to review Forest Service actions seems grim, making it an unrealistic approach. A specialized court will not remedy many of the perceived problems with present review of Forest Service action nor would it be likely to stay within the confines of a properly functioning administrative government. However, I do not believe that the super-deferential approach evidenced by some courts in recent cases encourages the reasoned decision making essential to the legitimacy of the Forest Service's management decisions and required for the prosperity of the nation's most precious resource.

The shortcomings present in judicial review can be addressed within the existing legal framework by generalist judges. Most importantly, judges must truly and uniformly ensure that the Forest Service has justified its substantive actions to the court in a logical, coherent and succinct fashion rather than simply rolling over when science is involved. The performance of this necessary judicial role can take many forms and need not be overly intrusive. For example, courts could be more liberal in allowing review beyond the record in appropriate circumstances. Along the same lines, the judiciary could grant de novo review under APA § 706(2)(F) to ascertain whether the Forest Service has complied with NFMA and its regulations.¹⁴⁸

Additionally, judges can appoint experts¹⁴⁹ and technical advisors¹⁵⁰ to aid in their understanding of the science involved in the

148. *Overton Park* has seemingly restricted the option to use of de novo review under § 706(2)(F) in informal rulemaking to circumstances in which independent judicial fact finding is necessary. 401 U.S. at 415. Only one court has granted de novo review since *Overton Park*; but see Fritz, *supra* note 46, at 30-35 (arguing that *Overton Park* may not have restricted de novo review to the extent lower courts have assumed and further that the dicta in the case is contrary to the APA's legislative history).

149. FRE 706 expressly authorizes court appointed experts.

150. The court has inherent authority to appoint technical advisors. See Reilly v. United States, 863 F.2d 149, 154-55 (1st Cir. 1988); see also Federal Judicial Center, Reference Manual on Scientific Evidence 531 (1994).

litigation in order to better equip themselves to adequately review Forest Services decisions.¹⁵¹ Some have cautioned against this approach as the advisor or expert may have too great an influence on the judge's decision.¹⁵² However, this could be mitigated to a considerable degree by ensuring that the parties participate in selection of the advisor and are present when the judge and expert or advisor engage in dialogue.¹⁵³

On a more basic level, in some circumstances judges can rely on NFMA and its regulations to evaluate whether the Forest Service provided adequate reasons for its action. Because the statute and regulations provide for such extensive procedure as well as some substantive requirements, courts should ensure that the Service fully complied before accepting decisions. For example, the extensive monitoring and assessment provisions allow a judge to determine whether the agency's decisions are appropriately based upon its past management successes and failures. If the agency has not complied with the requirements, then the court may find that the agency has not articulated an adequate connection between the facts and conclusions, or failed to consider all relevant factors. The court could determine whether the agency satisfied its own procedural requirements designed to ensure it accounts for all valid scientific information available without having the court adjudge substantive scientific matters. This may be an oversimplification for many issues that arise. However, that does not preclude its effectiveness in the appropriate circumstances.

All in all, judicial review is only a final check on the process. No matter what outcome any party or interest desires, judges can only act within the bounds of the constitution and the existing administrative system. In the end, to guarantee more effective judicial supervision of Forest Service practices, Congress needs to establish more definitively worded and concretely substantive management standards.

151. Judge Marsh used a technical advisor in *United States v. Oregon*, 787 F. Supp 1557 (D. Or. 1992). He explained that he utilized the advisors services merely to familiarize himself with technological and biological issues that arose in the case and that he did not ask for or receive the advisors opinion on any of the issues. See Samuel H. Jackson, *Technical Advisors Deserve Equal Billing with Court Appointed Experts in Novel and Complex Scientific Cases: Does the Federal Judicial Center Agree*, 28 ENVTL. L. 431, 462 (1998).

152. See, e.g., Patricia M. Wald, *Making "Informed" Decisions on the District of Columbia Circuit*, 50 GEO. WASH. L. REV. 135, 152-54 (1982).

153. This was not the case with Judge Marsh and his technical advisor. Jackson, *supra* note 151, at 462.