Litigation and Increased Planning's Impact on Our Nation's Overgrown, Fire-Prone National Forests.

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Good morning Chairman and members of the Subcommittee. My name is Robert W. Malmsheimer, and I am a Professor of Forest Policy and Law at the State University of New York's College of Environmental Science and Forestry (SUNY ESF). I am here today to testify on research that my colleague Dr. Denise Keele, an Associate Professor at Western Michigan University, and I have been working on since 2001.

We began this work with the goal of providing policymakers, land managers, and stakeholders with accurate, scientifically-validated data that could be used to help guide policy debate and choices. During the past ten years, we have published 10 articles analyzing Forest Service litigation. I've included a summary of those manuscripts, after the full text of the article I will base my comments on today, at the end of my testimony.

Our article published in the *Journal of Forestry* in 2014 represents the most comprehensive analysis of Forest Service litigation yet completed. The study analyzed the final outcome of 1,125 land management cases filed in federal court from January 1, 1989 to December 31, 2008, and completed by December 31, 2010. Since the article provides a complete analysis of our research on these 20 years of Forest Service litigation, my comments discuss some of its important findings and their implications.

Wins, Losses, and Settlements

The Forest Service won 53.8% of the 1,125 cases closed during this time, with 38.0% of those wins based on judicial decisions on the merits of plaintiffs' cases. A comparison of "wins by judicial decision" (428 wins) with "losses by judicial decision" (241 losses) reveals that the Forest Service won nearly two of every three (64.0%) cases in which judges decided the case on the merits. The agency settled almost one-quarter (22.9%) of all cases.

The Forest Service won 63.5% of the 315 US Courts of Appeals cases decided by judicial decision. It won 6.7% of these cases by other disposition, and lost 29.8% cases by judicial decision.

The Forest Service settles almost as many land management cases as it loses. There are many reasons why the Forest Service would settle; one obvious reason is that the plaintiff's case has some merit. However, as others have pointed out, settlements are often the choice for (1) time-sensitive cases, (2) cases in which judges actively broker settlements, and (3) "sue and settle" cases, in which the agency makes policy changes by encouraging legal

actions. Regardless of the reason for the prevalence of settlements, our findings indicate that settlements are an important dispute-resolution tool.

Plaintiffs' continued litigation (despite low chances of success), suggest that the indirect benefits of litigation, such as publicity and delay of Forest Service action, may be as important to litigants as the direct benefits of winning a case. Our results add to the observation by documenting that even if they do not often win cases, plaintiffs can expect to receive the benefits of a settlement in nearly one of every four cases.

Trends Over Time

Analyzing cases by the year in which they were initiated revealed that the litigation against the Forest Service generally increased from 1989 to 2000; however, since that time the number of cases commencing each year has varied greatly. Plaintiffs initiated an average of 56 cases per year against the agency during these 20 years, with a high of 101 cases in 2004.

Examining cases based on the year in which the case was actually completed reveals that in each year before 2001, the Forest Service won more cases than it lost and settled; i.e., the number of wins was greater than the number of losses plus settlements. But since 2001, it only did so three times (in 2002, when it won 58.2% of cases; in 2009, when it won 54.7% of cases; and in 2010, when it won 60.6% of cases). The agency had its lowest success rate in 2007, when it only won 29 (38.2%) cases, lost 30 (39.5%) cases, and settled 17 (22.4%) cases.

Some of the fluctuation during this time may be contextual. Litigation is based on projects and appeals. Therefore, fluctuations in the number of projects and appeals influences the number of potentially litigable Forest Service actions. Unfortunately, analyzing this context is difficult given the lack of publically accessible aggregate project and administrative appeal data for these 20 years – this was one of the reasons for the creation of the Forest Service's PALS [Projects, Appeals, and Litigation] database in 2007.

Location of Litigation

More than one in four cases occurred in the Forest Service's Region 6 (OR & WA). The agency was most likely to win a case in Region 8 (Southeast), most likely to lose in Region 5 (CA & HI), and most likely to settle in Region 3 (AZ & NM).

Courts within the Ninth Circuit Court of Appeals decided nearly two of every three cases; five times more than courts in the Tenth Circuit, which had the second largest percentage of cases. The agency was most successful in Seventh Circuit cases. The Ninth and Eleventh Circuits were the only circuits where the agency won fewer than half of all cases. The Forest Service was most likely to settle Fifth Circuit cases.

Management Activity Challenged

Vegetative management (i.e., logging and salvage) cases accounted for more than 40% of all challenged management activities, and the agency was most likely to settle these cases. Of the other management activities, the Forest Service was most successful in special use permit cases and most likely to lose wildlife cases.

It is not surprising that vegetative management projects are the most dominant type of management activity involved in Forest Service land management litigation since the results of research on administrative appeals (which are required before litigation can occur), indicates that projects involving vegetative management are more likely to be appealed regardless of other characteristics. Otherwise, the relatively equal distribution of litigation based on other management activities suggests that litigants seek to influence a wide variety of Forest Service land management decisions.

Statutory Basis of Litigation

Our article provides a comprehensive evaluation of the statutory basis of Forest Service litigation, including win, loss, and settlement rates for the 10 most frequently litigated statutes, and in-depth analysis of judicial decisions on these statutes. Of the 82 statutes that govern Forest Service land management decisions, plaintiffs alleged the agency violated 57 of these statutes in these cases. Although 42% of cases involved allegations that the Forest Service violated only one statute, cases involved on average two statutes.

Our analysis of statutory interaction disclosed the complexity of judges' rulings in the cases the Forest Service *lost* involving the National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), and Endangered Species Act (ESA). We documented that in all three types of statute interaction cases we examined (i.e. NEPA/NFMA loses, NEPA/ESA loses, and NFMA/ESA loses), judges found the agency violated its statutory obligations for *both* statutes in less than half the cases (45.7% of NEPA/NFMA cases, 34.7% of NEPA/ESA cases, and 24.1% of NFMA/ESA cases). Our results also revealed that in some cases, such as those involving NEPA/ESA losses and NFMA/ESA losses, judges found the agency was much more likely to comply with its obligations under one statute (ESA in these losses) than another statute.

Conclusion

Our article provides an overview of all Forest Service litigation. It does not address the impact of litigation on Forest Service land management decisions, but it is important to remember that the 1,125 cases we examined did not represent 1,125 land management projects or plans. Many lawsuits involved multiple projects, and many cases established a legal precedent that directed future Forest Service land management decisions.

Regardless of the administration managing our national forests (i.e., the G.H.W. Bush, Clinton, or G.H. Bush administrations), their management is sometimes controversial. This demonstrates why legal factors are as important as biological and economic factors in the management of our national forests.

RESEARCH ARTICLE

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policy

Twenty Years of Forest Service Land Management Litigation

Amanda M.A. Miner, Robert W. Malmsheimer, and Denise M. Keele

This study provides a comprehensive analysis of USDA Forest Service litigation from 1989 to 2008. Using a census and improved analyses, we document the final outcome of the 1,125 land management cases filed in federal court. The Forest Service won 53.8% of these cases, lost 23.3%, and settled 22.9%. It won 64.0% of the 669 cases decided by a judge based on cases' merits. The agency was more likely to lose and settle cases during the last 6 years; the number of cases initiated during this time varied greatly. The Pacific Northwest region along with the Ninth Circuit Court of Appeals had the most frequent occurrence of cases. Litigants generally challenged vegetative management (e.g., logging) projects, most often by alleging violations of the National Environmental Policy Act and the National Forest Management Act. The results document the continued influence of the legal system on national forest management and describe the complexity of this litigation.

Keywords: USDA Forest Service, litigation, land management, national forests, federal courts

The US Department of Agriculture Forest Service manages the National Forest System for multiple uses. The agency's managers must balance diverse uses, including timber production, recreation, grazing, wildlife habitat diversity, and water quality on behalf of and for the benefit of the public. When conflicts emerge over the Forest Service's land management decisions, stakeholders often use the federal court system to address their concerns. This has become increasingly prevalent since the 1960s and 1970s when federal courts expanded citizens' and advocacy groups' right to sue and the US Congress enacted numerous environmental statutes (Shapiro 1995).

Judicial review of the Forest Service's land management decisions ensures that the agency sufficiently accounts for "the various factors and policies Congress intended to be implemented" (Buccino et al. 2001, p. 2). However, as Baldwin (1997, p. 2) described, "Since the 1980s, critics have asserted that…[litigation is] stopping or unacceptably slowing the decisionmaking processes and the use of the federal lands and resources…."

In 2006, we published the first comprehensive analysis of Forest Service litigation in the *Journal of Forestry*. The article provided "a foundation for Forest Service land management litigation discussions" by providing "policymakers, land managers, and stakeholders with an accurate account of 14 years of litigation" based on data, rather than anecdotal information (Keele et al. 2006, p. 201). In this article, we expand the temporal scope to 20 years, revise and improve the analysis of case outcomes, and provide a first-of-its-kind comprehensive examination of agency success when sued under different statutes. After discussing recent research on how laws and litigation affect the Forest Service, we describe our revised final case outcome coding and then document how the Forest Service has fared in litigating land management cases during these 20 years.

USDA Forest Service Legal Research

Since the early 1980s researchers have analyzed Forest Service litigation as part of larger environmental litigation studies (e.g., Wenner 1982, Wenner and Dutter 1988, Alden and Ellefson 1997, Snape and Carter 2003). Starting with Jones and Taylor's 1995 study, researchers (e.g., Malmsheimer et al. 2004) and advocates (e.g., Carter et al. 2003) have analyzed Forest Service litigation. Since our first article was published, others have greatly expanded our understanding of how laws affect the management of the National Forest System and litigation

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based on those laws. For example, research during the last 6 years has examined the following:

• Effects of laws, such as the National Environmental Policy Act of 1969 (NEPA), on the management of national forests (Stern and Mortimer 2009, Stern et al. 2009, 2010a, 2010b, Cerveny et al. 2011a, 2011b, Freeman et al. 2011, Mortimer et al. 2011, Predmore et al. 2011);

• Forest Service administrative appeals and participants in that process (Laband et al. 2006, Westcott 2006, Scardina et al. 2007);

• Forest Service litigation based on specific statutes, such as NEPA (Broussard and Whitaker 2009, Miner et al. 2010), The Wilderness Act (TWA) and Wild and Scenic Rivers Act (WSRA) (Malmsheimer et al. 2008), and the Equal Access to Justice Act (Mortimer and Malmsheimer 2011); and

• Participants involved in Forest Service litigation (Portuese et al. 2009).

In addition, for the first time, researchers have used data from Forest Service litigation to address a question in the political science subdiscipline of judicial politics: whether judicial ideology affects judges' decisions to publish their opinions (Keele et al. 2009).

This article builds on this research and provides a foundation for understanding all Forest Service land management litigation. By using a more refined coding scheme of case outcomes and judges' decisions on statutory compliance, it provides the most comprehensive analysis yet of agency success in these cases.

Methods

We analyzed all federal court cases filed from Jan. 1, 1989 to Dec. 31, 2008, and completed by Dec. 31, 2010, in which the Forest Service was a defendant in a lawsuit challenging a land management decision. The case completion date of Dec. 31, 2010, provided time for cases initiated during the later years of this 20-year period to conclude. Following Keele et al. (2006, p. 197), we categorized land management cases to include "all cases in which the plaintiff 1) argued that a Forest Service decision affecting the use, classification, or allocation of a resource violated the law, and 2) sought a court order directing the Forest Service to change its management decision."

We expanded the database compiled by Keele et al. (2006) to include cases initiated by Dec. 31, 2008, and used their three-step cross-checking method to locate cases and obtain case documents. This allowed us to examine both physical and electronic court records, ensuring the most complete case database possible. We read and coded two documents: the docket sheet and one of the following: for cases decided by the court, the judicial opinion; for settled cases, the court-approved settlement; or for other cases, the notice of withdrawal or the stipulation of voluntary dismissal. We also read and coded the aforementioned documents for cases that were appealed to the US Court of Appeals and US Supreme Court. In accordance with Keele et al. (2006), we coded each case for its initiation and completion year, Forest Service region and US Court of Appeals circuit location, case characteristics (including purpose of the lawsuit, primary management activity challenged, and statutory basis), and final outcome. We coded the cases' final outcome into three mutually exclusive categories (two of which included subcategories):

Forest Service Win. We coded cases as a Forest Service win, if the final outcome of the case was based on either of the following:

• *Forest Service Win by Judicial Decision.* Cases where a court ruled on the merits of the plaintiff's case and found that the Forest Service had *not* done anything incorrectly.

• *Forest Service Win by Other Disposition.* Cases where (1) a court dismissed the case on procedural grounds, (2) the plaintiff withdrew the case *before* a judge decided on the case's merits, (3) the plaintiff terminated the case after a judge denied the plaintiff's request for a preliminary injunction, or (4) the court dismissed the case after the plaintiff and defendant agreed to a stipulation for voluntary dismissal.[1]

Forest Service Loss. We coded cases as a Forest Service loss, if the final outcome of the case was based on either of the following:

• *Forest Service Loss by Judicial Decision.* Cases where a court ruled on the merits of the plaintiff's case and found that the Forest Service had done anything incorrectly.

• *Forest Service Loss by Other Disposition.* Cases where (1) the Forest Service withdrew its plans for a project or forest plan or (2) the court ruled against the Forest Service on procedural grounds.

Settlement. We coded cases as a settlement, if the parties agreed to a court-approved stipulated agreement to settle their dispute.

This coding scheme retains the benefits of a conservative count of losses by judicial decision, because if the court found that the Forest Service did anything incorrectly, the case was coded as a loss; however, the new subcategories allowed us to differentiate more clearly and precisely (than in Keele et al. 2006) between the variety of ways to win and lose a case. In addition, whereas nonjudicial decision wins and losses are important, a major benefit of this refined coding is that it allowed us to account for and describe those cases in which a judge ruled on the merits of the case.

Management and Policy Implications

Litigation plays an important role in the USDA Forest Service management of the National Forest System. Recent legislative initiatives to amend the Equal Access to Justice Act (codified at 28 U.S.C. § 2412 and 5 U.S.C. § 5045), which provides for reasonable attorney fees and court costs to some qualifying parties prevailing in litigation when the federal agency cannot demonstrate that its legal position was substantially justified, illustrate legislators' and constituents' concerns over the use of litigation to change managers' land management decisions. This article provides forest managers, stakeholders, and policymakers with accurate information, based on a census of 20 years of land management cases, to guide management and policy debate and choices. Our findings indicate that the Forest Service wins nearly two of every three cases decided by judges and reveal that judges usually decide that plaintiffs have not carried their burden of demonstrating that the agency failed to comply with its legal mandates or are entitled to the relief they requested. The increasing settlement of land management litigation, however, demonstrates that agencies and the US Department of Justice regularly decide that it is more advantageous to resolve proceedings through mutual agreement than to have a judge decide the outcome of a controversy. These and other findings provide important information on the complexity of land management litigation.

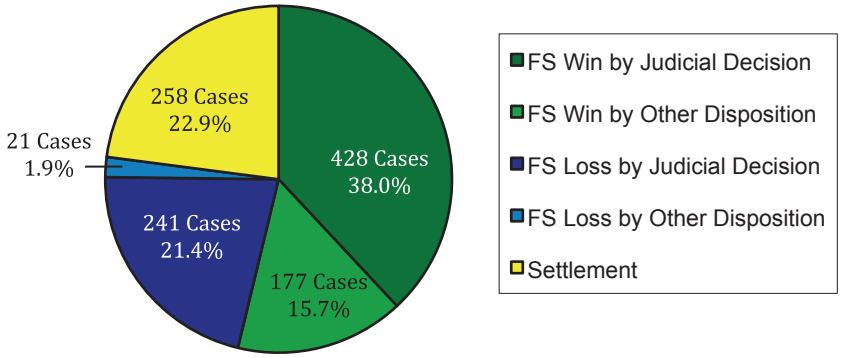
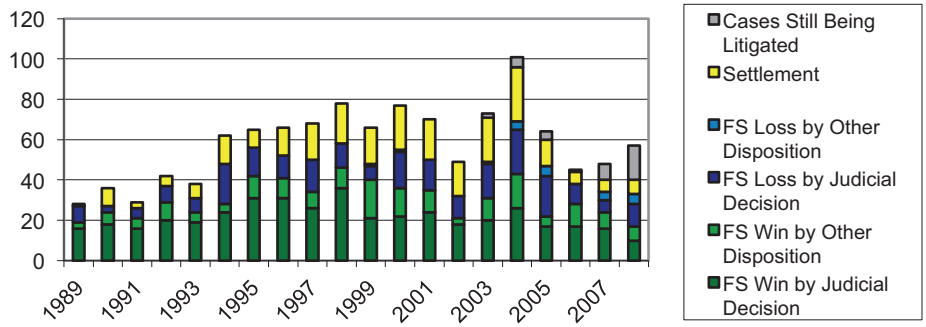


Figure 1. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome. Note: Forest Service Win by Other Disposition included cases where (1) a court dismissed the case on procedural grounds (74 cases), (2) the plaintiff withdrew the case before a judge decided on the case's merits (43 cases), (3) the plaintiff terminated the case after a judge denied the plaintiff's request for a preliminary injunction (30 cases), and (4) the court dismissed the case after plaintiff and defendant agreed to a stipulation for voluntary dismissal (30 cases). Forest Service Loss by Other Disposition included cases where (1) the Forest Service withdrew its plans for a project or forest plan (19 cases) and (2) the court ruled against the Forest Service on procedural grounds (2 cases).

A The year cases were initiated.



B The year case closed.

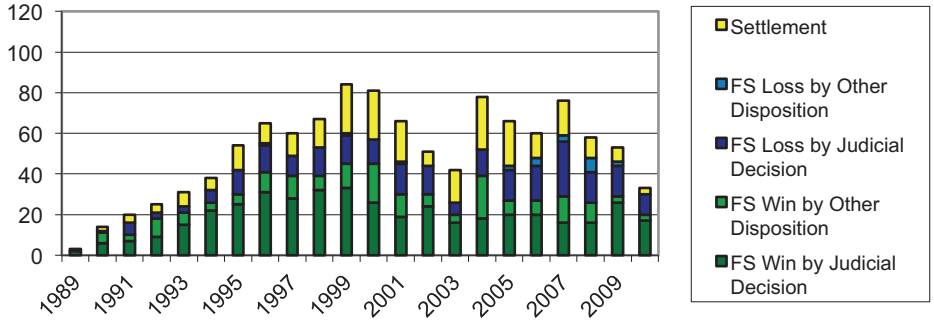


Figure 2. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome and (A) the year cases were initiated and (B) the year cases were closed.

Results

Plaintiffs initiated 1,162 cases against the Forest Service from 1989 to 2008. Of these cases, 1,125 closed on or before Dec. 31, 2010. The Forest Service won 605 (53.8%) of the completed cases, with 428 (38.0%) of those wins based on judicial decisions on the merits of plaintiffs' case (Figure 1). A comparison of "wins by judicial decision" (428 wins) with "losses by judicial decision" (241 losses) reveals that the Forest Service won nearly two of every three (64.0%) cases in which judges decided the case on the merits. The agency settled almost one-quarter (22.9%) of all cases.

Four hundred twenty-seven (38%) US District Court cases were appealed to the US Courts of Appeals. Litigants withdrew 95 (22.2%) of these cases before a decision on the merits of the cases (the Forest Service withdrew 61 cases and plaintiffs withdrew 34 cases), and 17 (4%) cases settled before a Court of Appeals rendered a final decision in the case. Of the 315 (73.8%) cases adjudicated by the Courts of Appeals, the Forest Service won 200 (63.5%) cases by judicial decision, won 21 (6.7%) cases by other disposition, and lost 94 (29.8%) cases by judicial decision. Litigants asked the US Supreme Court to review the Courts of Appeals' decision in 41 cases. The Supreme Court denied the *certiorari* petition in 39 cases and decided for the Forest Service in the only two cases they heard (*Ohio Forestry Association v. Sierra Club*, 523 US 726 [1998] and *Summers v. Earth Island Institute,* 129 US 1142 [2009]).

Trends over Time

Analyzing cases by the year in which they were initiated revealed that the litigation against the Forest Service generally increased from 1989 to 2000; however, since that time the number of cases commencing each year has varied greatly (Figure 2A). Plaintiffs initiated an average of 56 cases per year against the agency during these 20 years, with a high of 101 cases in 2004.

When one looks at cases based on the year in which the case was actually completed, in each year before 2001, the Forest Service won more cases than it lost and settled; i.e., the number of wins was greater than the number of losses plus settlements (Figure 2B). Since then, it only did so three times (in 2002, when it won 58.2% of cases; in 2009, when it won 54.7% of cases; and in 2010, when it won 60.6% of cases). The agency had its worst year in 2007, when it only won 29 (38.2%) cases, lost 30 (39.5%) cases, and settled 17 (22.4%) cases.

Location of Cases

Forest Service Region. Although Region 6 (Oregon and Washington) contains only 12.8% of the National Forest System (see Malmsheimer et al. 2004), more than one-fifth (21.9%) of all litigation occurred there. Excluding cases that affected the entire country, categorized as "national" in

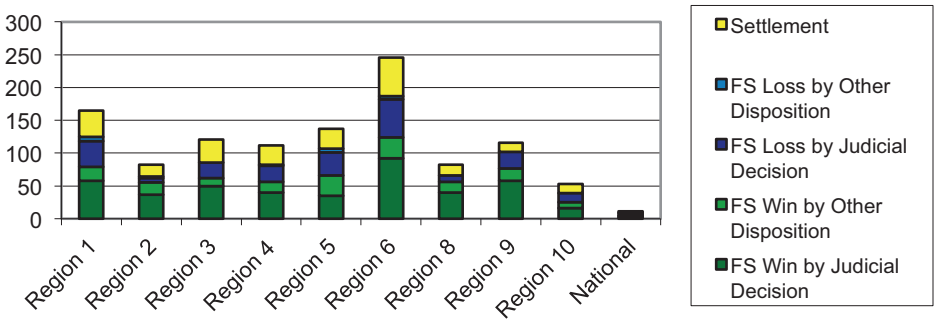


Figure 3. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome and Forest Service region.

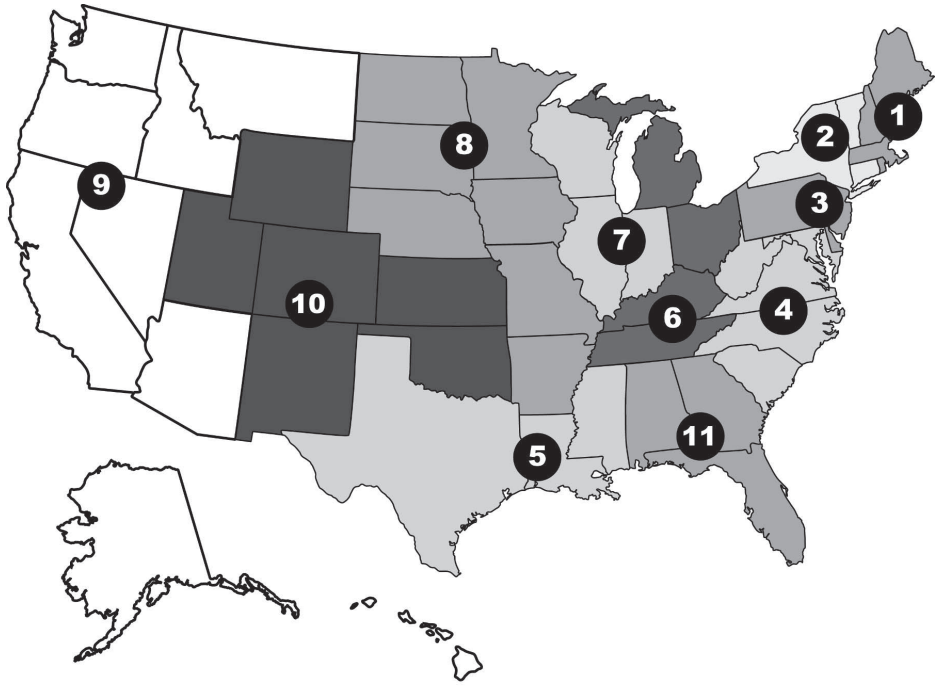


Figure 4. US Court of Appeals circuits by circuit number. The District of Columbia Court of Appeals does not appear on this map; the circuit is located in Washington, DC, and has jurisdiction over cases that have national implications.

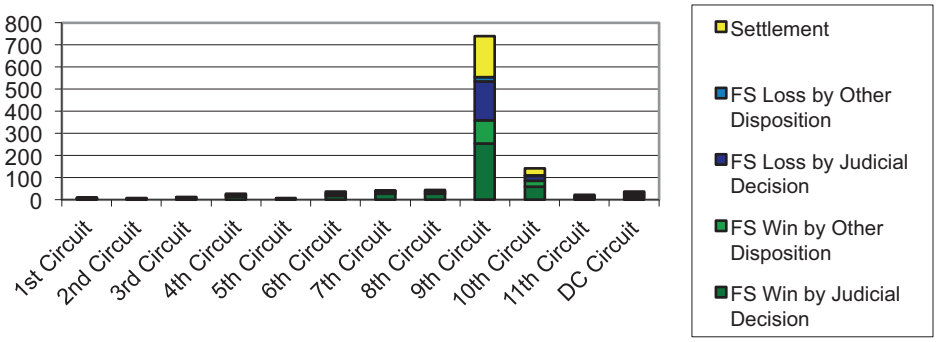


Figure 5. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome and Circuit Court of Appeals.

Figure 3, the agency was most likely to win a case in Region 8 (Southeast), most likely to lose a case in Region 5 (California and Hawaii), and most likely to settle cases in Region 3 (Arizona and New Mexico).

Appellate Court Jurisdiction. Courts within the Ninth Circuit Court of Appeals (Figure 4) preside over more than 99 million acres (51.3%) of the National Forest System (Malmsheimer et al. 2004) and decided 65.8% of all Forest Service cases during these 20 years, more than five times more cases than the Tenth Circuit, which has the second largest percentage of Forest Service land (Figure 5). The agency was most successful in the cases located in the Seventh Circuit, where it won more than 80% of the 42 cases. The Forest Service lost the highest percentage of cases in the Second Circuit; the circuit only decided seven cases. The Ninth (48.5%) and the Eleventh (47.8%) Circuits were the only circuits where the agency won fewer than half of all cases. The agency settled the highest percentage of cases in the Fifth Circuit, although the circuit only decided eight cases.

Case Characteristics

We were unable to obtain complete documentation for 138 (12.3%) cases because (as we explained in Keele et al. (2006, p. 199), "these cases' folders were archived at [National Archives and Records administration] facilities, and the cost for obtaining them was prohibitive." This precluded the coding of some cases for only three aspects of our case characteristics analysis: the purpose of the lawsuit (53 [4.7%] cases), the management activity challenged by the plaintiff (97 [8.6%] cases), and the statutory basis of the lawsuit (between 118 [10.5%] and 127 [11.3%] cases).[2]

Purpose of Suit. To understand the purpose behind land management litigation, we used the methods in our original article to classify each case's purpose as either less resource use or greater resource use. "For example, if a recreation outfitter brought a lawsuit to prevent the Forest Service from conducting a timber sale in an area used by the outfitter, we classified the purpose of the lawsuit as 'less resource use.' If a recreation outfitter brought a lawsuit to prevent the Forest Service from decreasing the number of special-use permits available to outfitters, we classified the purpose of the lawsuit as 'greater resource use'" (Keele et al. 2006, p. 199). More than three-quarters (78.9%) of all plaintiffs that sue the Forest Service sought less resource use within the National Forest System (Figure 6). The Forest Service won 415 (49.1%) of these cases, lost 229 (27.1%) of these cases, and settled 202 of these cases (23.9%). The Forest Service won more (69.5%) of the 226 cases in which the plaintiff sought greater resource use within the national forest, losing only 12.8% of these cases and settling only 17.7%.

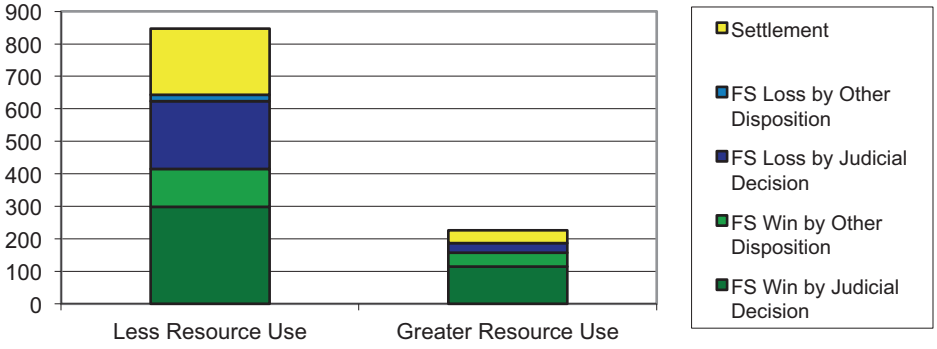


Figure 6. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome and case purpose. *N* = 1,072: 846 cases involved less resource use and 226 cases involved more resource use.

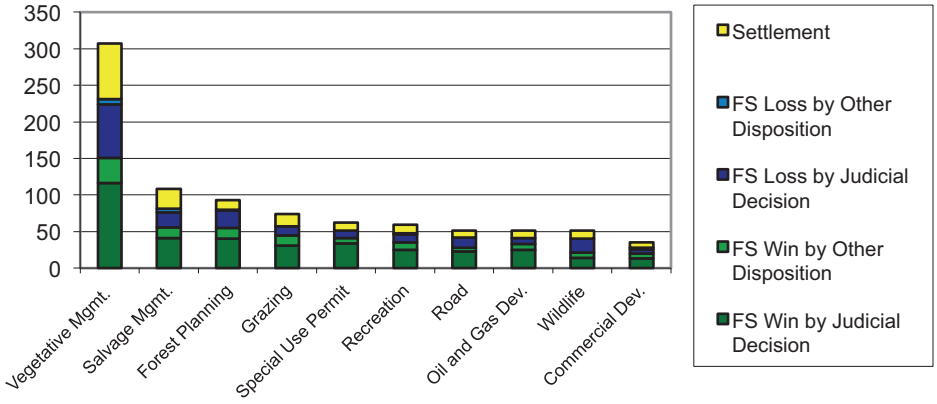


Figure 7. Number of Forest Service (FS) land management cases from 1989 to 2008, by final case outcome and management activity. *N* = 1,028. The figure contains only those management activities challenged by plaintiffs in 3% or more of cases.

Management Activity Challenged. We coded cases into 17 mutually exclusive categories based on the primary purpose of the land management activity that was challenged in the lawsuit. Figure 7 shows the 10 management activities that were challenged by plaintiffs in 3% or more of cases. Vegetative management (i.e., logging [the term used in Keele et al. 2006] and salvage management cases accounted for more than 40% of all challenged management activities, and the agency was most likely to settle these cases. Of the other management activities noted in Figure 7, the Forest Service was most successful in special use permit cases and most likely to lose wildlife cases.

Statutory Basis. Our previous analysis documented which statutes were involved in cases and the Forest Service's success rate when a statute was litigated by a case. However, it did not examine how judges ruled on *each* specific statutory allegation in a case. For example, in *Curry v. US Forest Service* (988 F. Supp. 541, W.D. Penn [1997]), the plaintiff alleged that the Forest Service violated NEPA, the National Forest Management Act of 1976 (NFMA), and the Migratory Bird Treaty Act (MBTA) when the Allegheny National Forest's Forest Supervisor approved a vegetative management project. Ultimately, US District Court Judge William L. Standish ruled that the agency violated NEPA and NFMA, but the court did not have jurisdiction to hear the MBTA claim. So in our previous article, we counted the Curry case as a Forest Service loss on all three of these statutes: NEPA, NFMA, and MBTA. For this article, we refined our coding to allow us to examine how the agency fared on *each* statutory claim. So although the final outcome of the Curry case remained coded a "loss" (because Judge Standish ruled the agency did something incorrectly), our coding now documented that the judge found the Forest Service violated NEPA and NFMA and *only* rejected the plaintiff's MBTA claim.

Eighty-two statutes govern the Forest Service's land management decisions (Floyd 2002). Plaintiffs alleged that the agency violated 57 of these statutes in the cases we were able to code for statutory basis. Although 412 of these cases involved allegations that the Forest Service only violated one statute, our results revealed the prevalence of multiple statutory allegations: cases involved on average two statutes and the maximum number of statutes plaintiffs alleged the Forest Service violated in any one case was eight (and that case settled).

Whereas plaintiffs often alleged multiple statutory violations, judges usually decided that the agency complied with all statutory requirements; the agency won 64.0% of all cases decided by a judge or panel of judges. In fact, we found that judges *never* ruled that the agency violated more than three statutes in a case.

Our analysis disclosed that the Forest Service was more likely to win on some statutes. Table 1 lists the 10 most frequently litigated statutes by number of cases and final case outcome by statute. It shows, for example, that plaintiffs alleged that the agency violated NEPA in 71.5% percent of cases (column 2). Of these cases, 445 cases (61.9%; columns 3–6) involved a judicial decision on the merits of the alleged NEPA violation and 274 cases (38.1%; column 7) did not involve a judicial decision (i.e., cases in which the final outcome was a Forest Service win by other disposition, a Forest Service loss by other disposition, or a settlement). Of the 445 decisions on the merits, judges found that the agency complied with NEPA in 272 cases (61.1%; column 4), violated NEPA in 137 cases (30.8%; column 5), and complied with NEPA but violated another statute involved in the lawsuit in 36 cases (8.1%; column 6). Thus, although the agency only won 61.1% of cases involving NEPA, judges actually found the agency complied with its NEPA obligations in 69.2% (columns 4 and 6) of all cases involving the statute.

Because NEPA and NFMA are involved in so many cases, the Forest Service's success rates in cases involving judicial dispositions (61.1 and 60.5% [column 4], respectively) on those statutes is close to the agency's success rate in all cases (64.0%) decided on their merits. The agency was more likely to win cases involving a constitutional law (91.7%) claim and was more likely to lose cases based on TWA (45.8%) and the Endangered Species Act of 1973 (ESA) (51.8%). An examination of judges' decisions on the agency's compliance with individual statutes (columns 4 plus 6 in Table 1), rather than on judges' decisions on cases

Table 1. Number of and percentage of national forest management cases from 1989 to 2008 and final case outcomes, by 10 most frequently litigated statutes.

Statute	No. of cases present (% of cases)	No. of judicial decisions (% of cases present)				No. of nonjudicial decisions (i.e., FS wins by other disposition, FS losses by other disposition, or settlements) (% of cases present)
		Total (%)	No. of cases judges ruled the FS complied with all statutes (% of judicial decisions)	No. of cases judges ruled the FS violated the listed statute (% of judicial decisions)	No. of cases judges ruled the FS violated a statute different from the listed statue (% of judicial decisions)	
NEPA (N = 1,005)	719 (71.5)	445 (61.9)	272 (61.1)	137 (30.8)	36 (8.1)	274 (38.1)
NFMA (N = 1,006)	491 (48.8)	309 (62.9)	187 (60.5)	87 (28.2)	35 (11.3)	182 (37.1)
ESA (N = 1,007)	177 (17.6)	114 (64.4)	59 (51.8)	37 (32.5)	18 (15.8)	63 (35.6)
APA* (N = 998)	82 (8.2)	57 (69.5)	42 (73.7)	15 (26.3)	0	25 (30.5)
CWA (N = 999)	61 (6.1)	37 (60.7)	26 (70.3)	3 (8.1)	8 (21.6)	24 (39.3)
FLPMA (N = 998)	45 (4.5)	31 (68.9)	18 (58.1)	7 (22.6)	6 (19.4)	14 (31.1)
TWA (N = 998)	35 (3.5)	24 (68.6)	11 (45.8)	8 (33.3)	5 (20.8)	11 (31.4)
WSRA (N = 998)	33 (3.3)	22 (66.7)	14 (63.6)	5 (22.7)	3 (13.6)	11 (33.)
Constitutional (N = 998)	33 (3.3)	24 (72.7)	22 (91.7)	1 (4.2)	1 (4.2)	9 (27.3)
MUSYA (N = 998)	32 (3.2)	18 (56.3)	12 (66.7)	1 (5.6)	5 (27.8)	14 (43.7)

N indicates the number of cases we were able to code for each statute. FS, Forest Service; NEPA, National Environmental Policy Act; NFMA, National Forest Management Act; ESA, Endangered Species Act; APA, Administrative Procedures Act; CWA, Clean Water Act; FLPMA, Federal Land Policy and Management Act; TWA, The Wilderness Act; WSRA, Wild and Scenic Rivers Act; Constitutional law, a provision of the US Constitution; MUSYA, Multiple Use and Sustained Yield Act.

* As noted in Keele et al. (2006, p. 199–200), because "the APA is the legal basis for courts' reviews of every case, we coded the APA as a case's statutory basis when it was the only statute that plaintiffs said the Forest Service had violated."

Table 2. Number of Forest Service land management cases involving combinations of NEPA, NFMA, and ESA from 1989 to 2008.

Case outcome	No. of NEPA/NFMA cases (% of cases)	No. of NEPA/ESA cases (% of cases)	No. of NFMA/ESA cases (% of cases)
Forest Service won	165 (59.6)	41 (51.2)	25 (46.3)
Forest Service lost	112 (40.4)	39 (48.8)	29 (53.7)
Total	277	80	54

as a whole (just column 4), reveals that judges decided that the agency successfully complied with its statutory obligations more than 9 of 10 times when it involved alleged constitutional (95.9%), Multiple Use and Sustained Yield Act (94.5%), and Clean Water Act (91.9%) violations.

Our revised coding scheme also allowed us to analyze statutory interaction: how the Forest Service performed or managed when judges ruled on a combination of statutes. Because plaintiffs most often alleged that the Forest Service violated NEPA, NFMA, and ESA, we focused our analysis on the complexities of cases involving these three statutes. Plaintiffs alleged both a NEPA and NFMA violation in 277 (41.4%) of the 669 judicially decided cases during these 20 years, and the Forest Service won 165 (59.6%) of the 277 cases involving these two statutes (Table 2). Plaintiffs alleged both a NEPA and ESA violation in 80 (28.9%) cases, and the Forest Service won 41 (51.3%) of these cases. In addition, the Forest Service was challenged in litigation involving both NFMA and ESA in 54 cases overall (19.5%); the Forest Service won 25 (46.3%) of those cases.

A win by judicial decision in our coding scheme indicated that the Forest Service complied with *all* the statutes litigated in the case. Therefore, to understand how statute interaction affected judges' decisions, we focused the rest of our analysis on the cases the agency lost, because judges in these cases may have ruled differently on each statute. For example, analyzing the 112 judicial losses involving both NEPA and NFMA (derived from the number of these cases the Forest Service lost in column 2 of Table 2), revealed that the agency performed slightly better in fulfilling its NFMA obligations than its NEPA obligations, complying with NFMA in 34 (31.8%) of the 107 NEPA/NFMA losses where judges ruled on the NFMA claim, compared with complying with NEPA in 29 (26.4%) of the 110 NEPA/NFMA losses where judges ruled on the NEPA claim. Table 3 documents the interaction between these two statutes and the table's notes explain how the agency's compliance with each statute can be calculated. As the table specifies, judges ruled the agency violated both NEPA and NFMA in 48 cases. In 6 cases, judges ruled that the agency complied with both statutes but violated another statute(s) involved in these cases. In 28 cases, judges found that the Forest Service violated NEPA but successfully defended the NFMA claim, and in 23 cases judges ruled that the agency successfully defended the NEPA claim but violated NFMA. The Forest Service also violated NEPA in 5 cases where judges failed to render a judicial decision on NFMA and violated NFMA in 2 cases where judges failed to render a judicial decision on NEPA.

An analysis of the 39 judicial losses involving NEPA and ESA reveals a different interaction between the statutes. In these cases, judges ruled that the agency successfully defended the ESA claim in 18 (48.6%) of the 37 NEPA/ESA losses where judges ruled on the ESA claim, but only successfully defended the NEPA claim in 11 (29.7%) of the cases where judges ruled on the NEPA claim (Table 4).

The agency's compliance with ESA was even higher in the 29 NFMA/ESA losses (Table 5). In these cases judges ruled that the agency successfully defended the ESA claim in 16 (55.2%) cases but ruled that the agency successfully defended the NFMA claim in 12 (41.8%) of these cases.

The ESA results illustrate the importance of our analysis of statute interaction.

Table 3. Number of land management cases the Forest Service lost involving NEPA and NFMA.

	NFMA			
NEPA	No. of cases judges ruled the FS complied with NFMA	No. of cases judges ruled the FS violated NFMA	No. of cases judges did not render a decision on the NFMA claim	Total
No. of cases judges ruled the FS complied with NEPA	6	23	0	29
No. of cases judges ruled the FS violated NEPA	28	48	5	81
No. of cases judges did not render a decision on the NEPA claim	0	2	0	2
Total	34	73	5	112

FS, Forest Service.
Note 1. Judges' determination of the Forest Service's compliance with each statute can be calculated by dividing the total number of cases won on a statute by the total number of cases minus the number of cases where judges did not make a decision on the statute. For example, judges ruled the agency complied with NEPA in 26.4% of NEPA/NFMA losses where judges ruled on the NEPA claim (29 cases [6 in which the agency won on both the NEPA and NFMA claims and 23 cases in which it won on the NEPA claim but lost on the NFMA claim] divided by 107 [112 NEPA/NFMA cases minus 2 cases where judges did not rule on the NEPA claim]).
Note 2. The percentage of cases where judges found the Forest Service violated both statutes can be calculated by dividing the total number of cases lost on both statutes by the total number of cases minus the number of cases where judges did not make a decision on either of the two statutes. For example, judges ruled the agency violated both NEPA and NFMA in 45.7% of the NEPA/NFMA losses (48 cases in which the agency lost on both the NEPA and NFMA claims divided by 105 [112 NEPA/NFMA cases, minus 2 cases where judges did not rule on the NEPA claim and five cases where judges did not rule on the NFMA claim]).

Table 4. Number of land management cases the Forest Service lost involving NEPA and ESA.

	ESA			
NEPA	No. of cases judges ruled the FS complied with ESA	No. of cases judges ruled the FS violated ESA	No. of cases judges did not render a decision on the ESA claim	Total
No. of cases judges ruled the FS complied with NEPA	6	5	0	11
No. of cases judges ruled the FS violated NEPA	12	12	2	26
No. of cases judges did not render a decision on the NEPA claim	0	2	0	2
Total	18	19	2	39

FS, Forest Service.

Table 5. Number of land management cases the Forest Service lost involving NFMA and ESA.

	ESA			
NFMA	No. of cases judges ruled the FS complied with ESA	No. of cases judges ruled the FS violated ESA	No. of cases judges did not render a decision on the ESA claim	Total
No. of cases judges ruled the FS complied with NFMA	6	6	0	12
No. of cases judges ruled the FS violated NFMA	10	7	0	17
No. of cases judges did not render a decision on the NFMA claim	0	0	0	0
Total	16	13	0	29

FS, Forest Service.

When only nonmutually exclusive statute coding was used, it appears that the agency is more likely to lose cases alleging an ESA violation. For example, Keele et al. (2006) reported that the Forest Service won only 50.0% of ESA cases and in Table 1 (of this article) we report that the Forest Service won only 51.8% of ESA cases. Yet, these results mask the agency's true compliance with ESA because under a nonmutually exclusive statute coding scheme, the agency's success on ESA claims in multistatute cases is based on its successful defense of both ESA *and other statutes.* However, when we examined the interaction of ESA with NEPA and NFMA (illustrated in Tables 4 and 5), we see that the agency lost many of these multistatute cases on NEPA or NFMA, not on ESA.

Discussion

Our results demonstrate some of the difficulties in utilizing results from litigation-based research based on aggregating cases over long time periods and how responsive results can be to changes in study initiation and end dates. As Table 6 illustrates, the Forest Service's success in litigation from 1989 to 2002 differs dramatically from the agency's success in cases decided from 2003 to 2008. It also demonstrates that although some of the agency's decrease in wins can be attributed to increased losses, most of the decrease was attributed to increases in settlements, providing evidence of the increased use of settlements by the Forest Service and the Department of Justice (which manages US agency litigation) and demonstrating the importance of settlements as a dispute-resolution tool that policymakers, stakeholders, and researchers interested in Forest Service litigation cannot ignore.

The longer time horizon revealed that the general rise in the number of lawsuits discussed in Keele et al. (2006) did not continue in the later 6 years of this study. Some of the fluctuation during this time may be contextual. Litigation is based on projects and appeals. Therefore, fluctuations in the number of projects and appeals influences the number of potentially litigable Forest Service actions. Unfortunately, analyzing this context is difficult because of the lack of publically accessible aggregate project and administrative appeal data for these 20 years (this was one of the reasons for the creation of the Forest Service's PALS [Projects, Appeals, and Litigation] database in 2007) and is why future research examining this context would be a valuable contribution to our understanding of the relationship between projects, administrative appeals, and litigation trends.

Spatially, Region 6 remained the most litigious of the Forest Service's regions, and

Table 6. Number of Forest Service land management cases from 1989 to 2002 (from Keele et al. 2006), from 2003 to 2008, and from 1989 to 2008, by final case outcome.

Case outcome	No. of cases 1989–2002 (% of total cases)	No. of cases 2003–2008 (% of total cases)	No. of cases 1989–2008 (% of total cases)
Forest Service wins	446* (61.2)	159 (40.2)	605 (53.8)
Forest Service losses	155 (21.3)	107 (27.0)	262 (23.3)
Settlements	128 (17.6)	130 (32.8)	258 (22.9)
Total cases	729	396	1,125

* Forest Service wins is the number of Forest Service wins (420 cases) plus the number of cases (26) withdrawn by plaintiffs from Keele et al. (2006).

the agency still had the highest winning percentage in Region 8. However, with the longer time horizon, the regions where the agency lost the highest percentage of cases and settled the most cases changed from Region 1 to Region 5 and from Region 1 to Region 3, respectively. By also analyzing cases by US Court of Appeals circuit, this research verified the dominance of the Ninth Circuit on Forest Service litigation described by Malmsheimer et al. (2004). More importantly, it documented the Forest Service's lack of success in the Ninth Circuit compared with that in the other circuits: the agency only won 48.5% of Ninth Circuit cases, whereas it won 63.9% of non-Ninth Circuit cases. This disparity may be based on the nature of the agency's resources or quality of its environmental analyses in this circuit or the competence of the circuit's plaintiffs. Because this research analyzed the final outcomes of cases, it also raises the question for other research of whether differences in the Ninth Circuit and other circuits are based on court level and/or spatial variability (e.g., some Ninth Circuit district courts may be more liberal and proenvironment than others).

The Forest Service's lower success rate in cases where plaintiffs advocated for less resource use (generally initiated by environmental groups [see Portuese et al. 2009]) compared to cases where greater resource use was advocated for was not unexpected; the trend appeared in our 2006 analysis. We hypothesize that the difference is based on two factors. First, there are differences in the number and purposes of statutes available to plaintiffs seeking less resource use. Not only are there more statutes available to those suing for less resource use but also these statutes were written to address deficiencies in public participation processes (e.g., NEPA) or to provide additional protection for threatened species (e.g., ESA) and scarce resources (e.g., NFMA, TWA, and WSRA). Thus, environmental groups suing the Forest Service for less resource use, not only have more statutes available to them than groups seeking more use of national forest resources, but they also have more statutes that relate directly to the purposes of their organizations available to them. Second, many of these statutes also contain significant procedural requirements (e.g., NEPA and ESA). Because judges regularly rule on whether federal agencies and others followed proper procedures, it seems likely that judges are more familiar with these types of challenges to agency actions and may be more comfortable ruling on procedural challenges.

Vegetative management, or logging (as we described them in Keele et al. 2006), projects continued to be the dominant type of management activity involved in Forest Service land management litigation, representing nearly three times more cases than any other type of management activity. This is not surprising and likely to continue, given the results of research on administrative appeals (which are required before litigation can occur), that indicates that projects involving vegetative management are more likely to be appealed regardless of other characteristics (e.g., Jones and Taylor 1995, Laband et al. 2006). What is surprising is the relatively equal distribution of litigation based on other management activities. This suggests that litigants are dissatisfied with a wide variety of Forest Service land management decisions.

Our unique analysis of cases' statutory bases allowed us to examine the Forest Service's success rate on each statutory claim and greatly improved our understanding of Forest Service litigation. For example, we learned that judges usually decide that the agency has successfully defended all statutory claims: the agency's won 64.0% of all cases decided by a judge or panel of judges. Thus, although intuitively it seems reasonable to assume that plaintiffs would claim violations of multiple statutes to improve their chances of winning, judges rarely find that all statutory claims are meritorious. Our analysis of statutory interaction disclosed the complexity of judges' rulings in the cases the Forest Service lost involving multiple statutory violations. We documented that in all three types of statute interaction cases we examined, judges found the agency violated its statutory obligations for *both* statutes in less than half the cases (45.7% of NEPA/NFMA cases, 34.7% of NEPA/ESA cases, and 24.1% of NFMA/ESA cases) (Tables 3–5). Our results also revealed that in some cases, such as those involving NEPA/ESA losses and NFMA/ESA loses, judges found the agency was much more likely to comply with its obligations under one statute (ESA in these losses) than another statute. Importantly, this result reveals greater nuance than that implied by the analyses of Keele et al.'s (2006) and our Table 1, which used a nonmutually exclusive statute coding scheme—that the agency is more likely to lose on the ESA. These results indicate why researchers interested understanding natural resource agencies' success in litigation should adopt this methodology if they want to learn how often judges actually rule that agencies comply with their statutory obligations.

Conclusions

Our findings expand on and clarify the findings of Keele et al. (2006). The expanded case outcome coding methodology allowed us to more completely document agency success in challenges to its land management, and our unique legal analysis allowed us to document the statutory complexity of these cases.

Our examination of Forest Service litigation for these 20 years has limitations. It aggregates events that occurred over 20 years and on more than 193 million acres. We fail to examine the uniqueness of each national forest management controversy litigated, which is significant, given the fact that nearly three of every four litigants in Forest Service litigation are involved in only one lawsuit (Portuese et al. 2009). In addition, court documents do not provide adequate information for determining litigation strategies, such as why nearly one-quarter of all appellate cases were withdrawn by the plaintiffs and/or the Forest Service.

However, our analysis reveals one critically important fact that would not be possible without such a long-term census of all

cases: regardless of the administration managing our national forests (i.e., the G.H.W. Bush, Clinton, or G.H. Bush administrations), controversy over their management continues. The significant and widespread changes in uses of national forests during the past 20 years, many of which were initiated or hastened by litigation, suggests that the legal environment continues to be an important factor in deciding how these forests are managed and indicates why forest managers, stakeholders, and policymakers, who want to understand the impact of the current statutory framework for national forest management, require a methodologically sound analyses of cases.

Endnotes

1. Under a Stipulation for Voluntary Dismissal (SVD), the plaintiff and the defendant agree that the claim is dismissed with prejudice (which means the plaintiff cannot bring the claim again) or without prejudice (which means the plaintiff can bring the claim again in another lawsuit). Thus, a SVD ends the lawsuit but in some cases (SVDs granted without prejudice), the plaintiff can initiate another lawsuit based on the same claim.

   This research was based on the final outcome of the case *according to court documents.* Because SVDs resulted in the dismissal of the case, we coded these cases as Forest Service wins. However, it is important to note that some SVDs may have been the result of an out-of-court settlement where the plaintiff was able to obtain some or all of the relief requested. Given our data and the purpose of our research—to describe the final outcome of Forest Service land management litigation based on court documents—and the difficulty of learning the results of out-of-court proceedings, we did not analyze out-of-court agreements.
2. All cases were coded for as many case characteristics as possible. The lack of information about one characteristic did not exclude a case's inclusion in the coding of other characteristics.

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An Annotated Bibliography of Other Forest Service Land Management Research by Robert Malmsheimer or Denise Keele

Keele, D.M., and R.W. Malmsheimer. Is the Ninth Circuit A Liberal Environmental Activist Court? In Press: *Justice System Journal*.

> We tested the proposition that litigation outcomes in the Ninth Circuit are significantly more activist and liberal on 20 years of Forest Service land management litigation. Our results revealed that the Ninth Circuit was not significantly more likely to reverse agency decisions in the liberal direction; however, the District Courts located in the Ninth Circuit were. Additionally, opinions that Ninth Circuit judicial panels opted to publish were significantly more likely to reverse agency action and be in the liberal direction. Thus, we suggest a combination of liberal Ninth Circuit published opinions and liberal District Court decisions may explain the perception of the Ninth Circuit as a liberal, pro-environment, activist court.

Mortimer, M.J., and R.W. Malmsheimer. 2011. The Equal Access to Justice Act and Federal Forest Service Land Management: Incentives to Litigate? *Journal of Forestry* 109(6):352-358.

> We examined EAJA awards paid by the US Forest Service from 1999 to 2005, finding more than $6 million awarded to various plaintiffs. Awards were most commonly paid to environmental litigants, although all categories of litigant stakeholders made use of the law. Although it remains uncertain whether EAJA provides an incentive to sue the US Forest Service in any specific instance, because litigation against the Forest Service generally has a low probability of success, EAJA one-way fee shifting does alter litigation risks among potential plaintiffs. Frequent EAJA claimants often possess considerable financial resources, calling into question how the law's purpose evolved in the last 20 years.

Mortimer, M.J., M.J. Stern, R.W. Malmsheimer, D.J. Blahna, L. Cerveny, and D. Seesholtz. 2011. Environmental and social risks: Defensive NEPA in the US Forest Service. *Journal of Forestry* 109(1):27-33.

> Although guidance from the President's Council on Environmental Quality suggests the decision to develop an Environmental Impact Statement (EIS) should be based on the likelihood of significant environmental impacts, findings from an Internet survey with US Forest Service project leaders suggest that the decision may more commonly be based on process-related risks, including the threat of litigation, perceived defensibility in court, and the level of public and political interest in the agency's proposed action. An analysis of judicial decisions in NEPA-related litigation reveals that EISs do not appear to be more defensible than Environmental Assessments in the courts, suggesting that current decisionmaking about NEPA documentation may be misguided, leading to unnecessary project expenditures and delays.

Miner. A.M.A., R.W. Malmsheimer, D.M. Keele, and M.J. Mortimer. 2010. Twenty years of Forest Service National Environmental Policy Act litigation. *Environmental Practice* 12(2):116-126.

This analysis examined Forest Service land management cases initiated from 1989 to 2008 to understand how the agency fared in NEPA cases. Of the 1,064 completed cases by June 30, 2009, 671 (63.1%) involved a NEPA challenge. The agency won the final outcome of 51.1% of the cases, lost 26.2%, and settled 22.7%. Case characteristic analyses indicate that case decisions peaked at the end of the 1990s, occurred mostly in the Ninth Circuit, and predominately involved vegetative management, forest planning, roads, recreation, and wildlife management activities. In addition to these general case outcomes, we conducted an in-depth analysis of the 411 cases where a judge or panel of judges specifically ruled on a NEPA challenge. The agency won the NEPA claim in 69.3% of these cases. The Forest Service was most successful litigating Supplemental Environmental Impact Statement cases and least successful in Categorical Exclusion cases. Most challenges to Forest Service NEPA implementation were based on Environmental Assessments (EAs) and Environmental Impact Statements (EISs). The agency was more likely to win a direct and indirect effects EA challenge and a range of alternatives EIS challenge.

Keele, D.M., R.W. Malmsheimer, D.W. Floyd, and L. Zhang. 2009. An analysis of ideological effects in published versus unpublished judicial opinions. *Journal of Empirical Legal Studies* 6(1):213-239.

This study employed the attitudinal model of judicial behavior to empirically test whether published judicial opinions are representative of all opinions in litigation challenging the Forest Service. Results indicated that the effects of ideological preferences are different in published and unpublished opinions issued by appellate judges; judges' decisions followed their ideological preferences in published opinions, but did not follow these preferences in unpublished opinions. At the district court level, judges did not follow their ideological preferences in either published or unpublished opinions, and no difference existed between judges' decisions in published and unpublished opinions. This research supports the contention that the process of judicial decision making in the courts of appeals differs between published and unpublished opinions and that scholars should use caution in drawing conclusions from examinations of published opinions alone.

Gambino Portuese, B., R.W. Malmsheimer, A.M. Anderson, D.W. Floyd, and D.M. Keele. 2009. Litigants' characteristics and outcomes in Forest Service land management cases 1989 to 2005. *Journal of Forestry* 107(1):16-22.

This research identified and analyzed all parties involved in the 729 U.S. Forest Service land management cases initiated between 1989 and 2002. We identified 2,402 parties, the frequency and type of their involvement, and their success rates. Most parties (76.9%) were only involved in one case. All 12 of the most frequent parties opposing the Forest Service were environmental organizations, whereas the top 12 most frequent Forest Service supporters included four different types of

organizations. Repeat Forest Service opponents were more successful than non-repeat opponents. However, only 12.5% of Forest Service opponents involved in more than one percent of all the cases won more cases than they lost, and only 42.5% of all Forest Service opponents settled more often than the average settlement rate.

Malmsheimer, R.W., C. Falco, A.M. Anderson, D.M. Keele, and D.W. Floyd. 2008. U.S. Forest Service Litigation: The Wilderness Act and the Wild and Scenic Rivers Act litigation. *International Journal of Wilderness* 14(1):7-14.

We located and analyzed all U.S. Forest Service land management litigation based on the TWA and WSRA from 1989 to 2004. The agency was slightly more successful in WSRA cases than in TWA cases, but it was less likely to lose and more likely to settle a WSRA case than a TWA case. Cases were geographically dispersed throughout the country. Plaintiffs initiated most TWA litigation, and all WSRA litigation, to limit Forest Service management activities.

Keele, D.M., R.W. Malmsheimer, D.W. Floyd, and J.E. Perez. 2006. Forest Service land management litigation 1989-2002. *Journal of Forestry* 104(4):196-202.

This study provided the first complete picture of Forest Service land management litigation. Previous litigation studies limited their examination to published cases and did not analyze final case outcomes. We documented the characteristics and final outcomes of 729 Forest Service management cases filed in federal court from 1989 to 2002. The Forest Service won 57.6% of cases, lost 21.3% of cases, and settled 17.6% of cases. It won 73% of the 575 cases decided by federal judges. Plaintiffs seeking less resource use lost more than half the cases they initiated, and plaintiffs seeking greater resource use lost more than two of every three cases they initiated. Most litigation (1) was for less resource use, (2) was based on the NEPA, and (3) challenged logging projects.

Malmsheimer, R.W., D.M. Keele, and D.W. Floyd. 2004. National forest litigation in the U.S. Courts of Appeals. *Journal of Forestry* 102(2):20-25.

We examined all published US Courts of Appeals cases decided from 1970 to 2001 in which the Forest Service was the defendant in a lawsuit challenging forest management. Our results demonstrate that, even though the Forest Service wins most courts of appeals cases, judicial review of national forest management is intensifying. This study found that environmental interests were involved in most cases, and NEPA was the basis of most litigation, although NFMA and ESA cases were increasing. The cases were concentrated in the Ninth Circuit – the only circuit where the forest service lost more than half its cases.