

WIELDING A FINELY CRAFTED LEGAL SCALPEL: WHY COURTS DID NOT CAUSE THE DECLINE OF THE PACIFIC NORTHWEST TIMBER INDUSTRY

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Judicial decisions in challenges to logging projects must interpret statutory and regulatory protections for national forests; consequently, judicial decisions affect both local economies and the environment. But have courts overstepped the bounds of judicial review, causing a decline in the Pacific Northwest's logging industry? This chapter considers that question in the context of challenges to logging projects under the National Forest Management Act (NFMA) and the National Environmental Policy Act (NEPA)—challenges examined under the Administrative Procedure Act's deferential arbitrary and capricious standard of review.

*Recently, the Ninth Circuit has considered the level of scrutiny courts should give the United States Forest Service's scientific methodology in forest management decisions. In 2007, when a panel of the Ninth Circuit decided *Lands Council v. McNair*, the discussion of allowable judicial scrutiny erupted into a debate over values. Judge Smith, in a special concurrence, alleged that "blunderbuss" judicial injunctions based on misconstruction of federal law had substantially contributed to the decline of the Pacific Northwest's timber industry. Judge Ferguson, who authored the panel's opinion, wrote separately to respond. In January 2008, the Ninth Circuit agreed to rehear the case en banc. In June 2008, after the author submitted this article, the Ninth Circuit issued its en banc decision, reversing the three-judge panel. Still, the initial 2007 opinion—particularly the concurring opinions—holds enduring significance in the broader, ongoing discussion of the judiciary's role in reviewing agency decision making.*

Judge Ferguson's concurrence argues that the Pacific Northwest's timber industry decline is real, but not caused by judicial maintenance of

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Congress's values balance. This chapter supports this conclusion. It presents the view that arbitrary and capricious review permits limited judicial review of the Forest Service's scientific methodology, particularly given the statutory and regulatory emphasis on scientific decision making under both NFMA and NEPA. Since the onset of the Pacific Northwest's spotted owl debates, courts have exercised restraint in issuing injunctions. Judicial decisions have refused to mandate the Forest Service's adoption of scientific methodologies offered by plaintiffs when the agency presented a sound methodology of its own, and instead have applied the arbitrary and capricious review standard by asking merely whether the agency offered facts in support of its conclusions. Further, courts have the expertise necessary to review scientific methodology—an expertise recognized by the United States Supreme Court in other contexts. This past restraint and reviewing capacity demonstrate the ability of courts to wield a "finely crafted legal scalpel" in reviewing the Forest Service's methodology in decision making.

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I. INTRODUCTION: JOBS VERSUS THE ENVIRONMENT

Debates surrounding all areas of environmental policy fundamentally stem from clashes in values.¹ In the forest policy arena, clashes over values are epitomized by the timber harvest conflicts of the Pacific Northwest. One commentator described the region as the “crucible for forest policy changes” at the national level.² The Northwest’s timber conflict represents a classic “jobs versus the environment” story that grew heated during the decades-long spotted owl debate.³ During their campaign to protect the owl, environmentalists drew America’s attention to the importance of preserving old-growth forests and biodiversity; logging interests responded with evidence of regional economies and local communities’ reliance on resource extraction jobs.⁴ Under one view, the purpose of these public debates is to influence elected officials; thus, if persuasion is the goal, neither side’s evidence presents an accurate picture by fully considering the ability of economies, communities, and industries to respond dynamically to regulatory change.⁵ However, real and significant social, ecological, and economic change underlies such rhetoric and affects the lives of individuals and the environment that surrounds them.⁶

Courts play a consequential role in Pacific Northwest logging debates because they interpret statutory protections and review agency actions.⁷ Undoubtedly, judicial decisions at the project scale sometimes result in economic consequences for individuals.⁸ But do these impacts indicate that courts have overstepped the bounds of judicial review? Did courts cause a decline in the timber industry by issuing injunctions that overburden

¹ JUDITH A. LAYZER, *THE ENVIRONMENTAL CASE: TRANSLATING VALUES INTO POLICY* 1 (2d ed. 2006).

² George Hoberg, *Science, Politics, and U.S. Forest Service Law: The Battle Over the Forest Service Planning Rule*, 44 NAT. RESOURCES J. 1, 7 (2004).

³ LAYZER, *supra* note 1, at 192–93. See also Michael J. Mortimer, *The Delegation of Law-Making Authority to the United States Forest Service: Implications in the Struggle for National Forest Management*, 54 ADMIN. L. REV. 907, 923 (2002) (discussing environmentalists’ ability to nationalize the spotted owl debate).

⁴ LAYZER, *supra* note 1, at 192–93. See also Mortimer, *supra* note 3, at 923.

⁵ LAYZER, *supra* note 1, at 193, 218 n.6.

⁶ Compare DERRICK JENSEN & GEORGE DRAFFAN, *STRANGELY LIKE WAR: THE GLOBAL ASSAULT ON FORESTS* 10–11, 30–32 (2003) (reporting that America’s national forests provide habitat to over 3,000 species of fish and wildlife, but that loss of forest land specifically harms the species dependent on these forests; and noting that beyond tree-cutting, the environmental impacts extend to activities related to timber harvests, such as road building, which contributes to erosion, habitat fragmentation, and infiltration of non-native invasive species), with LAYZER, *supra* note 1, at 194 (reporting that 25% of all United States Forest Service timber sale revenue returns to the county in which the forest is located, meaning that cutbacks in national forest timber sales have real effects on local funding for schools, roads, and other services).

⁷ See Brenden Swedlow, *Scientists, Judges, and Spotted Owls: Policymakers in the Pacific Northwest*, 13 DUKE ENVTL. L. & POL’Y F. 187, 189 (2003), available at <http://www.law.duke.edu/shell/cite.pl?13+Duke+Envtl.+L.+&+Pol’y+F.+187+pdf>.

⁸ See *Lands Council v. McNair (Lands Council III)*, 494 F.3d 771, 779 (9th Cir. 2007) (acknowledging that logging companies intervening in a suit to enjoin a timber harvest project claimed an injunction of the project would force the timber companies that purchased the sales to lay off some or all of their workers).

defendants and give more relief to plaintiffs than equity requires?⁹ This chapter explores that question as presented in a 2007 Ninth Circuit decision—*Lands Council v. McNair* (*Lands Council III*).¹⁰ The analysis below supports the assertion in Judge Ferguson’s concurrence in the panel decision—that assigning a causal relationship between past judicial injunctions and a decline in Pacific Northwest logging is nothing more than “a text book logical fallacy: *post hoc, ergo propter hoc* (after this, therefore because of this).”¹¹

The traditional view places Congress at the helm in settling values debates, leaving agencies to rely on their expertise to implement congressional objectives.¹² But in the forest policy arena, little remains “settled” by congressional action that affords broad agency discretion,¹³ be it due to constraints on Congress’s time and resources, or intentional avoidance of difficult decisions by shifting responsibility to agencies.¹⁴ By some accounts, the absence of specific direction within the National Forest Management Act (NFMA),¹⁵ the major statute governing our nation’s forests, requires courts to step in to clarify the United States Forest Service’s (Forest Service) legal obligations.¹⁶

Congress’s passage of NFMA itself was in part a response to a Fourth Circuit decision to ban clear-cutting in national forests.¹⁷ While the court

⁹ See *id.* at 784 (Smith, J., specially concurring) (discussing injunctions as equitable remedies that must be “narrowly tailored” to place no more burden on defendants than necessary to remedy specific harms to the plaintiffs, rather than “enjoin all possible breaches of the law”).

¹⁰ *Id.* at 771.

¹¹ *Id.* at 786 (Ferguson, J., concurring).

¹² Hoberg, *supra* note 2, at 2–3.

¹³ Charles F. Wilkinson, *The National Forest Management Act: The Twenty Years Behind, The Twenty Years Ahead*, 68 U. COLO. L. REV. 659, 665 (1997) (“Today, the issue of timber harvesting in the national forests represents the single longest-running unresolved conflict in federal public land law and policy.”). Wilkinson also comments that generally, the National Forest Management Act affords broad discretion to agencies. *Id.* at 668.

¹⁴ Mortimer, *supra* note 3, at 921–22.

¹⁵ National Forest Management Act of 1976, 16 U.S.C. §§ 472a, 521b, 1600, 1604, 1611–1614 (2000) (amending Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476).

¹⁶ See, e.g., Mortimer, *supra* note 3, at 946–47 (noting that in addition to providing standing for legal challenges, the broad delegatory nature of statutes governing public lands management leads to legal challenges to define an agency’s obligations, particularly when a court finds the United States Forest Service misinterpreted congressional intent because, afterwards, all actions relying on that interpretation are suspect); see also Natural Resources Defense Council, Inc. v. Hodel, 624 F. Supp. 1045, 1063 (D. Nev. 1985) (“[T]he primary reason for the large scale intrusion of the judiciary into the governance of our society has been an inability or unwillingness of the first two branches of our governments—both state and federal—to fashion solutions for significant societal, environmental, and economic problems in America.”); Stephanie M. Parent, Comment, *The National Forests Management Act: Out of the Woods and Back to the Courts?*, 22 ENVTL. L. 699, 700 (1992) (noting Congress might have accomplished its goal of getting the practice of forestry out of the courts if it had legislated to limit the discretion of agencies in managing national forests).

¹⁷ W. Va. Div. of the Izaak Walton League of Am., Inc. v. Butz (*Monongahela*), 522 F.2d 945, 948 (4th Cir. 1975) (citing Organic Administration Act of 1897 (Organic Act), ch. 2, 30 Stat. 11,

rested its ban on its interpretation of a statute, passed roughly eight decades earlier, it specifically pointed to Congress as the proper forum for balancing values.¹⁸ The Fourth Circuit indicated that if the old congressional directive no longer served the public interest, “the appropriate forum to resolve this complex and controversial issue is not the courts but the Congress.”¹⁹

The role of the judiciary includes clarifying the legal obligations of the Forest Service in implementing congressional direction, but courts must hold agencies to the constraints Congress has set while adhering to the requirement that they not substitute their own views for those of the agency.²⁰ Dr. Charles Wilkinson, a member of the 1998 Committee of Scientists appointed by the Forest Service to review the land and resource management process, observed that in passing NFMA Congress set out substantive and procedural law for courts to apply, but hoped to “adopt substantial reform measures [without] intrud[ing] too much into technical, on-the-ground management.”²¹

Recent cases decided in the Ninth Circuit²² raise the question of just what level of scrutiny courts should give the methodology employed in the Forest Service’s technical, on-the-ground management determinations. In 2007, when a panel of the Ninth Circuit decided *Lands Council III*,²³ the discussion of allowable judicial scrutiny erupted into a debate over values. Judge Smith, in a special concurrence, alleged that “blunderbuss” judicial injunctions based on misconstruction of federal law had substantially contributed to the decline of the Pacific Northwest’s timber industry.²⁴ Judge Ferguson, who authored the panel’s opinion, wrote separately to respond.²⁵ In early 2008, the Ninth Circuit ordered the case be reheard en banc, signaling that the law regarding deference to the Forest Service’s scientific methodology is not yet settled.²⁶

Although the three-judge panel opinion holds no precedential value, the judges’ debate and the line of cases leading to the panel decision bear significant weight on the level of deference due agency management decisions regarding national forests. Section II of this chapter reviews the legal context for judicial review of agency forest management decisions.

34–36 (codified as amended at 16 U.S.C. §§ 473–482, 551 (2000)) (holding that by clear-cutting, the Forest Service exceeded its authority under the Organic Act, which required the Forest Service to sell dead or matured trees that had been marked and designated for sale).

¹⁸ *Id.* at 955.

¹⁹ *Id.*

²⁰ See *Citizens to Preserve Overton Park, Inc. v. Volpe* (*Overton Park*), 401 U.S. 402, 416 (1971).

²¹ Wilkinson, *supra* note 13, at 668.

²² See discussion *infra* Part II (discussing the new standard for judicial review of scientific methodology expressed in *Lands Council v. Powell* (*Lands Council I*), 379 F.3d 738 (9th Cir. 2004), *amended by* 395 F.3d 1019 (9th Cir. 2005), and the extension of this standard by *Ecology Center v. Austin*, 430 F.3d 1057 (9th Cir. 2005), as well as the case law leading up to these decisions).

²³ 494 F.3d 771 (9th Cir. 2007).

²⁴ See *id.* at 784 (Smith, J., specially concurring).

²⁵ See *id.* at 786 (Ferguson, J., concurring).

²⁶ *Lands Council v. McNair*, 512 F.3d 1204, 1204 (9th Cir. 2008).

Section III summarizes the *Lands Council III* panel opinion and concurrences. Section IV addresses the crucial issues in Judge Smith's argument: whether the Ninth Circuit case law exhibits an unpredictable pattern of standards for the Forest Service, whether judicial review of agency methodology is permissible under existing administrative case law precedent, and whether, in fact, court injunctions in the Northwest contributed to the decline in the timber industry. Section IV concludes that the panel in *Lands Council III* merely applied a standard for reviewing agency methodology consistently employed by the court, but articulated more clearly in recent cases leading to the *Lands Council III* decision. Finally, the chapter concludes by supporting Judge Ferguson's view that the Pacific Northwest's timber industry decline is real, but is not caused by judicial action; and that in the face of mounting damage to our environment, conservation pressures will continue to cycle through the judicial and legislative branches. However, as a diversified economic base reaches rural, timber-dependent communities, the jobs versus environment debate may settle if lifting the pressure for jobs from the scales tips the weight slightly in favor of the environment.

II. BACKGROUND

A. Statutory Framework

Assessing the role of the courts in reviewing Forest Service decisions is best considered in the context of the history of national forest management and the current substantive and procedural protections for national forests under NFMA. These statutes moved the Forest Service and our national forests in the direction of diversified protection for multiple uses and better management, but did not eliminate the important role for courts in enforcing protections and providing an avenue for public participation in national forest management.²⁷

1. Early Regulation of National Forests

In 1891, Congress authorized the creation of our national forest system.²⁸ The subsequent passage of the Organic Administrative Act of 1897 (Organic Act)²⁹ limited the purpose of these forest reserves to securing water flows and timber production, principles that governed that system for six full decades.³⁰ When special interest groups began lobbying for management of the forests to support other uses, namely increased timber production, recreation, and preservation, Congress responded by passing the Multiple-

²⁷ Parent, *supra* note 16, at 700–01.

²⁸ Creative Act of 1891, ch. 561, § 24, 26 Stat. 1095 (repealed 1976).

²⁹ Act of June 4, 1897, ch. 2, 30 Stat. 11, 34–36 (codified as amended at 16 U.S.C. §§ 473–482, 551 (2000)).

³⁰ Robert Jackson Allen, *Sustainable Forestry in Virginia: Opportunities for Overdue Legislation and Options for Private Landowners*, 7 APPALACHIAN J. L. 1, 5 (2007).

Use Sustained-Yield Act of 1960 (MUYSA).³¹ This act required that the Forest Service give “due consideration” to an expanded list of purposes for the national forests; specifically, “outdoor recreation, range, timber, watershed, and wildlife and fish,” but made clear that these purposes were only supplemental to those established by the Organic Act.³² Perhaps because MUYSA’s directive seemed to rank these purposes as secondary, the Forest Service continued to focus primarily on timber production after its passage.³³ The United States Supreme Court upheld this “timber first” management view in *United States v. New Mexico*,³⁴ in which the court held that Congress established the national forests only for the Organic Act’s timber supply and water flow purposes, and that MUYSA mandated only that the Forest Service consider other purposes.³⁵ Under this framework, courts afforded the Forest Service extreme deference in management decisions.³⁶

While MUYSA introduced the concepts of alternative uses of our national forests, its broad language offered no guidelines for settling disputes between special interests.³⁷ Congress subsequently passed the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA).³⁸ RPA acknowledged the need for forest management planning with objectives and output goals for renewable resources, but did not restrain Forest Service discretion.³⁹ Soon after its passage, the Fourth Circuit held in *West Virginia Division of the Izaak Walton League of America, Inc. v. Butz (Monongahela)*⁴⁰ that language in the Organic Act forbid harvesting timber through clear-cutting.⁴¹ Very quickly, Congress adopted the much more comprehensive NFMA and repealed the portion of the Organic Act affecting the Fourth Circuit’s decision to ban clear-cutting in the process.⁴²

2. The National Forest Management Act

As passed, NFMA represented a compromise between two competing bills in the Senate, the first seeking specific standards and procedures for

³¹ 16 U.S.C. §§ 528–531 (2000); *see also* Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests*, 64 OR. L. REV. 1, 29 (1985) (referencing special interest concerns for the national forests from timber industries and environmentalists).

³² 16 U.S.C. §§ 528, 529 (2000).

³³ Andrew Orlemann, Note, *Do the Proposed Forest Service Regulations Protect Biodiversity? An Analysis of the Continuing Viability of “Habitat Viability Analysis,”* 20 J. LAND RESOURCES & ENVTL. L. 357, 359 (2000).

³⁴ 438 U.S. 696, 707 (1978).

³⁵ *Id.* at 713–15.

³⁶ Parent, *supra* note 16, at 703 (discussing *Sierra Club v. Hardin*, 325 F. Supp. 99 (D. Alaska 1971), *rev’d sub nom.* *Sierra Club v. Butz*, 542 F.2d 1180 (9th Cir. 1976), and subsequent cases adopting its deferential treatment of Forest Service decisions).

³⁷ Robert Breazeale, *Is Something Wrong With the National Forest Management Act?* 21 J. LAND RESOURCES & ENVTL. L. 317, 323 (2001).

³⁸ Pub. L. No. 93-378, 88 Stat. 476 (codified with NFMA at 16 U.S.C. §§ 1600–1614 (2000)).

³⁹ Parent, *supra* note 16, at 707.

⁴⁰ 522 F.2d 945, 948 (4th Cir. 1975).

⁴¹ *See id.* at 947.

⁴² Orlemann, *supra* note 33, at 359.

the Forest Service, and the second setting broad policy guidelines and retaining flexibility and deference to Forest Service expertise.⁴³ NFMA represented the first time since the creation of the national forests that Congress limited the Forest Service's discretion.⁴⁴

NFMA includes both procedural and substantive protections for forests. Procedurally, NFMA focuses on the importance of planning with public participation to bring accountability to the Forest Service.⁴⁵ Consequently, the agency is now required to develop forest management plans for each national forest.⁴⁶ NFMA also fully recognized the importance of science in this planning, requiring foresters to work with interdisciplinary teams of road engineers, biologists, hydrologists, ecologists, archaeologists, and other appropriate disciplines to develop the plans.⁴⁷ Finally, to ensure the full integration of scientific principles, a Committee of Scientists provided advice on NFMA's implementing regulations.⁴⁸ These regulations must follow the principles of MUYSA and comply with the National Environmental Policy Act (NEPA),⁴⁹ as well as NFMA's substantive requirements.⁵⁰

The substantive protections require the Forest Service to specify guidelines for forest plans which "insure consideration of the economic and environmental aspects of various systems of renewable resource management."⁵¹ Subsequent site-specific actions must comply with the forest plans.⁵² These requirements also address the suitability of lands for timber harvest and limit harvesting in unsuitable areas or where such activity will lead to irreversible damage to soil and slope.⁵³ Notably, NFMA specifically requires forest management plans to "provide for diversity of plant and animal communities . . . in order to meet overall multiple-use objectives."⁵⁴ It also provides some watershed protection, including protection from "irreversible damage[]" from timber harvests, limits the amounts of timber harvests to sustained yields, and allows clearcutting only when "it is determined to be the optimum method . . . to meet the objectives and requirements of the relevant land management plan."⁵⁵ Although the Forest Service continues to retain much discretion, NFMA's

⁴³ Parent, *supra* note 16, at 708–09. *See also* Wilkinson, *supra* note 13, at 665–66 (discussing the rapid passage of this complex litigation and the need for compromise to recognize the agency's history of excellence while acknowledging management mistakes).

⁴⁴ Wilkinson, *supra* note 13, at 668.

⁴⁵ *Id.* at 667.

⁴⁶ *See* 16 U.S.C. § 1604(a)–(f) (2000).

⁴⁷ Wilkinson, *supra* note 13, at 667.

⁴⁸ *Id.* (citing 16 U.S.C. § 1604(h)).

⁴⁹ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370e (2000).

⁵⁰ *See* 16 U.S.C. § 1604(g) (2000).

⁵¹ *Id.* § 1604(g)(3)(A).

⁵² *See* Ohio Forestry Ass'n v. Sierra Club, 523 U.S. 726, 730 (1998) (citing 16 U.S.C. § 1604(i)) ("[I]nstruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans.").

⁵³ 16 U.S.C. § 1604(g)(3)(E) (2000).

⁵⁴ *Id.* § 1604(g)(3)(B).

⁵⁵ *Id.* § 1604(g)(3)(F)(i).

specific directives represent a significant “incursion into the on-the-ground activities” of the agency.⁵⁶

3. *The National Environmental Policy Act*

NEPA imposes no specific substantive requirements, but does require federal agencies to comply with certain procedures to assess the likely environmental impacts from any major federal actions which “significantly affect[] the quality of the human environment.”⁵⁷ Federal actions deemed to significantly affect the environment require preparation of an environmental impact statement (EIS) that includes an analysis of the alternatives to the proposed action and a discussion of the significant environmental impacts to “insure a fully informed and well-considered decision” with knowledge of environmental effects of the proposal.⁵⁸ Before undertaking a major federal action, the Forest Service must prepare a draft EIS describing alternatives and discussing the direct, indirect, and cumulative effects of the action, circulate the document for public comment, and respond to any comments in the final EIS.⁵⁹ NEPA compliance requires agencies to rely on high-quality information and incorporation of scientific analysis.⁶⁰ NEPA also requires that agencies to insure the professional and scientific integrity of discussions and analyses in environmental impact statements.⁶¹ In short, NEPA requires agencies to take a “hard look” at the environmental consequences of their proposed actions.⁶²

4. *The Administrative Procedure Act*

The Administrative Procedure Act (APA)⁶³ provides the avenue for judicial challenges to final agency actions under NFMA and NEPA, because those statutes do not specifically authorize suit against an agency for noncompliance.⁶⁴ The APA provides that courts review agency actions to see whether they are “arbitrary, capricious, or otherwise not in accordance

⁵⁶ Kristen Potter, *Judicial Review of Forest Service Decisions Made Pursuant to the National Forest Management Act's Substantive Requirements: Time for a Science Court?*, 20 J. NAT'L ASS'N ADMIN. L. JUDGES 241, 247 (2000) (quoting Wilkinson & Anderson, *supra* note 31, at 7); see also Rebecca Smith, *Lands Council v. Powell and the Ninth Circuit's Refusal to Blindly Defer to Unreliable Forest Service Science*, 28 PUB. LAND & RESOURCES L. REV. 65, 70 (2007) (quoting the same).

⁵⁷ National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C) (2000).

⁵⁸ *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1978). See 42 U.S.C. § 4332(2)(C) (2000); 40 C.F.R. §§ 1501.1, 1502.1 (2007).

⁵⁹ 40 C.F.R. §§ 1502.14, 1502.19, 1503.1, 1503.4 (2007).

⁶⁰ *Id.* § 1500.1(b).

⁶¹ *Earth Island Inst. v. U.S. Forest Serv. (Earth Island II)*, 442 F.3d 1147, 1159–60 (9th Cir. 2006) (quoting 40 C.F.R. § 1502.24) (“They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for the conclusions in the statement.”).

⁶² See *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

⁶³ 5 U.S.C. §§ 551–59, 701–06, 1305, 3105, 3344, 4301, 5335, 5362, 7521 (2000).

⁶⁴ See *id.* §§ 701–06.

with law” or if the agency failed to meet statutory, procedural, or constitutional requirements.⁶⁵

Under the arbitrary and capricious standard, courts look to “see whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment,” and while the court may not “substitute its judgment for that of the agency,”⁶⁶ its inquiry into the agency record must be “searching and careful.”⁶⁷ However, a decision is arbitrary and capricious if the agency

relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.⁶⁸

An agency must meet this standard based on the record before it at the time the decision is made rather than “post hoc” rationalizations, its findings must support its decision, and there must be a rational connection between the facts found and the choices made.⁶⁹

B. The Role of Judicial Review in Forest Management

1. Preliminary Injunctions

The U.S. Supreme Court has repeatedly held that “the basis for injunctive relief in the federal courts has always been irreparable injury and the inadequacy of legal remedies.”⁷⁰ Further, in exercising their equitable discretion, courts must pay particular attention to “the public consequences in employing the extraordinary remedy of injunction.”⁷¹ However, courts are limited in their exercise of this discretion; they may not “override Congress’s policy choice” or “reject the balance that Congress has struck in a statute.”⁷² In that regard, a court may not consider any and all factors relating to the public interest.⁷³ Instead, judicial discretion is limited to considering the advantages and disadvantages of issuing an injunction over the other available methods of enforcement.⁷⁴ Further, in the environmental context, the Supreme Court recognized that “[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often

⁶⁵ *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 375 (1989); *Overton Park*, 401 U.S. 402, 414 (1971).

⁶⁶ *Overton Park*, 401 U.S. at 416.

⁶⁷ *Marsh*, 490 U.S. at 378.

⁶⁸ *Motor Vehicle Mfrs. Ass’n. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).

⁶⁹ *Burlington Truck Lines v. United States*, 371 U.S. 156, 168–69 (1962).

⁷⁰ *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982).

⁷¹ *Id.* at 312.

⁷² *United States v. Oakland Cannabis Buyers’ Coop.*, 532 U.S. 483, 497 (2001).

⁷³ *Id.*

⁷⁴ *Id.* at 497–98.

permanent or at least of long duration, *i.e.*, irreparable.”⁷⁵ And, in cases challenging logging projects, courts have held that logging old growth represents an irretrievable commitment of resources—in other words, irreparable harm.⁷⁶

In the Ninth Circuit, courts issue injunctions when a plaintiff demonstrates “either: 1) a likelihood of success on the merits and the possibility of irreparable injury; or 2) that serious questions going to the merits were raised and the balance of hardships tips sharply in [the plaintiff’s] favor.”⁷⁷ Given the Supreme Court’s direction in determining whether an injunction shall issue, courts must respect the policy balance of multiple uses and substantive environmental protections Congress laid out in NFMA.

2. Review of Agency Decision Making

While the APA’s arbitrary and capricious standard is ultimately a narrow one,⁷⁸ by keeping an agency within its statutory limits, judicial review plays an important check against Forest Service discretion and ensures consistency between substantive environmental statutes, regulations, and site-specific actions.⁷⁹ One implication of congressional delegation of authority is a resulting increase in public responsibility,⁸⁰ an idea with particular significance in the context of NFMA’s procedural efforts to increase public participation in forest management planning.⁸¹ Judicial enforcement of NFMA’s statutory requirements provides another means of guaranteeing public participation in the management of the national forests.⁸²

In one of the earliest decisions reviewing a completed forest management plan, *Citizens for Environmental Quality v. United States*,⁸³ a district court in the Tenth Circuit acknowledged that review of these plans “is unlike review of typical agency decisions” in part because of the technical complexity involved, and cautioned against “rubber stamping”

⁷⁵ *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987).

⁷⁶ *Lane Co. Audubon Soc’y v. Jamison*, 958 F.2d 290, 295 (9th Cir. 1992).

⁷⁷ *Clear Channel Outdoor Inc. v. City of Los Angeles*, 340 F.3d 810, 813 (9th Cir. 2003) (citing *Walczak v. EPL Prolong, Inc.*, 198 F.3d 725, 731 (9th Cir. 1999)).

⁷⁸ *Overton Park*, 401 U.S. 402, 416 (1971).

⁷⁹ Parent, *supra* note 16, at 712.

⁸⁰ Mortimer, *supra* note 3, at 924 (citing Peter H. Schuck, *Delegation and Democracy: Comments on David Schoenbrod*, 20 CARDOZO L. REV. 775, 784 (1999)).

⁸¹ See Wilkinson, *supra* note 13, at 667 (referencing the congressional intent that forest management plans evolve as “truly public documents, with whole sale public participation”).

⁸² Parent, *supra* note 16, at 712. *But see* Mortimer, *supra* note 3, at 939–41 (arguing the combination of broad delegation of authority, ambiguity in NFMA, and the “environmental conflict industry” combine to cripple the Forest Service’s ability to justify and explain its management decisions, and that undermining the agency in this way provides a rationale for reining in agency discretion in relying on democratic decision-making to decide great public controversies like forest policy).

⁸³ 731 F. Supp 970 (D. Colo. 1989).

agency decisions.⁸⁴ This technical complexity has been referenced as a rationale for avoiding over generalizations and leaving judicial analysis to turn on the facts in a given case and the applied expertise in the record before the court.⁸⁵ However, by setting standards for the Forest Service to follow, and where possible, remanding for the agency to exercise its discretion within those set boundaries, courts can strike a balance between appropriate judicial deference to the Forest Service and the need to enforce NFMA's substantive requirements.⁸⁶

Recent decisions in the Ninth Circuit trend towards setting a rule of reliability for the Forest Service's scientific methodology.⁸⁷ Clear direction from courts on methodology review will benefit the agency by providing a roadmap for successfully avoiding arbitrary and capricious actions. A clear rule will assure the public that the agency's decisions exhibit a rational connection between the facts found and the conclusions reached, even within the realm of the agency's technical expertise.⁸⁸ The development of courts' willingness to review the methods behind agency management decisions is evident from Ninth Circuit decisions spanning a full decade of case law preceding Judge Smith's attack on the examination of agency methodology for on-the-ground decisions in *Lands Council III*.⁸⁹

In 1996, the Ninth Circuit decided *Inland Empire Public Lands Council v. United States Forest Service (Inland Empire)*,⁹⁰ a case frequently cited as an example of judicial deference to an agency's scientific methodology.⁹¹ In *Inland Empire*, the Ninth Circuit upheld the Forest Service's methodology for complying with NFMA's regulatory requirement to complete a population viability analysis.⁹² The court determined that the agency acted reasonably in relying on a model that indirectly measured species population trends by relying on reasonable assumptions.⁹³ In particular, the agency assumed that maintaining the acreage of habitat necessary for survival in fact assures survival, and that analyzing the amount of habitat reduction provided a reasonable estimate of the population of a species.⁹⁴ The *Inland Empire* court afforded deference to the agency when it used all the scientific data

⁸⁴ Parent, *supra* note 16, at 721 (quoting *Citizens for Environmental Quality*, 731 F. Supp at 982-983.).

⁸⁵ Wilkinson, *supra* note 13, at 668.

⁸⁶ *Id.* at 669.

⁸⁷ See, e.g., *Lands Council I*, 379 F.3d 738 (9th Cir. 2004), *amended by* 395 F.3d 1019 (9th Cir. 2005); *Ecology Center v. Austin*, 430 F.3d 1057 (9th Cir. 2005).

⁸⁸ *Burlington Truck Lines*, 371 U.S. 156, 168-69 (1962); *Earth Island II*, 442 F.3d 1147, 1156-57 (9th Cir. 2006).

⁸⁹ See Smith, *supra* note 56, at 71-76, 80, 84 (reviewing cases supporting the Ninth Circuit's closer scrutiny of the Forest Service's scientific methodology, and calling for further development of a "methodology review" rule in subsequent cases).

⁹⁰ 88 F.3d 754 (9th Cir. 1996).

⁹¹ See, e.g., Smith, *supra* note 56, at 71 (referring to *Inland Empire* as an oft-cited example of judicial deference); see also Orlemann, *supra* note 33, at 364, 368 (summarizing *Inland Empire* and noting the Eleventh Circuit's rejection of its deference to the Forest Service).

⁹² *Inland Empire*, 88 F.3d at 763.

⁹³ *Id.*

⁹⁴ *Id.*

currently available and no technically reliable and cost effective method of counting individual members of the species existed.⁹⁵

Just one year later, in *Idaho Sporting Congress v. Thomas*,⁹⁶ the Ninth Circuit shifted towards a closer examination of the Forest Service's methodology. The court held the Forest Service failed to take a "hard look" under NEPA at the environmental impacts of two timber sales.⁹⁷ The court rejected the agency's scientific methodology as incomplete and unreliable when its NEPA analysis relied on a study more than a decade old that sampled only one of two affected streams, the agency's own report cautioned against applying its findings to the whole area, and the logging done before the agency collected that data differed substantially from the proposed logging under consideration.⁹⁸ Finally, although required by NEPA, the agency failed to disclose data underlying an expert opinion that discussed the topography of the proposed harvest area.⁹⁹

In *Lands Council v. Powell (Lands Council I)*,¹⁰⁰ the Ninth Circuit more clearly articulated its unwillingness to defer to agency methodology without giving it the same review afforded other management decisions. The Ninth Circuit examined the Forest Service's methodology underlying its approval of a proposed logging project, but it took a larger step towards defining a standard for the reliability of the agency's science. Plaintiffs claimed violations of NEPA and NFMA.¹⁰¹ The court found two NEPA violations. The first violation resulted from the use of a thirteen-year-old fish habitat survey with data too stale to support a cumulative effects analysis; the second violation stemmed from the agency's reliance on an in-stream sedimentation model despite its known shortcomings, because the agency failed to disclose the model's flaws.¹⁰² The court also rejected the use of the proxy-on-proxy method approved in *Inland Empire* when the habitat data used as a proxy for species survival was outdated and incomplete, holding that, without accurate proxy-on-proxy modeling or other population monitoring, the agency failed to meet the requirements of NFMA.¹⁰³

In perhaps the most significant development towards a clearer articulation of the Ninth Circuit's review of agency methodology,¹⁰⁴ the *Lands Council I* court rejected the Forest Service's method of using aerial

⁹⁵ *Id.* at 762, 763 n.12.

⁹⁶ 137 F.3d 1146 (9th Cir. 1998).

⁹⁷ *Id.* at 1150.

⁹⁸ *Id.* at 1150–51.

⁹⁹ *Id.* at 1150. *See also* *Idaho Sporting Congress v. Rittenhouse*, 305 F.3d 957, 969-70 (9th Cir. 2002) (rejecting an agency's use of scientific methodology relying on aerial photography to determine the number of old-growth stands as violating NFMA when the agency's own environmental assessment determined that none of the stands examined on the ground exhibited old-growth characteristics, and rejecting the use of the proxy-on-proxy method approved in *Inland Empire*, which uses habitat as a proxy for population estimates, when the agency's methodology for monitoring habitat in this instance was arbitrary and capricious).

¹⁰⁰ 379 F.3d 738 (9th Cir. 2004), *amended by* 395 F.3d 1019 (9th Cir. 2005).

¹⁰¹ *Lands Council I*, 395 F.3d at 1024.

¹⁰² *Id.* at 1031–32.

¹⁰³ *Id.* at 1036.

¹⁰⁴ *See* Smith, *supra* note 56, at 79.

photographs and a spreadsheet model to assess detrimental soil conditions in the project area.¹⁰⁵ The Ninth Circuit held that, even granted appropriate deference, the “Forest Service’s basic scientific methodology, to be reliable, required that the hypothesis and prediction of the model be verified with . . . *on the ground analysis*”; therefore, the use of spreadsheet models with no *on-site verification* violated NFMA.¹⁰⁶

The *Lands Council I* court, in analyzing both the proxy-on-proxy method and the soil condition development under NFMA, drew its conclusions “under the circumstances of [that] case.”¹⁰⁷ However, the Ninth Circuit extended the *Lands Council I* analysis of scientific methodology in *Ecology Center v. Austin*.¹⁰⁸ The *Ecology Center* court, in a challenge under NFMA and NEPA to a postburn project in Lolo National Forest, held that the agency’s decision to treat old-growth stands violated both statutes.¹⁰⁹ The court reasoned that the agency’s conclusion that treating old-growth is beneficial to dependent species is “predicated on an unverified hypothesis” and not verified with “on the ground analysis.”¹¹⁰ The agency’s conclusion that the treatment would not adversely affect wildlife was rejected as without factual basis or explanation.¹¹¹ The court relied on the same lack of on-site verification to hold the soils analysis did not satisfy NEPA¹¹² because transects in the area focused on burned areas and not harvest areas, the agency’s own scientist concluded the soil condition conclusions were not credible, and the court had no information about the methodology or surveyor credibility for informal field reports referenced in the record.¹¹³ Although one judge wrote a strong dissenting opinion,¹¹⁴ the Ninth Circuit declined to hear the case en banc, and the U.S. Supreme Court denied certiorari.¹¹⁵

¹⁰⁵ *Lands Council I*, 395 F.3d at 1035.

¹⁰⁶ *Id.* (emphasis added).

¹⁰⁷ *Id.* at 1035, 1037.

¹⁰⁸ 430 F.3d 1057 (9th Cir. 2005).

¹⁰⁹ *Id.* at 1065.

¹¹⁰ *Id.* at 1064.

¹¹¹ *Id.* at 1067–68.

¹¹² *Id.* at 1070–71.

¹¹³ *Id.* at 1070.

¹¹⁴ *Id.* at 1071–78 (McKeown, J., dissenting); *see also* discussion *infra* Part III.B.1 (summarizing Judge Smith’s dissent in *Lands Council III*, which drew heavily on Judge McKeown’s *Ecology Center* dissent).

¹¹⁵ *See* Smith, *supra* note 56, at 84. Smith also reviewed additional cases decided after *Lands Council I* in which the Ninth Circuit deemed the Forest Service’s underlying data and methodology unreliable. *Id.* (citing *Earth Island II*, 442 F.3d 1147, 1166–67, 1176 (9th Cir. 2006) (holding Forest Service review of black-backed woodpecker habitat inadequate, agency’s population data too generalized for two other bird species, and agency’s tree mortality model either incorrect, misapplied, or intentionally misleading); *Native Ecosystems Council v. Bosworth*, No. CV-04-367-E-BLW, 2005 WL 2387594, *5–6 (D. Idaho Sept. 28, 2005) (finding habitat inventory unreliable when based on inaccurate and unverified scientific data); *Env’t. Prot. Info. Ctr. v. Blackwell*, 389 F. Supp 2d 1174, 1213–14 (N.D. Cal. 2004) (finding a habitat model unreliable when not verified with a comparison to monitoring data which reflected current conditions); *Idaho Conservation League v. Bennett*, No. CV 04-447-S-MHW, 2005 WL 1041396, at *10 (D. Idaho Apr. 29, 2005) (finding determination of fish habitat conditions unreliable when the Forest Service failed to analyze or quantify key variables)).

These cases demonstrate a willingness by the Ninth Circuit to undertake limited review of the scientific basis for an agency action. And decisions of other circuit courts indicate support for the Ninth Circuit's analysis of scientific methodology when presented with similar issues. In *Central South Dakota Cooperative Grazing District v. Secretary of United States Department of Agriculture (Central South)*¹¹⁶ the Eighth Circuit closely analyzed two scientific methodologies the Forest Service employed in setting grazing levels on federal grasslands.¹¹⁷ The *Central South* court ultimately upheld the agency's habitat suitability index and one-point-in-time inventory methodologies.¹¹⁸ But that court left open the possibility that in certain situations, the court would reject the methodology and remand if the agency's data is flawed, and there is a significant chance that accurate data would result in a different agency outcome.¹¹⁹

In *Utah Environmental Congress v. Bosworth (UEC I)*,¹²⁰ the Tenth Circuit determined that the Forest Service must gather "actual, quantitative population data" to meet management indicator species (MIS) monitoring obligations under NFMA's implementing regulations.¹²¹ While the *UEC I* court noted that an MIS is not necessarily present in a project area, it held NFMA's implementing regulations require the Forest Service to use "good faith efforts to confirm the absence or presence of an MIS," and in that case the record reflected no attempt to confirm the presence of such species.¹²²

Building on its analysis in *UEC I*, in *Utah Environmental Congress v. Bosworth (UEC II)*¹²³ the Tenth Circuit closely reviewed the Forest Service's methodology under the arbitrary and capricious standard of review in a challenge to a timber-harvesting project.¹²⁴ In *UEC II*, environmental groups challenged the Forest Service's monitoring of the sage-nester guild, riparian guild, cavity-nester guild, northern goshawk, and the Mexican spotted owl.¹²⁵ The *UEC II* court addressed the Forest Service's monitoring treatment of each in detail.¹²⁶ For example, the court pointed to the "paucity and staleness of quantitative data" for an MIS of the cavity-nester guild when the record included only two studies each over a decade old that detected owls within several miles of the project area.¹²⁷ The court also rejected the Forest Service's conclusion that the project's effects on the Mexican spotted owl "[are] expected to be minimal" because a decade-old survey detected only single owls and that survey concluded only "incidental use by non-breeding

¹¹⁶ 266 F.3d 889 (8th Cir. 2001).

¹¹⁷ *Id.* at 898–99.

¹¹⁸ *Id.* at 900.

¹¹⁹ *Id.*

¹²⁰ 372 F.3d 1219 (10th Cir. 2004).

¹²¹ *Id.* at 1226.

¹²² *Id.* at 1229–30.

¹²³ 439 F.3d 1184 (10th Cir. 2006).

¹²⁴ *Id.* at 1187–88.

¹²⁵ *Id.* at 1191.

¹²⁶ *Id.* at 1191–94.

¹²⁷ *Id.* at 1193–94.

individuals.”¹²⁸ By contrast, the court held that the agency used good faith efforts to confirm the absence of the sage-nester guild by combining field surveys with aerial photos and vegetation mapping.¹²⁹ The *UEC II* court also upheld the adequacy of the Forest Service’s monitoring of the northern goshawk adequate when the agency collected monitoring data through four aerial surveys, two recent ground surveys, three additional surveys and a recent statewide habitat assessment.¹³⁰

The Tenth Circuit in *UEC I* and *UEC II* relied on the Eleventh Circuit’s analysis in *Sierra Club v. Martin*.¹³¹ In *Martin*, the Eleventh Circuit reviewed the Forest Service’s reliance on habitat as a proxy for the health of a species,¹³² the same approach presented by the Forest Service in *Inland Empire*.¹³³ Although the *Martin* court ultimately rejected the Ninth Circuit’s holding in support of a habitat proxy for indicator species, the Eleventh Circuit acknowledged that the agency record in *Inland Empire* included a detailed EIS, whereas the record in *Martin* contained only an environmental assessment with significantly less detail. The Eleventh Circuit implied that with access to more detail regarding the agency’s decision making, the Ninth Circuit may have rightly determined the agency’s findings were not arbitrary and capricious through support found in the extensive record.¹³⁴

This suggestion holds merit when compared to the Ninth Circuit’s subsequent decisions finding the proxy-on-proxy method arbitrary and capricious in *Idaho Sporting Congress v. Rittenhouse*¹³⁵ and in *Earth Island Institute v. United States Forest Service (Earth Island II)*.¹³⁶ The Ninth Circuit in both decisions reaffirmed the proxy-on-proxy method in some cases, but determined that the habitat data in the respective records of those cases was insufficient to serve as a proxy for the health of the species in the case at hand.¹³⁷

Further, it is possible to reconcile *Inland Empire* as at least on the same continuum with cases following that decision, if perhaps slightly less searching in its review of agency decision-making than subsequent Ninth Circuit opinions. In granting deference to the Forest Service, the *Inland Empire* court noted specifically that the agency adopted an alternative methodology for determining species viability because no technically reliable and cost effective alternative existed.¹³⁸ Although not expressly stated by that court, it appears the Forest Service record in *Inland Empire*

¹²⁸ *Id.* at 1194.

¹²⁹ *Id.* at 1192.

¹³⁰ *Id.*

¹³¹ 168 F.3d 1 (11th Cir. 1999); *see also UEC II*, 439 F.3d 1184, 1191 (citing *Martin*, 168 F.3d at 6).

¹³² *Martin*, 168 F.3d at 7 n.10.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ 305 F.3d 957, 972–73 (9th Cir. 2002).

¹³⁶ 442 F.3d 1147, 1176 (9th Cir. 2006).

¹³⁷ *See Rittenhouse*, 305 F.3d at 972–73 (rejecting the application of proxy-on-proxy using insufficient habitat data); *Earth Island II*, 442 F.3d at 1175 (determining the Forest Service had not conducted habitat analysis on the level found satisfactory in *Inland Empire*).

¹³⁸ *Inland Empire*, 88 F.3d 754, 763 n.12 (9th Cir. 1996).

contained a reasoned explanation supporting the facts in the record and the agencies conclusions regarding proper methodology.¹³⁹

In addition, more than agency deference may have motivated the *Inland Empire* court's interpretation of 36 C.F.R. § 219.19 to permit the Forest Service's use of an MIS's suitable habitat as a proxy for surveys of the MIS itself.¹⁴⁰ 36 C.F.R. § 219.19 required the Forest Service to manage wildlife habitat to "maintain viable populations" of existing species, and to monitor and evaluate that viability by designating an MIS.¹⁴¹ Consider that the *Inland Empire* plaintiffs asked the court to require the Forest Service to use a different methodology—one that analyzed the population and population trends of each species, and determined whether each species could travel between "linkages" (patches of forest).¹⁴² Perhaps, rather than view *Sierra Club v. Martin*¹⁴³ as an Eleventh Circuit split with the Ninth Circuit in *Inland Empire* on the validity of the agency's habitat proxy methodology, it is possible to view the *Inland Empire* court as affirmatively rejecting the idea that an agency acts arbitrarily when it adopts its own methodology over that of the plaintiffs'.¹⁴⁴ Although the agency has since replaced 36 C.F.R. § 219.19 with another regulation implementing NFMA's requirement to "provide for diversity of plant and animal communities,"¹⁴⁵ these cases are still important for two reasons: 1) the requirements of 36 C.F.R. § 219.19 may still apply locally if incorporated into a site-specific plan or forest management plan;¹⁴⁶ and 2) the courts' analysis in these cases provides examples of wielding the "finely crafted legal scalpel"¹⁴⁷ to show deference to the agency when necessary (particularly when a plaintiff seeks to mandate the agency's use of a particular methodology).

¹³⁹ *Martin*, 168 F.3d 1, 7 n.10 (11th Cir. 1999).

¹⁴⁰ *Inland Empire*, 88 F.3d at 763.

¹⁴¹ *Id.* at 759.

¹⁴² *Id.* at 760.

¹⁴³ 168 F.3d 1 (11th Cir. 1999).

¹⁴⁴ This view is consistent with the analysis of the Seventh Circuit in *Sierra Club v. Marita*, 46 F.3d 606, 621–23 (7th Cir. 1995) (rejecting plaintiff's attempt to mandate conservation biology methodologies in challenge to final management plans for Wisconsin forests, and holding that the Forest Service passed arbitrary and capricious review when it rejected plaintiff's proposed methodology in favor of its own, and provided reasons for its decisions).

¹⁴⁵ See NFMA, 16 U.S.C. § 1604(g)(3)(B) (2000); see also 36 C.F.R. § 219.10(b) (2007) (requiring the Forest Service to provide a framework to contribute to sustaining native ecological systems by providing appropriate ecological conditions to support diversity of native plant and animal species); *Env'tl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1017 (9th Cir. 2006) (noting 36 C.F.R. § 219.16 eliminated the MIS concept).

¹⁴⁶ In *Inland Empire*, the court stated that "forest and site specific plans may be incorporated by reference, or 'tiered'—so that the site specific plan need not reiterate issues adequately discussed in the forest plan." *Inland Empire*, 88 F.3d at 757. The court did not discuss there whether these "tiers" would change with any changes in NFMA's implementing regulations, leaving open the possibility that if the plan incorporated the requirements of 36 C.F.R. § 219.19, its requirements may apply even after the regulation is no longer in force, so long as the plan that includes the regulations is in force.

¹⁴⁷ *Lands Council III*, 494 F.3d 771, 784 (9th Cir. 2007) (Smith, J., specially concurring) (criticizing the *Ecology Center* court as misconstruing federal law and banning all logging by not using a "finely crafted legal scalpel based upon correct legal interpretations").

The willingness of the Ninth Circuit to devote more attention to examination of Forest Service methodologies is apparent in cases following *Inland Empire*. The Ninth Circuit continues to be the circuit reversed most frequently by the U.S. Supreme Court;¹⁴⁸ however, this trend towards more searching review appears more of a natural progression that aligns with review undertaken in the Eighth, Tenth, and Eleventh circuits. And while deference to agency scientific expertise is highly prevalent in the environmental context,¹⁴⁹ courts have a solid basis under the APA's arbitrary and capricious review standard for reviewing methodology to look for a rational connection between the facts in the record and the agency's conclusions.¹⁵⁰ Further, in reviewing technical documents in environmental disputes, NFMA and its regulations provide guidance to courts in determining whether the Forest Service provides adequate reasons for its actions.¹⁵¹ Although not used by the courts in the cases discussed above, a court may appoint a technical expert to assist the court's decision making if necessary.¹⁵²

Using these tools and bases for analysis, courts can review agency methodologies while still operating within the bounds of arbitrary and capricious review. This careful review may be just the "finely crafted legal scalpel" necessary to guard against arbitrary decision making and ensure that the Forest Service employs sound science. And while the Ninth Circuit has not adopted the standards set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*¹⁵³ as a way of determining whether the Forest Service's scientific assertions are owed any deference under NEPA, the Supreme Court's application of these principles in other contexts underscores judicial competence to evaluate scientific methodologies.¹⁵⁴ Having set forth the legal context, this comment now turns to the Ninth Circuit's consideration of *Lands Council III*.

III. *LANDS COUNCIL V. MCNAIR*

In July 2007, the Ninth Circuit decided *Lands Council III*.¹⁵⁵ The court issued a subsequent order on January 18, 2008, stating that the Ninth Circuit accepted the case for en banc review, and that the three-judge panel opinion

¹⁴⁸ John M. Roll, *The 115 Year-Old Ninth Circuit—Why A Split is Necessary and Inevitable*, 7 WYO. L. REV. 109, 135 (2007).

¹⁴⁹ Potter, *supra* note 56, at 261–62.

¹⁵⁰ *Burlington Truck Lines*, 371 U.S. 156, 168–69 (1962); *Earth Island II*, 442 F.3d 1147, 1156–57 (9th Cir. 2006).

¹⁵¹ Potter, *supra* note 56, at 262.

¹⁵² *Id.* at 261–262 & nn.149–51 (noting Rule 706 of the Federal Rules of Evidence expressly authorizes court appointed experts and providing support for their use).

¹⁵³ 509 U.S. 579, 594–95 (1993). *Daubert* requires district courts to consider a number of factors in determining the admissibility of expert testimony regarding a scientific theory under Rule 702 of the Federal Rules of Evidence, including (but not limited to) whether the theory can be or has been tested, whether the theory has been subjected to peer review and publication, the known or potential rate of error in applications of the theory, and the "general acceptance" of the theory in the "relevant scientific community." *Id.*

¹⁵⁴ See, e.g., *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 145, 149 (1999) (holding that "*Daubert's* general principles apply to the expert matters described in Rule 702.").

¹⁵⁵ 494 F.3d 771 (9th Cir. 2007).

should not be cited as precedent to any court of the Ninth Circuit.¹⁵⁶ Still, the initial opinion—particularly Judge Smith’s special concurrence and Judge Ferguson’s concurring opinion written in response—holds enduring significance in the broader, ongoing discussion of the judiciary’s role in reviewing agency decisions. This is particularly so in the context of technical scientific methodology, where courts are generally loath to infringe on the congressional realm of balancing policies and values. The following summary of the majority and concurring opinions focuses closely on the court’s review of the agency’s scientific methodology under the arbitrary and capricious standard.

A. The Case

In June 2004, the Forest Service released a final EIS and record of decision adopting the Mission Brush Project (Project).¹⁵⁷ The Project proposed logging and silvicultural treatments on 3,829 acres in the wildlife-rich Bonners Ferry Ranger District of the Idaho Panhandle National Forests (IPNF).¹⁵⁸ Decades of fire suppression and logging of old-growth trees left the forest susceptible to disease and stand replacing fires. The Project ostensibly supported a goal to restore the forest’s historic composition, although it included cutting within 277 acres of old-growth stands and three timber sales totaling 23.5 million board feet of timber.¹⁵⁹

In October 2006, Lands Council and the Wild West Institute (collectively “Lands Council”) challenged the Project in the United States District Court for the District of Idaho, alleging violations of the APA, NFMA, NEPA, and Standard 10(b) of the IPNF Forest Plan.¹⁶⁰ The district court denied Lands Council’s motion for a preliminary injunction to stop the Project, and Lands Council appealed to the Ninth Circuit.¹⁶¹

Reviewing the district court’s denial under an abuse of discretion standard, the Ninth Circuit considered whether Lands Council met the test for a preliminary injunction by showing “either 1) a likelihood of success on the merits and the possibility of irreparable injury; or 2) that serious questions going to the merits were raised and the balance of hardships tips sharply in the [the plaintiffs’] favor.”¹⁶² The Ninth Circuit reversed and remanded to the district court, holding Lands Council demonstrated a likelihood of success on the merits of its NFMA and NEPA claims (although not the Standard 10(b) claim), and that the balance of hardships and the public interest favored granting an injunction against logging in contested portions of the Project.¹⁶³

¹⁵⁶ *Lands Council v. McNair*, 512 F.3d 1204, 1204 (9th Cir. 2008).

¹⁵⁷ *Lands Council III*, 494 F.3d at 775.

¹⁵⁸ *Id.* at 774.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.* at 774–75.

¹⁶¹ *Id.* at 775.

¹⁶² *Id.* (citing *Lands Council v. Martin (Lands Council II)*, 479 F.3d 636, 639 (9th Cir. 2007) (quoting *Clear Channel Outdoor Inc. v. City of Los Angeles*, 340 F.3d 810, 813 (9th Cir. 2003)).

¹⁶³ *Id.* at 780.

1. The Merits of the National Forest Management Act Claim

Relying heavily on its decisions in *Lands Council I* and *Ecology Center*, the Ninth Circuit held that Lands Council was likely to succeed on its NFMA claim because the Forest Service failed to “demonstrat[e] the reliability of its [scientific] methodology.”¹⁶⁴ The court noted that even after the Forest Service meets NFMA’s procedural requirements to develop a forest plan with public participation,¹⁶⁵ all subsequent actions must comply with the forest plan and with NFMA’s substantive mandate to ensure species diversity and viability.¹⁶⁶ The court further set forth the standards laid out in *Lands Council I* and *Ecology Center* that the Forest Service must demonstrate the “reliability of its scientific methodology,”¹⁶⁷ meaning a methodology “verified with observation” and “on the ground analysis,”¹⁶⁸ and one not “predicated on an unverified hypothesis.”¹⁶⁹

The Forest Service argued it met this standard by providing sufficient data on the Project’s effects on wildlife habitat.¹⁷⁰ The agency relied primarily on a 2006 study that monitored flammulated owl habitat. The study included five one-fifth-acre plots within an eighteen-acre study area that was logged in 2000 and underburned in 2002.¹⁷¹ Although surveyors heard only one owl response, the study concluded owls used the area after harvest, and that the results implied the harvesting practices *maintained* suitable habitat.¹⁷² The study also found that it was inappropriate to conclude that the harvesting *improved* habitat.¹⁷³ The Forest Service stated that it planned to continue monitoring pursuant to its record of decision.¹⁷⁴ The agency additionally relied on a twenty-year-old study of flammulated owl habitat in British Columbia and two bird conservation plans developed by Partners in Flight organizations in Montana and Idaho.¹⁷⁵

The Ninth Circuit held that none of these documents demonstrated the reliability of the agency’s underlying hypothesis—that the Project’s treatment of old-growth stands benefits, or at a minimum will not harm, the viability of sensitive species such as the flammulated owl.¹⁷⁶ Specifically, the court noted that like the *Ecology Center* court’s determination that a study reporting a single observation of a bird species in a treated old-growth stand was inadequate to prove reliability of scientific methodology, the Forest Service’s report of a “solitary hoot” was insufficient to prove reliability

¹⁶⁴ *Id.* at 777.

¹⁶⁵ *Id.* at 775 (citing 16 U.S.C. § 1604(a), (b), (d)).

¹⁶⁶ *Id.* (citing 16 U.S.C. §§ 1604(i), 1604(g)(3)(B)).

¹⁶⁷ *Ecology Center*, 430 F.3d 1057, 1064 (9th Cir. 2005).

¹⁶⁸ *Lands Council I*, 395 F.3d 1019, 1035 (9th Cir. 2005).

¹⁶⁹ *Ecology Center*, 430 F.3d at 1064.

¹⁷⁰ *Lands Council III*, 494 F.3d at 776.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 777 n.2.

¹⁷⁵ *Id.* at 777.

¹⁷⁶ *Id.* at 776.

here.¹⁷⁷ The habitat study's conclusion, that the single owl response implied the Project's ability to maintain owl habitat, was insufficient to justify "grant[ing] [the Forest Service] license to continue treatment of old-growth forests while excusing it from ever having to verify that such treatment is not harmful."¹⁷⁸ The court squarely rejected continued monitoring as an acceptable means of confirming the reliability of its methodology under NFMA.¹⁷⁹ With no discussion, the court dismissed the study of owl habitat in British Columbia by comparing it to the methodology rejected in *Lands Council I* as stale data unsupported by on-site inspection.¹⁸⁰ Finally, the court dismissed the Partners in Flight documents as position papers insufficient to prove the reliability of the Project's methodology, concluding they lacked "on the ground analysis" to determine whether the sensitive species would use the treated forest.¹⁸¹ Because the Forest Service failed to demonstrate its scientific methodology met the reliability standard laid out in *Lands Council I* and expanded by *Ecology Center*, the court concluded Lands Council was likely to succeed on its NFMA claim.¹⁸²

2. The Merits of the National Environmental Policy Act Claim

Again relying on *Ecology Center*, the Ninth Circuit held that Lands Council was likely to succeed on the merits of its NEPA claim.¹⁸³ The court first reviewed NEPA's procedural requirements: federal agencies must take a "hard look" at the environmental impacts of a federal action¹⁸⁴ and prepare an environmental impact statement (EIS) fully and fairly discussing significant environmental impacts of that action.¹⁸⁵ And "[t]he EIS must be supported by evidence that the agency has made the necessary environmental analyses,"¹⁸⁶ and "address in [a] meaningful way the various uncertainties surrounding the scientific evidence."¹⁸⁷

¹⁷⁷ *Id.* (citing *Ecology Center*, 430 F.3d 1057, 1063 (9th Cir. 2005)).

¹⁷⁸ *Id.* at 777 (quoting *Ecology Center*, 430 F.3d at 1064).

¹⁷⁹ *Id.* at 777 n.2 (citing *Ecology Center*, 430 F.3d at 1071).

¹⁸⁰ *Id.* at 777.

¹⁸¹ *Id.* (citing *Lands Council I*, 395 F.3d 1019, 1035 (9th Cir. 2005)). The panel also rejected arguments by localities and timber harvesters, who intervened as defendants in *Lands Council III*, that the Forest Service merely employed the "proxy-on-proxy" method for assessing habitat that the Court approved in prior cases. The Ninth Circuit stated that the approved "proxy-on-proxy" method permits an assumption that "maintaining the acreage of habitat necessary for survival would in fact assure a species' survival." *Id.* at 777 n.3 (alteration in original) (quoting *Env'tl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1017 (9th Cir. 2006)). However, the methodology challenged in *Lands Council III*, also rejected in *Ecology Center*, involved altering old-growth habitat through invasive commercial logging, rather than meeting the wildlife viability requirements by preserving or maintaining habitat. *Id.* (citing *Ecology Center*, 430 F.3d at 1064).

¹⁸² *Id.* at 777.

¹⁸³ *Id.* at 778.

¹⁸⁴ *Id.* (citing *Idaho Sporting Congress v. Rittenhouse*, 305 F.3d 957, 963 (9th Cir. 2002)).

¹⁸⁵ *Id.* (citing 42 U.S.C. § 4332(C) (2000); 40 C.F.R. § 1502.1 (2007)).

¹⁸⁶ *Id.*

¹⁸⁷ *Id.* at 778 (citing *Ecology Center*, 430 F.3d 1057, 1065 (9th Cir. 2005)) (quoting *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993)).

Referring to its discussion of the NFMA claim, the court agreed with Lands Council that rather than addressing the scientific uncertainties of its method for improving habitat, the Forest Service treated the Project's "benefit [to] old-growth dependent species as a fact instead of an untested . . . hypothesis."¹⁸⁸ Although sources cited in the supplemental final EIS supported the agency's analysis of historical conditions and the health of old-growth trees following treatment, the agency merely stated that it assumed its plan would restore natural processes in the system.¹⁸⁹ Because the Forest Service never discussed the uncertainties surrounding potential use of the habitat by wildlife, the court concluded Lands Council was "likely to succeed on its NEPA claim."¹⁹⁰

3. The Merits of the IPNF Plan Standard 10(b)

Counter to its conclusions regarding the NFMA and NEPA claims, the court upheld the district court's finding that Lands Council was unlikely to succeed on the merits of its claim that the Project failed to comply with Standard 10(b) of the forest plan as required by NFMA.¹⁹¹ Standard 10(b) requires that the agency "maintain at least ten percent old-growth throughout the forest."¹⁹² Relying on its own report, Lands Council claimed the IPNF currently fell short of this ten percent requirement and called for the agency to address how the Project's harvesting of old-growth timber affected its compliance with this standard.¹⁹³ By comparison, the agency concluded the forest's old-growth composition averaged twelve percent and exceeded the standard.¹⁹⁴ Because the agency's expert considered the conflicting data and explained the differences between Land Council's report and its own findings, the Ninth Circuit held that the agency acted well within its discretion when it rejected Land Council's methodology and conclusions in favor of its own data.¹⁹⁵

4. Balance of Hardships and Conclusion

After determining Land Council's likely success on the merits of its NFMA and NEPA claims, the court turned to the second prong of the preliminary injunction test. The Ninth Circuit considered the possibility of irreparable injury absent an injunction and weighed the balance of hardships

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.* at 779. See NFMA, 16 U.S.C. § 1604(i) (2000) (requiring that agency actions comply with the forest management plan).

¹⁹² *Lands Council III*, 494 F.3d at 778.

¹⁹³ *Id.* at 778–79.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* (relying on the U.S. Supreme Court's conclusion that an agency "must have discretion to rely on the reasonable opinions of its own qualified experts" when presented with conflicting data (quoting *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989))).

and the public interest before remanding with instructions to grant relief.¹⁹⁶ The court began its analysis with reference to the uniqueness of environmental injury as a harm seldom remediable by money damages, and which “is often permanent or at least of long duration, *i.e.*, irreparable.”¹⁹⁷

Against the potential harm to the forest and economic harms to the local community, the court weighed the Project’s potential effect on thousands of acres of capable habitat and hundreds of acres of currently suitable habitat for the flammulated owl, northern goshawk, and fisher.¹⁹⁸ The court looked to Congress’s own balancing in enacting environmental laws, and its determination that compliance with these statutes outweighed any harm caused by failure to engage in activity prohibited by the statutes.¹⁹⁹ As to the economic harms, the court found troubling that an injunction against the Project could result in layoffs of up to thirty-seven employees in a county with one of the state’s highest unemployment rates.²⁰⁰ However, the court cited to the many cases in which, as here, the public interest in avoiding irreparable environmental injury outweighed economic concerns.²⁰¹ Accordingly, the Ninth Circuit held the balance of hardships weighed in favor of the environment and remanded for entry of a preliminary injunction.²⁰²

B. The Debate

Two concurrences (one a special concurrence) follow the court’s opinion in *Lands Council III*, laying the foundation for a debate over the appropriate level of scrutiny of an agency’s scientific methodology and whether court injunctions against logging projects carry responsibility for the general decline in timber production and economic health of communities that rely on logging.

1. Judge Smith: Questioning the Legality of Ecology Center

In the first concurring opinion, Judge Smith strongly asserted that the Ninth Circuit wrongly decided *Ecology Center*, and concurred in the judgment of *Lands Council III* only because *Ecology Center* dictated its result.²⁰³ Judge Smith argued that whereas the *Lands Council I* court rejected

¹⁹⁶ *Id.* at 779.

¹⁹⁷ *Id.* (quoting *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987)).

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.* at 779–80.

²⁰¹ *Id.* (citing *Earth Island II*, 442 F.3d 1147, 1177 (9th Cir. 2006); *Earth Island Inst. v. U.S. Forest Serv. (Earth Island)*, 351 F.3d 1291, 1308–09 (9th Cir. 2003)); *Sierra Nev. Forest Prot. Campaign v. Tippin*, No. 06-00351, 2006 WL 2583036, at *21 (E.D. Cal. Sept. 6, 2006) (recognizing the environment as a “vital constituent [of] public interest” needing protection even when resulting in adverse effects to economic interests)).

²⁰² *Id.* at 780.

²⁰³ *Id.* (Smith, J., specially concurring) (citing *Gen. Constr. Co. v. Castro*, 401 F.3d 963, 975 (9th Cir. 2005) for the rule that prior panels’ cases represent binding case law unless

the Forest Service's scientific methodology because the specific circumstances in that case dictated a verified hypothesis and on-site inspection to confirm a soil analysis model's reliability,²⁰⁴ NFMA and NEPA do not dictate the same result when the Forest Service's modeling rests on a reasonable scientific basis. In addition to this administrative law argument, Judge Smith asserted that a pattern of injunctions issued based on misconstruction of federal law has upset the congressional balance between logging and the environment and substantially contributed to the decline of the Pacific Northwest's logging industry.²⁰⁵

Throughout his opinion, Judge Smith cited to Judge McKeown's dissent in *Ecology Center* to support his belief that *Ecology Center* unlawfully extended *Lands Council I* by replacing the APA's arbitrary and capricious standard with a more demanding review.²⁰⁶ Specifically, he agreed that while *Lands Council I* made "compliance with NFMA and NEPA a moving target," its holding fell within the arbitrary and capricious standard because it only required courts to ask whether the agency conducted an on-site sampling.²⁰⁷ In *Ecology Center*, he argued, the court too closely examined the detail, quality, and amount of data even when some on-site sampling occurred, and mistakenly generalized *Land Council I*'s "unverified hypothesis" principle and on-site verification requirement to all of an agency's scientific hypotheses and findings.²⁰⁸ Judge Smith agreed with Judge McKeown that in doing so, the *Ecology Center* court treaded beyond arbitrary and capricious review and abandoned traditional deference to an agency's technical expertise on scientific matters.²⁰⁹

Judge Smith argued that without *Ecology Center*'s extension of *Lands Council I*, the court in *Lands Council III* may have upheld the denial of a preliminary injunction. First, freed from the on-site analysis requirement, the court could have considered all of the agency's scientific data concerning the Project's effect on wildlife habitat, rather than limiting consideration to the only study of owl habitat with on-the-ground analysis and verification.²¹⁰ Additionally, even if *Lands Council I*'s on-site analysis requirement applied, without *Ecology Center*'s requirement to examine the detail and quality of data, the *Lands Council III* court may not have counted owl hoots in the Forest Service's one on-site study and supplanted

undermined by an en banc decision, United States Supreme Court decision, or subsequent legislation).

²⁰⁴ *Id.* at 781 (Smith, J., specially concurring). In *Lands Council I*, plaintiffs' challenge to a logging project questioned the Forest Service's use of aerial photographs and soil samples from other areas of the forest to demonstrate the logging project complied with the forest management plan's soil conditions requirement. The *Lands Council I* court held the "Forest Service's reliance on the spreadsheet models, unaccompanied by on-site verification of the model's predictions, violated NFMA." *Lands Council I*, 395 F.3d 1019, 1032–35 (9th Cir. 2005).

²⁰⁵ *Lands Council III*, 494 F.3d at 784–85 (Smith, J., specially concurring).

²⁰⁶ *Id.* at 780–83 (Smith, J., specially concurring).

²⁰⁷ *Id.* at 781 (Smith, J., specially concurring).

²⁰⁸ *Id.* at 781–82 (Smith, J., specially concurring).

²⁰⁹ *Id.* at 782 (Smith, J., specially concurring).

²¹⁰ *Id.* at 782–83 (Smith, J., specially concurring).

its own judgment for that of the agency's expertise.²¹¹ *Ecology Center's* holding, however, compelled the injunction in *Lands Council III*.

Turning from *Ecology Center's* implication for *Lands Council III*, Judge Smith articulated his belief that the injunction mandated by *Ecology Center* is merely one in a pattern of "blunderbuss" injunctions substantially contributing to the decline of the Pacific Northwest's logging industry and correlating to the dramatic rise in unemployment within the region.²¹² Although acknowledging injunctions are at times appropriate and that judicial decisions are not entirely responsible for the timber industry's declines, Judge Smith nevertheless maintained the judicial decisions like that in *Ecology Center* make it "virtually impossible for logging to occur . . . because the Forest Service can never satisfy the [Ninth Circuit's] constantly moving legal targets . . ."²¹³ Judge Smith cited statistics he considered "illustrative of the damage suffered," including decline in lumber yards and the timber harvests on Oregon's federal lands, job loss in the timber industry throughout the Pacific Northwest, and a general decrease in the socioeconomic well-being in towns closest to the region's federal forests who lost logging as a source of economic stability.²¹⁴ Judge Smith asserted that effects of Ninth Circuit decisions reverberate nationwide, and pointed to national figures on timber imports and exports and a peak in lumber exports in 1988 "before our circuit began to issue over broad injunctions against the logging industry."²¹⁵

In response to evidence in Judge Ferguson's concurrence suggesting these economic impacts resulted from globalization of the timber industry, Judge Smith attacked the source of these arguments directly, suggesting that the views of activists "deserve a healthy skepticism because they are . . . so far from the mainstream of knowledgeable discourse."²¹⁶ Judge Smith rooted his argument in our government's separation of powers: the role of federal courts is to properly construe and apply federal environmental laws to protect ecological resources, but courts must act within the established standards

²¹¹ *Id.* at 783 (Smith, J., specially concurring).

²¹² *Id.* at 783–85 (Smith, J., specially concurring).

²¹³ *Id.* at 783 (Smith, J., specially concurring).

²¹⁴ *Id.* at 784–85 (Smith, J., specially concurring).

²¹⁵ *Id.* at 785 (Smith, J., specially concurring). Judge Smith cited a number of credible government sources. See KRISTA M. GEBERT, ET AL., U.S. DEP'T. OF AGRIC., UTILIZATION OF OREGON'S TIMBER HARVEST AND ASSOCIATED DIRECT ECONOMIC EFFECTS, 1998 2 (2002), available at http://www.fs.fed.us/pnw/pubs/pnw_gtr532.pdf (showing a decrease in timber harvests on federal lands by more than 89% from 1988 to 1998 and a decline in the number of Oregon lumber mills from 360 to 200 during the same period); SUSAN E. CHARNLEY, ET AL., U.S. DEP'T. OF AGRIC., SOCIOECONOMIC MONITORING RESULTS 156, 159 (2006), available at http://www.fs.fed.us/pnw/publications/pnw_gtr649/pnw_gtr649_3g.pdf (showing a loss in 30,000 Pacific Northwest timber jobs between 1990 and 2000 and a decrease in the socioeconomic well-being of 40% of communities within five miles of national forests during the same period, and stating logging became a minor or negligible sources of economic stability in these communities by 2003); JAMES L. HOWARD, U.S. DEP'T. OF AGRIC., U.S. TIMBER PRODUCTION, TRADE, CONSUMPTION, AND PRICE STATISTICS 1965 TO 1999 4 (2001), available at <http://www.fpl.fs.fed.us/documnts/fplrp/fplrp595.pdf> (showing 1988 imports and exports at 13.8 billion board feet and 4.5 billion board feet, respectively; and 1999 figures of imports and exports at 19.9 billion board feet and 2.5 billion board feet, respectively).

²¹⁶ *Lands Council III*, 494 F.3d at 786 (Smith, J., specially concurring).

governing that role, not frustrate the careful balance between regulated logging and the environment struck by the democratic branches of our government.²¹⁷

2. Judge Ferguson's Response: Judge Smith Based His Assertions on a Logical Fallacy

Judge Ferguson, joined in his concurrence by Judge Reinhardt, wrote separately to respond to Judge Smith.²¹⁸ His opinion makes two clear points. First, he asserted that the *Ecology Center* court correctly held that the Forest Service acted arbitrarily and capriciously by basing decisions on unconfirmed hypotheses, and underscored this belief by noting that the Supreme Court denied certiorari in that case.²¹⁹ Second, Judge Ferguson argued that because Judge Smith provided no evidence supporting his claim, by linking court-issued injunctions barring logging with the decline in the timber industry, Judge Smith committed “a text book logical fallacy: *post hoc, ergo propter hoc* (after this, therefore because of this).”²²⁰ Judge Ferguson dismissed as “entirely erroneous” both Judge Smith’s assault on Ninth Circuit injunctions, and his assertion that the timber industry declined as a result of their issuance.²²¹

Addressing Judge Smith’s contention that many Ninth Circuit injunctions are “overbroad” or “blunderbuss,” Judge Ferguson pointed out that *Ecology Center* is the only particular injunction Judge Smith references.²²² Where Judge Smith asserts, based on a separation of powers argument, that the courts should not upset the congressional balance between logging and the environment, Judge Ferguson responds that a pattern of injunctions indicates a pattern of illegal environmental violations courts have a responsibility to enjoin.²²³

Although he saw no connection between court injunctions and timber industry trends, Judge Ferguson’s opinion pointed to the practices of the industry itself, citing evidence that mergers, downsizing and automation contributed to job loss.²²⁴ Judge Ferguson looked at Boundary County, Idaho,

²¹⁷ *Id.* at 783, 786 (Smith, J., specially concurring).

²¹⁸ *Id.* at 786 (Ferguson, J., concurring).

²¹⁹ *Id.* (Ferguson, J., concurring).

²²⁰ *Id.* (Ferguson, J., concurring).

²²¹ *Id.* (Ferguson, J., concurring).

²²² *Id.* (Ferguson, J., concurring).

²²³ *Id.* at 786–87 (Ferguson, J., concurring). Judge Ferguson cites the words of Judge Fletcher’s opinion in *Earth Island II*, which acknowledges “a disturbing trend in the [Forest Service’s] recent timber-harvesting and timber-sale activities,” suggesting the agency has “been more interested in harvesting timber than in complying with our environmental laws.” *Id.* at 787 (Ferguson, J., concurring) (citing *Earth Island II*, 442 F.3d 1147, 1177–78 (9th Cir. 2006)).

²²⁴ *Id.* at 787 (Ferguson, J., concurring). Citing Derrick Jensen and George Draffan, two authors Judge Smith criticized as “activists” who “fantasize about blowing up dams,” Judge Ferguson footnoted that Judge Smith’s attack on the writers never addressed the merits of their documented research. Stating his own belief that politically engaged individuals are not disqualified from contributing to an issue’s analysis, Judge Ferguson went on to say it is not a judge’s role to determine who is in the “political ‘mainstream’ and to credit their research accordingly.” *Id.* at 787 n.1 (Ferguson, J., concurring). Jensen and Draffan’s research explained

the area touched by the *Lands Council III* decision. He noted that when Louisiana-Pacific, a building product manufacturer, closed its mill in Bonners Ferry, that corporate decision eliminated 130 local jobs.²²⁵ However, he pointed to interviews in local news stories suggesting “that too much logging, rather than not enough, . . . caused the economic decline in Boundary County.”²²⁶ Judge Ferguson refused to accept that the judiciary, rather than actions of the industry itself,²²⁷ caused the economic decline affecting traditional logging communities in the Pacific Northwest.

IV. DISCUSSION OF *LANDS COUNCIL III*

Discussion of the three-judge panel decision in *Lands Council III* is best undertaken by considering in turn the two major issues implied by Judge Smith’s special concurrence: 1) his criticism of the Ninth Circuit’s judicial decisions, emphasizing a purported lack of deference to the Forest Service’s scientific determinations, unpredictability in court decisions, and “blunderbuss injunctions”; and 2) the connection he draws between these judicial decisions and the decimation of the Pacific Northwest’s timber industry. Considering these issues within the forest management legal context undermines Judge Smith’s assertions. Instead, the following discussion reinforces the judiciary’s ability to review agency methodology within the bounds of arbitrary and capricious review.

A. Judicial Decisions

1. Adequate Deference and Consistency with Arbitrary and Capricious Review

Holdings in both the Supreme Court and the Ninth Circuit set bounds on agency discretion,²²⁸ acknowledging that courts may withhold deference to

that as the number of paper mills decreased in the 1970s and 1980s by 21%, the average output per mill increased 90%. Worker productivity in the pulp and paper and logging and milling industries echoed this trend, resulting in job losses between 6 and 10 percent during the same time. JENSEN & DRAFFAN, *supra* note 6, at 50–51.

²²⁵ *Lands Council III*, 494 F.3d at 787 (Ferguson, J., concurring).

²²⁶ *Id.* at 788 (Ferguson, J., concurring) (citing Becky Kramer, *Timber Town May Buy Two L-P Sawmills*, SPOKESMAN REV. (Spokane, Wash.), May 30, 2003, at A1 (quoting a spokesman for Louisiana-Pacific as explaining the closure by saying “[i]n the lumber business, we continue to see an oversupply situation, with historic low prices”)); *see also id.* (Ferguson, J., concurring) (citing Dan Hansen, *Bonners Ferry Mill Won’t Reopen*, SPOKESMAN REV. (Spokane, Wash.), July 23, 2003, at A8 (quoting a spokesman for a lumber company who purchased the mill, who stated the mill would not reopen because “[t]here’s not enough raw material to support a mill operation at Bonners Ferry”)).

²²⁷ In a footnote, Judge Ferguson pointed to the multi-million dollar salary packages chief executive officers of Louisiana-Pacific, International Paper, Weyerhaeuser, and Georgia-Pacific received, even in the face of low income worker layoffs. *Id.* at 788 n.4 (Ferguson, J., concurring).

²²⁸ *See* Smith, *supra* note 56, at 80 (citing *Burlington Truck Lines*, 371 U.S. 156, 167 (1962), which states “unless we make the requirements for administrative action strict and demanding,

expertise when agency decisions are not well-reasoned.²²⁹ The Ninth Circuit's review of an agency's technical and scientific methodologies is consistent with this case law and with arbitrary and capricious review under the APA.

A judicial inquiry into the agency record is "searching and careful"²³⁰ when it seeks verification of the Forest Service's hypothesis in the agency's methodology, just as the *Lands Council I*, *Ecology Center*, and *Lands Council III* courts sought. Further, the Supreme Court indicates an agency's action is arbitrary and capricious when it relies on factors other than those Congress intended it to consider, "entirely fail[s] to consider . . . important aspect[s] of the problem, offer[s] an explanation for its decision that runs counter to the evidence before the agency, [and] is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."²³¹ The Forest Service's incorporation of inaccurate habitat data into its models (an action rejected by the courts in *Rittenhouse* and *Earth Island II*) compares with this description of arbitrary decision making. Although ultimately the review is a narrow one, *Lands Council III*'s prohibition against methodology predicated on an "unverified hypothesis" and its requirements for "on-site verification" fit neatly within the scope of arbitrary and capricious decision making described by Supreme Court holdings.

Lands Council III and the cases it builds upon also demonstrate the Ninth Circuit's capacity to exhibit deference when due.²³² In *Lands Council III*, despite Land Council's conflicting report regarding the percentage of old-growth stands in the project area, the court recognized that the project complied with IPNF Plan Standard 10(b), ruling that when presented with conflicting data, an agency "must have discretion to rely on its own qualified experts."²³³ The Ninth Circuit's attempts to articulate an approach for judicial review of agency methodology do not indicate a runaway court without judicial restraint,²³⁴ and the Ninth Circuit will likely continue to exhibit restraint and proper deference for the Forest Service's reasoned decisions in the future.

expertise, the strength of modern government, can become a monster which rules with no practical limits on discretion")(discussing the consistency of *Lands Council I* with Supreme Court and Ninth Circuit precedent); *New York v. United States*, 342 U.S. 882, 884 (1951) (stating "[a]bsolute discretion, like corruption, marks the beginning of the end of liberty"); *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv. (NWF v. NMFS)*, 422 F.3d 782, 798 (9th Cir. 2005) ("The deference accorded an agency's scientific or technical expertise is not unlimited.").

²²⁹ See *NWF v. NMFS*, 422 F.3d at 798 (citing *Brower v. Evans*, 257 F.3d 1058, 1067 (9th Cir. 2001)).

²³⁰ *Marsh*, 490 U.S. 360, 378 (1989) (quoting *Overton Park*, 401 U.S. 402, 416 (1971)).

²³¹ *Motor Vehicle Mfrs. Ass'n. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

²³² See *Lands Council III*, 494 F.3d at 778–79 (quoting *Earth Island*, 351 F.3d 1291, 1302 (9th Cir. 2003) (holding an agency is entitled to discount alternative data offered by plaintiffs and rely on its own data)).

²³³ *Id.* (quoting *Marsh*, 490 U.S. at 378).

²³⁴ See *Env'tl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1011 (9th Cir. 2006) (deferring to an agency's scientific rationale when holding, in part, that potential harm to the northern spotted owl was not a significant environmental impact requiring preparation of an EIS because the agency was reasonable in assuming that even if owl activity centers had changed in recent years, the density of owls in the project area should be roughly constant, so the project carried an acceptably low level of uncertainty).

2. Predictability in Court Decisions

Judge Smith's assertion that unpredictability in court decisions will prevent the Forest Service from ever completing a timber harvest sale is also without merit. The line of cases represented by *Lands Council I*, *Ecology Center*, and *Lands Council III* represent a shift towards consistency by carving out an approach for review of agency methodology: base scientific methodologies on verified hypotheses and include on-the-ground verification in the analysis.²³⁵ These cases impliedly add one additional consideration: an agency's scientific methodology is more likely arbitrary and capricious if its own analysis implicitly or explicitly provides evidence counter to the agency's final conclusion or adopted methodology.²³⁶

The Ninth Circuit's decision to re-hear *Lands Council III* en banc leaves uncertain whether the court plans to affirm its *Ecology Center* approach, but it most assuredly indicates new developments to come. Retaining the approach followed in *Lands Council I* and *Ecology Center*, one that delineates some boundaries within which agencies may exercise discretion, the new decision in *Lands Council III* provides an opportunity to add consistency to reviews by subsequent panels and lower courts and give agencies clear direction on the Ninth Circuit's expectations.²³⁷

A judicially enforced limit setting some boundary on the Forest Service's methodological discretion is consistent with both the history of NFMA and its implementing regulations.²³⁸ One of the original goals of NFMA was to rein in the Forest Service's discretion, which led to production of timber at the expense of environmental protections even after the passage of MUYSA.²³⁹ Congress's own substantive mandates in NFMA, particularly the protections for a diversity of plant and animal communities,²⁴⁰ represent clear direction for the agency to consider multiple uses on equal footing, rather than place timber harvest above all else.²⁴¹ Congress limited agency discretion itself by appointing a committee of scientists to counter the

²³⁵ See summary of cases *supra* Parts II.B.2, III.A (discussing these elements in all three cases).

²³⁶ See, e.g., *Lands Council III*, 494 F.3d at 777 (issuing an injunction and noting, by its own statement, that the owl habitat study is merely an "encouraging" 'impl[ication]'" that treatment could maintain habitat, and therefore the conclusion is circumspect at best); *Ecology Center*, 430 F.3d 1057, 1069 (9th Cir. 2005) (reversing summary judgment and commenting that the agency's own scientist called the Forest Service's soil analysis into question because it failed to analyze soil conditions by field testing the actual areas, and another agency expert pointed out that the transects targeted burned areas and not proposed harvest units); *Lands Council II*, 479 F.3d 636, 642 (9th Cir. 2007) (issuing an injunction and pointing to testimony of Forest Service's own expert that live trees that were dying, but not dead, were marked for harvest when governing guidelines prohibited harvest of live trees).

²³⁷ See discussion *supra* Part II.B.2, citing Wilkinson, *supra* note 13, at 668–69 (discussing the need for clear judicial rules to guide agency decision making).

²³⁸ See Smith, *supra* note 56, at 80–83 (discussing support for the *Lands Council I* opinion in the history of the passage of NFMA and its regulations).

²³⁹ *Id.* at 82.

²⁴⁰ 16 U.S.C. § 1604(g)(3)(B) (2000).

²⁴¹ See Smith, *supra* note 56, at 82 (stating the statute was an attempt to "neutralize" industry influence).

problem of industry capture and politicized science in the development of NFMA's implementing regulations.²⁴² Consistent with these congressional directions, the regulations governing the agency development of environmental impact statements require the Forest Service to "insure . . . scientific integrity" and "identify methodologies used" and the "sources relied on."²⁴³ The very emphasis Congress put on science as a solution to values debates suggests a review of agency science to seek out arbitrary and capricious methodology plays an important role in ensuring that the Forest Service complies with congressional preferences.²⁴⁴

Judicial restraint on unfettered agency discretion is consistent with congressional action and prior case law in the Ninth Circuit. Dr. Wilkinson makes a strong case that while judicial standards for agency action are good, the technical complexity of environmental administrative records is a good reason for courts to retain some flexibility to consider the facts in the record before them on a case-by-case basis.²⁴⁵ Thus far, cases ranging from *Inland Empire* to *Lands Council III* represent the Ninth Circuit's attempt at balancing these two themes and providing an adequate limit on agency discretion and politicization by both sides of the debate—particularly an agency's ability to maintain scientific objectivity²⁴⁶—without overstepping the bounds of judicial review.²⁴⁷

3. Adequately Tailored Injunctions

One issue not raised by Judge Smith, but validly presented by *Land Council III*'s reliance on *Ecology Center* and *Lands Council v. Martin* (*Lands Council II*),²⁴⁸ is the variance between the abuse of discretion standard of review of the district court decision to deny an injunction and the de novo standard of review of a district court's ruling on a motion for summary

²⁴² Hoberg, *supra* note 2, at 3 (discussing how environmentalists broke up the "Iron Triangle" between regional congressional delegations, industry, and the Forest Service by heading for the courts and appealing to Congress through a nationalized argument).

²⁴³ Smith, *supra* note 56, at 81–82 (quoting 40 C.F.R. § 1502.24 (2007)).

²⁴⁴ Hoberg, *supra* note 2, at 3 (suggesting that without citizen suits in court and a committee of scientists overseeing its regulations, the Forest Service could fall back on alignments with timber interests instead of complying with congressional preferences).

²⁴⁵ Wilkinson, *supra* note 13, at 668.

²⁴⁶ After the passage of President Bush's Healthy Forest Initiative in December 2003, the government won seventeen straight challenges favoring timber cutting over environmental challenges. See LAYZER, *supra* note 1, at 221.

²⁴⁷ Note that even the many injunctions issued during the late 1980s and early 1990s required only that the agency reconsider information. These temporary limits on agency action were lifted once the agency gave due consideration to an issue. See discussion *infra* Part IV.A.3; *supra* note 201 (listing cases granting temporary injunctions). See also Swedlow, *supra* note 7, at 228 (quoting U.S. GEN. ACCOUNTING OFFICE, ENDANGERED SPECIES: SPOTTED OWL PETITION EVALUATION BESET BY PROBLEMS 1 (1989), available at <http://archive.gao.gov/d15t6/137989.pdf> (noting that the U.S. General Accounting Office reported that the "Fish and Wildlife Service management substantively changed the body of scientific evidence" with regard to the spotted owl)).

²⁴⁸ 479 F.3d 636, 639 (9th Cir. 2007).

judgment.²⁴⁹ Although the *Lands Council III* court set out the correct standard of review,²⁵⁰ and abuse of discretion seems to encompass overbroad deference to arbitrary and capricious determinations, perhaps reviewing courts will defer more to district court determinations once the standard for reviewing agency methodology is more firmly settled.

Judge Smith does assert, however, that the Ninth Circuit exhibits a “pattern” of injunctions that are blunderbuss, overbroad, or sweeping.²⁵¹ As Judge Ferguson points out, Judge Smith cites no specific case for this assertion.²⁵² However, this “pattern” is obviously not rooted in *Ecology Center* or *Lands Council I*, which reversed summary judgments but issued no injunctions.²⁵³ Likely, given his argument that “blunderbuss” injunctions are linked to a decline in the timber industry, Judge Smith refers to the many injunctions issued during the heated spotted owl debates that epitomized the jobs versus the environment debate nationwide.²⁵⁴ However, just as the Fourth Circuit in *Monongahela* issued its decision to halt clear-cutting based on interpretation of current law²⁵⁵—leaving the values debate to Congress in passing NFMA—arguably the legal decisions in the Pacific Northwest interpreted current law under NFMA and NEPA, leaving Congress the choice to step in if necessary.²⁵⁶ Instead, during the spotted owl debate, the

²⁴⁹ See Answering Brief for the United States at 25 n.5, *Lands Council III*, 494 F.3d 771 (9th Cir. 2007) (No. 07-35000), available at 2007 WL 1103853 771, 775 (9th Cir. 2007).

²⁵⁰ *Lands Council III*, 494 F.3d at 775.

²⁵¹ *Id.* at 784–85 (Smith, J., specially concurring).

²⁵² *Id.* at 786 (Ferguson, J., concurring).

²⁵³ See *Ecology Center*, 430 F.3d 1057, 1061 (9th Cir. 2005); *Lands Council I*, 395 F.3d 1019, 1024 (9th Cir. 2005).

²⁵⁴ See, e.g., *Or. Natural Res. Council Action v. U.S. Forest Serv.*, 59 F. Supp. 2d 1085, 1097 (W.D. Wash. 1999) (enjoining nine timber sales); *Pac. Coast Fed’n of Fishermen’s Ass’n v. Nat’l. Marine Fisheries Serv.*, 71 F. Supp. 2d 1063, 1066–67, 1073 (W.D. Wash. 1999) (enjoining 24 timber sales); *Seattle Audubon Soc’y v. Evans*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (enjoining any award of future timber sales until the Forest Service submitted, adopted, and put into effect standards and guidelines and an EIS to ensure the viability of the spotted owl); *Seattle Audubon Soc’y v. Moseley*, 798 F. Supp. 1473, 1476 (W.D. Wash. 1992), *aff’d sub. nom.* *Seattle Audubon Soc’y v. Espy*, 998 F.2d 699 (9th Cir. 1993) (holding the EIS prepared by the Forest Service violated NEPA because it did not consider the effects of Bureau of Land Management timber sales on the spotted owl or consider new available data on the owl, and because the EIS did not consider the risks of timber harvest on other species); *Portland Audubon Soc’y v. Lujan*, 795 F. Supp. 1489, 1492–93 (D. Or. 1992), *aff’d sub. nom.* *Portland Audubon Soc’y v. Babbitt*, 998 F.2d 705 (9th Cir. 1993) (holding the Forest Service violated NEPA by failing to issue a supplemental EIS considering new data available on the spotted owl and issuing an injunction against timber sales until such supplemental EIS was completed). These injunctions are discussed more fully in LAYZER, *supra* note 1, at 200–203 (reporting that as a result of these injunctions, in one year over 150 timber sales halted and the amount of timber available dropped from 5.4 billion board feet to 2.4 billion board feet, but noting that while many of these cases were waiting on appeal, more than 600 timber sales went forward). See also Lauren M. Rule, Note, *Enforcing Ecosystem Management Under the Northwest Forest Plan: The Judicial Role*, 12 FORDHAM ENVTL. L.J. 211, 217–222 (2000) (summarizing the role of the courts and legal challenges to federal land management agencies leading up to the adoption of the Northwest Forest Plan).

²⁵⁵ *Monongahela*, 522 F.2d 945, 947 (4th Cir. 1975).

²⁵⁶ Although Congress never undertook major amendments to NFMA, congressional action followed closely on the heels of the injunctions in the Pacific Northwest. Congress passed

Executive Branch intervened. President Clinton built upon Congress's direction to develop NEPA's regulations in conjunction with a committee of scientists, and established the Forest Ecosystem Management Assessment Team (FEMAT) to prepare a federal assessment of the forests in spotted owl territory.²⁵⁷ The effort resulted in the adoption of the Northwest Forest Plan, the first of its kind and the only forest management plan built with input from scientists.²⁵⁸

Both the *Monongahela* case and the Pacific Northwest's logging debates evidence a cycle of democratic participation, congressional action, and judicial review that enforces the themes of democracy and separation of powers; rather than undermines them, as Judge Smith seems to suggest.²⁵⁹ Citizens and interest groups brought issues to the legislators and the courts, the courts enforced and interpreted existing law, and the representative branches of government responded to citizens by addressing the values—in each case, bringing science in as a solution. The congressionally-provided avenues for public participation in NFMA and NFMA's historic grounding in science reinforce the importance of, and the need for, judicial review of agencies' technical forest management decisions, ensuring the science implemented on the ground comports with the science used to develop the Forest Service's regulations.

B. There Is No Merit in Linking Forestry's Decline with Judicial Action

Judge Ferguson asserted that Judge Smith's *Land Council III* concurrence represents "a text book logical fallacy: *post hoc, ergo propter hoc* (after this, therefore because of this)."²⁶⁰ As both *Lands Council III* concurrences accurately point out, the Northwest underwent dramatic economic shifts during recent decades. However, even if judicial decisions are linked to the spotted owl controversy, it does not follow that overbroad court injunctions caused the changes. By the time courts began handing down injunctions in the spotted owl debate, a shift in the timber industry was well underway.²⁶¹ By the mid-1980s, private companies "had virtually denuded the region's privately owned old-growth," in part because changes

timber salvage riders in 1989, 1990, and 1995, the last of which provided specific management direction including eliminating administrative review of timber salvage harvests and prohibiting injunctions against any decision to prepare a sale. See Mortimer, *supra* note 3, at 975–76.

²⁵⁷ See Rule, *supra* note 254, at 220–21. Using the compromise ground from FEMAT's recommendations, the Bureau of Land Management and the Forest Service developed an EIS to support the compromise. After extensive public comment, the agencies adopted a record of decision that is widely known as the Northwest Forest Plan. *Id.*

²⁵⁸ *Id.*

²⁵⁹ See *Lands Council III*, 494 F.3d 771, 786 (9th Cir. 2007) (Smith, J., specially concurring) (asserting courts "may not properly ignore the well-established standards that govern our own role in reviewing the law and regulations enacted by the representative branches of our government").

²⁶⁰ *Id.* (Ferguson, J., concurring).

²⁶¹ See LAYZER, *supra* note 1, at 193–94 (describing the changing dynamics of the industry at the time).

in New York financial markets made corporate takeovers more common—logging companies with huge holdings of valuable timber were targets for raiders who clear-cut their holdings to pay off debts.²⁶² State agencies logged much of the state-owned old-growth during the same period, and thus by the time the spotted owl controversy erupted, nearly 90 percent of remaining old-growth was on federal lands.²⁶³ Once the old-growth was gone, demand for workers fell because while old-growth was labor intensive and required more workers, smaller, second growth trees could be cut by large machines.²⁶⁴

Furthermore, timber harvests from public lands fell by eighty percent between 1989 and 1994, a time-frame the Forest Service considers useful comparison years to determine the impact of the policy and management changes, because “1989 predates most of the policy changes and resulting harvest impacts, and by 1994 most of the impacts from the changes and recovery from the national recession had occurred.”²⁶⁵ This certainly affected localities, which receive twenty-five percent of all timber sales revenue from national forests in their counties.²⁶⁶ The Forest Service offers for timber dropped from 5.4 billion board feet to 506 million from 1981 to 2004.²⁶⁷ The Forest Service estimates that in 1988, forty-four percent of Oregon’s economy and twenty-eight percent of Washington’s was directly or indirectly dependent on national forest timber,²⁶⁸ but this level of economic influx was not necessarily sustainable—environmentalists argued that at the rate of cut reached in the 1980s, all trees over 200 years-old would be gone in less than thirty years.²⁶⁹ As debates raged over solutions to protect habitat, both sides publicly issued widely varying reports and estimates of potential job loss.²⁷⁰

Between 1989 and 1996, as the Northwest Forest Plan’s ecosystem was implemented, the timber industry in the Pacific Northwest lost 21,000 jobs²⁷¹—but economists had difficulty separating the effects of the implementation of the forest plan and spotted owl injunctions from the general recession that hit at the same time.²⁷² One study found no statistical

²⁶² *Id.* at 193.

²⁶³ *Id.* at 193–94.

²⁶⁴ *See id.* at 194 (describing how old-growth logging is more labor intensive than second-growth logging).

²⁶⁵ TERRY L. RAETTIG & HARRIET H. CHRISTENSEN, U.S. FOREST SERV., *TIMBER HARVESTING, PROCESSING, AND EMPLOYMENT IN THE NORTHWEST ECONOMIC ADJUSTMENT INITIATIVE REGION: CHANGES AND ECONOMIC ASSISTANCE 3* (1999), *available at* http://www.fs.fed.us/pnw/pubs/pnw_gtr465.pdf.

²⁶⁶ LAYZER, *supra* note 1, at 194.

²⁶⁷ *Id.* at 214 tbl.8-1.

²⁶⁸ *Id.* at 194.

²⁶⁹ *Id.* at 195.

²⁷⁰ *Id.* Reports ranged from 102,757 jobs lost to only 13,000 jobs lost. *Id.* at 204 n.36.

²⁷¹ *Id.* at 195, 204 (noting actual job loss varies depending on whether only direct job loss is considered or also indirect job loss); *see also* Timothy Egan, *Administration Offers Plan To Limit Northwest Logging*, N.Y. TIMES, Sept. 22, 1990, <http://query.nytimes.com/gst/fullpage.html?res=9C0CE7D81F39F931A1575AC0A966958260&sec=&spon=&pagewanted=all> (discussing the perspective on the crisis during the first Bush administration) (last visited July 20, 2008).

²⁷² LAYZER, *supra* note 1, at 215.

evidence linking job loss with the spotted owl protections.²⁷³ As Judge Ferguson pointed out, job loss in the region is at least partially attributable to changes in the industry.²⁷⁴ Another factor contributing to loss of timber industry jobs is the encroachment of urban areas on roughly 75,000 acres of timberland each year in Oregon and Washington during the 1980s and early 1990s.²⁷⁵ Although certainly individuals felt the effects of these changes, the standard of living in the region increased dramatically in a short period following the timber industry job loss, with diversification in jobs and an associated drop in unemployment and rise in overall income.²⁷⁶

As these statistics point out, many different economic, industrial, and environmental forces combined in a perfect storm to cause the timber industry changes in the Pacific Northwest. It does not necessarily follow that federal judges, enforcing statutes enacted by Congress and implemented by federal agencies, caused these changes. Even though courts maintain equitable discretion as to whether to issue an injunction, the Supreme Court limited this discretion by requiring courts to maintain the policy balances struck by the legislative branch.²⁷⁷

One alternative suggestion for the changes seen in the Pacific Northwest is that in the forest management arena, inherent values conflicts lead to responsibility shifting through delegation of authority.²⁷⁸ And by its very nature, the Forest Service's operation under a statute that does not mandate national forest strategies in detail, produces conflicts that eventually settle in the courts.²⁷⁹ This is particularly true because the Forest Service is subject to special interest influence, which leaves other parties who are unhappy with policy changes ready to go to the courts.²⁸⁰ For example, from the 1970s through 1992, between seventy-five percent and ninety-two percent of all lawsuits brought by environmentalists included some "intention of obstructing commodity production."²⁸¹ While environmentalists also sought legislation in Congress,²⁸² the courts offered

²⁷³ William R. Freudenburg, Lisa J. Wilson, & Daniel J. O'Leary, *Forty Years of Spotted Owls? A Longitudinal Analysis of Logging Industry Job Losses*, 41 SOC. PERSP. 1, 15 (Feb./Mar. 1988) (finding no link between job loss and spotted owl restrictions).

²⁷⁴ *Lands Council III*, 494 F.3d 771, 787 (9th Cir. 2007) (Ferguson, J., concurring); LAYZER, *supra* note 1, at 215 (noting a shift in timber industry operations from the Pacific Northwest to the Southeast of the United States). The seven largest forest producers in the United States reduced mill capacity by 35% in the Northwest while increasing it by 121% in the Southeast; resulting in a loss of 27,000 Oregon and Washington timber industry jobs between 1979 and 1989. *Id.* Timber production was relatively stable during that time but exports of raw, unmilled timber increased, resulting in a loss of mill jobs. *Id.*

²⁷⁵ LAYZER, *supra* note 1, at 215.

²⁷⁶ *Id.* at 215–216.

²⁷⁷ *United States v. Oakland Cannabis Buyers' Coop*, 532 U.S. 483, 497 (2001) (citing *Virginian R.R. Co. v. Ry. Employees*, 300 U.S. 515, 551 (1937)).

²⁷⁸ Mortimer, *supra* note 3, at 929, 932–34.

²⁷⁹ *Id.*

²⁸⁰ Hoberg, *supra* note 2, at 3.

²⁸¹ Mortimer, *supra* note 3, at 934.

²⁸² *Id.* at 934–35 (noting that between 1977 and 1992, 507 bills affecting the Forest Service were introduced in Congress, and of those, 164 were enacted).

one tool for resource protection in an era of growing environmental awareness, increased population in the American West, increases in recreational uses of our national forests, and pressure on ecosystems from natural resource extraction.²⁸³ The courts, however, have the judicial expertise to recognize when a plaintiff “seeks to capitalize on the Forest Service’s thorough and candid environmental analysis by seizing on various bits of information and data . . . to claim that substantial questions exist as to whether the [Project] may have a significant effect on the environment.”²⁸⁴ Not every injunction issues, because courts know well how to exercise this expertise.²⁸⁵

In the 1980s and early 1990s, many different economic forces combined to result in job loss within the Pacific Northwest’s timber industry.²⁸⁶ Even though some of this job loss may have resulted when temporary injunctions were issued to prevent timber harvests, it does not follow that courts’ *overbroad* injunctions *caused* or even “*substantially contributed*”²⁸⁷ to this loss, because the injunctions merely enforced the values balance struck within congressional statutes passed through democratic processes, and the regulations implementing them.²⁸⁸

More recently, in *Lands Council III*, the injunction issued against the timber project similarly reflected discretion exercised within the bounds of congressional balancing. Just as Congress required forest management plans under NFMA to “insure consideration of the economic and environmental aspects of various systems of renewable resource management,”²⁸⁹ in balancing the equities, the court weighed permanent environmental harms against the economic hardships to those in the timber industry.²⁹⁰ In the panel’s discretionary determination, “preserving nature and avoiding irreparable environmental injury” outweighed the potential lost timber sales and possible loss of jobs, even in a county with high unemployment.²⁹¹ In doing so, the three-judge panel merely maintained the balance struck by Congress between environmental protections and timber harvests as the Supreme Court directed.²⁹²

²⁸³ See Wilkinson, *supra* note 13, at 670 (discussing changes since 1976).

²⁸⁴ *Env’tl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1018 (9th Cir. 2006).

²⁸⁵ See, e.g., *Wildwest Inst. v. Bull*, 472 F.3d 587, 592 (9th Cir. 2006) (rejecting environmentalist’s claim of hardship in request for injunction because they made little more than an assertion of hardship).

²⁸⁶ See LAYZER, *supra* note 1, at 215.

²⁸⁷ *Lands Council III*, 494 F.3d 771, 784 (9th Cir. 2007) (Smith, J., specially concurring) (emphasis added).

²⁸⁸ See Rule, *supra* note 254, at 215 (discussing the history of spotted owl injunctions and the reasons these injunctions were issued).

²⁸⁹ NFMA, 16 U.S.C. § 1604(g)(3)(A) (2000).

²⁹⁰ *Lands Council III*, 494 F.3d at 779.

²⁹¹ *Id.* at 780.

²⁹² *United States v. Oakland Cannabis Buyers’ Coop.*, 532 U.S. 483, 497 (2001).

V. CONCLUSION

In sum, the Pacific Northwest's timber industry decline is real, but is not caused by judicial action. And despite Judge Smith's strong assertions, the scope of a judicial review of agency decisions can and should rightfully include arbitrary and capricious review of an agency's technical determinations, especially when documented in the administrative record, which is the core basis for judicial decision making.²⁹³ Even during the spotted owl controversy, when judges reviewing agency determinations²⁹⁴ did occasionally go outside the record, they used their own expertise to limit the scope of their reviews, and gave deference where necessary—as this account of Judge Frye, an instrumental district court judge in the spotted owl debates suggests:

Judge Frye was very reluctant to choose among scientists, although she was the only one to give any space in her opinions to the critique of an owl expert testifying on behalf of industry intervenors. She relied primarily on owl assessments produced by BLM's own biologists to hold that the agency must reassess its timber sale program.²⁹⁵

Judge Frye's consideration of scientific evidence and her court's primary reliance on agency scientists evidences the ability of the judiciary to review agency methodology with "a finely crafted legal scalpel based upon correct legal interpretations."²⁹⁶ The foregoing discussion suggests *Ecology Center* and *Lands Council III* exhibit this kind of thoughtful review, and as such, were accurately decided. The Ninth Circuit has yet to complete its en banc reconsideration of *Lands Council III*. Hopefully, the court will not pull back from the panel court's reliance on *Ecology Center*, but will continue its development of the scope of judicial review of scientific methodology exhibited over the past decade.²⁹⁷

Finally, economic and environmental debates over salmon, forests, water, and other constrained resources will continue. Appropriately, conservation pressures will continue to cycle through the judicial and legislative branches. As a diversified economic base reaches rural, timber-dependent communities, the jobs versus environment debate over Pacific Northwest forests may settle if the result of new jobs in rural communities is to lessen reliance on industrial-scale logging and lift the "thumb" from the scales caused by nearly eight decades of established management for timber

²⁹³ Jack Tuholske & Beth Brennan, *The National Forest Management Act: Judicial Interpretation of a Substantive Environmental Statute*, 15 PUB. LAND L. REV. 53, 121 (1994) (commenting that "[t]he cornerstone for judicial review of administrative actions is the record of the agency at the time the challenged decision was made. This is based upon the premise that consideration of evidence outside the record undermines the administrative process and opens the door for the court to substitute its judgment for that of the agency.").

²⁹⁴ Swedlow, *supra* note 7, at 276.

²⁹⁵ *Id.*

²⁹⁶ *Lands Council III*, 494 F.3d at 784 (Smith, J., specially concurring).

²⁹⁷ See discussion *supra* Part II.B.2.

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harvest in our national forests.²⁹⁸ In the meantime, the progress towards ecosystem management and protection of resources for multiple uses is not attributable to courts making policy. Instead, this progress evidences courts' application of the law to the cases brought to them by citizens who hope to ensure the Forest Service follows the values determination made by Congress in passing NFMA. Congress determined that "new knowledge [from research] will promote a sound technical and ecological base for effective management, use, and protection of the Nation's renewable resources."²⁹⁹ With hope, the Ninth Circuit in its upcoming *Lands Council III* en banc decision will help enforce this congressional values balance by clarifying and preserving its rule for reviewing scientific methodology under the APA's arbitrary and capricious standard.

²⁹⁸ See LAYZER, *supra* note 1, at 214–16 (discussing positive economic trends in the Northwest, including economic diversification, following the decline in timber production).

²⁹⁹ National Forest Management Act of 1976, 16 U.S.C. § 1600(4) (2000).