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ENVIRONMENTAL CITIZEN SUITS AND THE INEQUITIES OF RACES TO THE TOP

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Environmental citizen suits were founded on the belief that empowering organizations and individuals to take legal action would provide a backstop against lax federal or state programs. Working in conjunction with the system of cooperative federalism, citizen suits were designed to uphold minimum levels of environmental protection and to provide a restraint on so called "races to the bottom" in which states compete for economic development by relaxing environmental standards. To our knowledge, no one has considered whether the geographic distribution of citizen suits could have the opposite effect—namely, that it reinforces rather than mitigates disparities in the levels of environmental protection. Yet we observe this phenomenon in data spanning two presidential administrations: citizen suits are filed in a small number of states with strong public support for environmental policies and robust state programs—not in states where policies and enforcement lag.

The small number of citizen suits and skewed geographic distribution of cases revealed by our data upend the narratives of proponents and critics of citizen suits. Among

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environmentalists, citizen suits are lauded for their capacity to augment government enforcement and to compel lax or ideologically antagonistic administrations to take legally required action. For skeptics, citizen suits threaten the constitutional authority of federal agencies to implement the law and allow private organizations to exploit broad legislative mandates. Neither perspective is borne out by the observed patterns of litigation, which are dominated by "wholesale" litigation challenging major policies rather than "retail" litigation against private entities. In fact, retail litigation accounted for just 18 percent of the environmental citizen suits filed over 16 years.

Taking a broad view of citizen suits, we find that the different statutory regimes facilitate or impede citizen suits in predictable ways. Structural limits are evident in statutes, such as the Clean Water Act, that minimize the barriers to filing citizen suits, as well as those for which the barriers are highest, such as the Clean Air Act. These limits are also evident in plaintiffs' preference for procedural claims, which accounted for almost 40 percent of the citizen suits in our dataset. These findings demonstrate the importance of the practical and structural limits of citizen suits to identifying effective reforms. The Article proposes a series of recommendations, both within and outside of the federal government, designed to mitigate the inequitable distribution of citizen suits and the resource limits that so often limit access to them.

INTF	RODU	CTION	.379
I.	No	RMATIVE AND EMPIRICAL PERSPECTIVES ON	
	EN	VIRONMENTAL CITIZEN SUITS	.384
	A.	The Scope and Mechanics of Environmental	
		Citizen Suits	.385
		1. The Legislative Origins of Wholesale	
		Rulemaking and Retail Enforcement	
		Litigation Under the Major Pollution Statutes	.386
		2. Federal Oversight and Third-Party	
		Enforcement Through Citizen Suits Under	
		the Major Natural Resources Statutes	.391
	B.	The Threats and Promises of Environmental	
		Citizen Suits	.394

	C.	The Mixed and Incomplete Empirical Record of	
		Environmental Litigation	399
II.	LI	TIGATION TRENDS DO NOT CONFORM TO	
	PR	EVAILING VIEWS OF CITIZEN SUITS	407
	A.	Most Environmental Litigation Is in the Ninth	
		and D.C. Circuits	412
	B.	Environmental Plaintiffs Sue the Federal	
		Government Far More Often Than They Sue	
		Private Third Parties	417
	C.	The Low and Declining Rates at Which Attorney's	
		Fees Are Awarded	
	D.	Support for Environmental Policies and	
		Perceptions About Judicial Forums Are the	
		Strongest Determinants of Where Citizen Suits	
		are Filed	426
III.	RE	ASSESSING THE PROMISE OF CITIZEN SUITS	
	\dot{A} .	The Practices and Resource Constraints That	
		Limit the Impact of Citizen Suits	432
		1. Geographic Concentration and Low Numbers	
		Limit Conflicts Between Citizen and	
		Government Enforcement	433
		a. Citizen Suits Are More Likely to	
		Exacerbate Rather Than Mitigate	
		Disparities in the Enforcement and	
		Implementation of Environmental Laws	435
		2. Patterns of Wholesale and Retail	100
		Environmental Litigation	438
	В.	Reforming Our Vision for Citizen Suits and the	100
	٠.	Policies Needed to Realize It	442
		1. Targeted Reforms to Facilitate and Support	
		Citizen Suits	444
		2. Facilitating Coordination of and	
		Transparency About Citizen Suits	447
		3. Educating Judges About the Patterns,	1 1 1
		Impacts, and Value of Citizen Suits	449
Con	CLUS	SIONS	

INTRODUCTION

Environmental citizen suit provisions were founded on the belief that empowering organizations and individuals to take

legal action would provide a backstop against lax federal or state programs. Working in conjunction with cooperative federalism, citizen suits were designed to uphold minimum levels of environmental protection and to provide a restraint on so-called "races to the bottom" in which states compete for economic development by relaxing environmental standards. To our knowledge, no one has considered whether the geographic distribution of citizen suits could have the opposite effect—namely, that it reinforces rather than mitigates disparities in the levels of environmental protection. Yet, we observe this phenomenon in data spanning the Barack Obama and George W. Bush Administrations: citizen suits are filed in a small number of states with strong public support for environmental policies and robust state programs rather than in states where policies and enforcement lag.

The geographic disparities in the filing of citizen suits have direct effects on "favored" states where citizen suits are plentiful and indirect effects in states where citizen suits are rare. In the favored states where the great majority of citizen suits are filed, they bolster strong environmental programs directly and, to the extent that they target new facilities or infrastructure, increase project costs, risk, and the time required for development. In disfavored states, the effects are indirect and driven by the differences in regulatory costs relative to favored states. In other words, it is irrelevant whether interstate differences are caused by lower regulatory costs in lax states or higher costs in states with heightened standards. As a consequence, citizen suits disproportionately benefit states with robust environmental programs and, in doing so, magnify disparities at the top by ensuring that standards and procedures are followed and at the bottom by driving development with significant environmental impacts towards states in which citizen suits are rare and enforcement is less rigorous.

The small number of citizen suits and skewed geographic distribution of cases also upend the narratives of proponents and critics of citizen suits. Among environmentalists and liberal commentators, citizen suits are lauded for augmenting government enforcement and compelling ideologically antagonistic

^{1.} See, e.g., Barton H. Thompson, Jr., The Continuing Innovations of Citizen Enforcement, 2000 U. ILL. L. REV. 185, 191 n.23 (2000).

administrations to take legally required action.² Among skeptics, citizen suits threaten the constitutional authority of federal agencies to implement the law³ and allow private organizations to take advantage of broad legislative mandates without any political accountability.⁴ In this light, rather than acting as "private attorneys general," environmental groups exploit government power for their own ends, overriding the interests of local communities and private actors.⁵ Importantly, these critiques have been influential with federal judges.⁶

We find little evidence for either perspective for the simple reason that few citizen suits are filed annually and a relatively small proportion of them involve "retail" litigation actions. Most citizen suits operate at the "wholesale" level through challenges to major policies or programs. Drawing on data collected by the Department of Justice on environmental litigation between 2001 and 2016, we find that just 18 percent of the cases involve

^{2.} See Eileen Gauna, Federal Environmental Citizen Provisions: Obstacles and Incentives on the Road to Environmental Justice, 22 ECOLOGY L.Q. 1 (1995); James R. May, Now More Than Ever: Trends in Environmental Citizen Suits at 30, 10 WIDENER L. REV. 1 (2003); William B. Rubenstein, On What a "Private Attorney General" Is—and Why It Matters, 57 VAND. L. REV. 2129 (2004); Trevor W. Morrison, Private Attorneys General and the First Amendment, 103 MICH. L. REV. 589 (2005); Christian Langpap & Jay P. Shimshack, Private Citizen Suits and Public Enforcement: Substitutes or Complements?, 59 J. ENV'T ECON. MGMT. 235 (2010); Matthew C. Stephenson, Public Regulation of Private Enforcement: The Case for Expanding the Role of Administrative Agencies, 91 VA. L. REV. 93 (2005); Will Reisinger, Trent A. Dougherty & Nolan Moser, Environmental Enforcement and the Limits of Cooperative Federalism: Will Courts Allow Citizen Suits to Pick Up the Slack?, 20 DUKE ENV'T L. & POL'Y F. 1 (2010); Matthew D. Zinn, Policing Environmental Regulatory Enforcement: Cooperation, Capture, and Citizen Suits, 21 STAN. ENV'T L.J. 81 (2002).

^{3.} See Charles S. Abell, Ignoring the Trees for the Forests: How the Citizen Suit Provision of the Clean Water Act Violates the Constitution's Separation of Powers Principle, 81 VA. L. REV. 1957 (1995).

^{4.} See Frank B. Cross, Rethinking Environmental Citizen Suits, 8 TEMP. ENV'T L. & TECH. J. 55 (1989); Jeannette L. Austin, The Rise of Citizen-Suit Enforcement in Environmental Law: Reconciling Private and Public Attorneys General, 81 Nw. U. L. REV. 220 (1987); Stephen M. Johnson, Sue and Settle: Demonizing the Environmental Citizen Suit, 37 SEATTLE U. L. REV. 891 (2014) (noting criticisms of so-called "sue and settle" tactics by citizen suit plaintiffs); David Freeman Engstrom, Agencies as Litigation Gatekeepers, 123 YALE L.J. 616, 630–41 (2013) (discussing zealousness, coordination, and legislative fidelity critiques of citizen enforcement)

^{5.} See Engstrom, supra note 4, at 639–41.

^{6.} See, e.g., Friends of the Earth v. Laidlaw Env't Servs., 528 U.S. 167, 209 (2000) (describing a "plaintiff pursuing civil penalties . . . as a self-appointed mini-EPA" who acts "without meaningful public control").

enforcement actions against private entities.⁷ Significant differences also exist in the types and numbers of suits filed. Most notably, the geographic concentration of cases is in the Ninth Circuit. While our findings do not negate the importance of citizen suits, they expose important limits and inequities that are overlooked in current debates. In particular, the concentration of citizen suits in states where public support is strong for environmental programs both negates critics' concerns about conflicts with local values and highlights the socioeconomic inequities of access to this form of legal recourse.

A central reason for the persistence of misperceptions about citizen suits is the focus of commentators on a small subset of environmental litigation. Specifically, commentators focus on cases filed by environmental or community organizations against a private entity that is alleged to be in violation of its regulatory responsibilities. Yet, most citizen suits are filed against the federal or a state government for regulatory violations or, more commonly, for noncompliance with statutory mandates that span nondiscretionary duties, substantive criteria, and procedural requirements. While suits filed directly against private parties raise distinct issues, the narrow focus of the current debate on these types of suits obscures their functional equivalence with citizen suits involving private parties sued indirectly through the federal government, such as where a federal agency is sued for procedural violations in the course

^{7.} To put this in perspective, under the Clean Water Act, roughly 19,000 facilities are permitted to discharge pollutants, and during the sixteen-year period of this study there were about 10,500 state and federal enforcement actions. Citizens filed more suits against private entities under this program than any other, and yet during the same period, they filed 170 cases—or 1.6 percent—of the government actions. See infra Section III.A.1.

^{8.} This type of citizen suit is authorized by virtually all of the major federal pollution control statutes. *E.g.*, Clean Water Act [hereinafter CWA] § 1365(a)(1), 33 U.S.C. § 1251 (2012); Resource Conservation and Recovery Act [hereinafter RCRA] § 6972(a)(1), 42 U.S.C. § 6901 (2012); Clean Air Act [hereinafter CAA] § 7604(a)(1), (3), 42 U.S.C. § 7401 (2012); Endangered Species Act [hereinafter ESA] § 1540(g)(1)(A), 16 U.S.C. § 1531 (2012).

^{9.} Such suits can be filed under environmental statutes, such as the ESA $\S 1540(g)(1)(B)$, 16 U.S.C. $\S 1531$ or the CAA $\S 7604(a)(2)$, 42 U.S.C. $\S 7401$ (2012), or the Administrative Procedure Act [hereinafter APA] $\S 706(1)$, 5 U.S.C. $\S 500$ (2012).

^{10.} These suits may also be filed under the APA, 5 U.S.C. \S 706(2) (authorizing courts to "hold unlawful and set aside agency action" found to be in violation of any of six standards of review), or a governing environmental statute, e.g., 33 U.S.C. \S 1369(b) (CWA); 42 U.S.C. \S 6976 (RCRA); 42 U.S.C. \S 7607(b) (CAA).

of granting a permit to a private entity. This myopathy also ignores pervasive inequities that exist across all of the major environmental statutes and the inherent contingencies of common assumptions about those who file citizen suits and their motivations.

By taking a broader perspective of citizen suits filed over two presidential administrations, we are able to examine the connections between the structures of statutory regimes and patterns of litigation. We observe dramatic differences in the relative volumes of wholesale litigation (typically challenges to agency rulemaking) and retail litigation (generally specific decisions on the implementation of a program). We find that almost 90 percent of the citizen suits filed under the Clean Air Act involve wholesale rulemaking challenges, whereas retail litigation accounts for a similar percentage of cases under the National Environmental Policy Act. These differences reflect the substantive and procedural elements of each statute. Put differently, statutory regimes facilitate or impede citizen suits in predictable ways. Structural and operational limits are also evident in plaintiffs' strong preference for procedural claims, which account for almost 40 percent of the citizen suits in our dataset, despite the availability of substantive claims. Recognizing the practical and structural limits of citizen suits is therefore essential to identifying effective reforms.

This Article proceeds in three parts. Part I provides an overview of the current debate over citizen suits and the existing empirical work. It focuses on the gaps in the legal literature and empirical studies that have allowed misperceptions about citizen suits to persist. Part II describes our empirical methods and central findings. Our results provide the first comprehensive empirical study of environmental citizen suits in the United States. Part III synthesizes the major findings of our empirical work and concludes that prevailing views and critiques of citizen suits must be reexamined in light of the structural and practical constraints reflected in the empirical record. The Article concludes with a series of recommendations designed to mitigate the inequitable distribution of citizen suits and resource limits that so often restrict access to them. Taking into account current political constraints, we propose three principal actions: (1) targeted legislative reforms for lowering the barriers to filing citizen suits and creating incentives for filing them where they are most needed; (2) enhanced transparency about the filing of citizen suits and coordination among environmental organizations; and (3) education of judges about the types and importance of environmental citizen suits.

I. NORMATIVE AND EMPIRICAL PERSPECTIVES ON ENVIRONMENTAL CITIZEN SUITS

Relatively few studies have been conducted on environmental citizen suits, and they are now almost all over a decade old.¹¹ Most of this work has focused on cases against private or public entities alleged to be in violation of regulatory standards or protocols. Further, while studies of litigation exist under specific natural resource statutes, they often focus either on broad national statistics or litigation involving specific federal agencies, with little attention to variation across states or circuits and little consideration of differences in the nature of suits. 12 We will show that the gaps in the empirical record explain, in part, the prevailing misperceptions about citizen suits and the divergent views about their efficacy and value. This section reviews the legal debate over citizen suits and the existing empirical studies. We begin with an overview of the relevant environmental statutes and types of citizen suits, then turn to the debate over citizen suits and its lack of empirical grounding, and finally examine the gaps in the empirical record and the ways these gaps

^{11.} ENV'T L. INST., CITIZEN SUITS: AN ANALYSIS OF CITIZEN ENFORCEMENT ACTIONS UNDER EPA-ADMINISTERED STATUTES V-7 (1984) [hereinafter ELI]; Wendy Naysnerski & Tom Tietenberg, Private Enforcement of Federal Environmental Law, 68 Land Econ. 28 (Feb. 1992); May, supra note 2; Kristi M. Smith, Who's Suing Whom?: A Comparison of Government and Citizen Suit Environmental Enforcement Actions Brought Under EPA-Administered Statutes, 1995-2000, 29 COLUM. J. ENV'T L. 359, 371 (2004); Langpap & Shimshack, supra note 2.

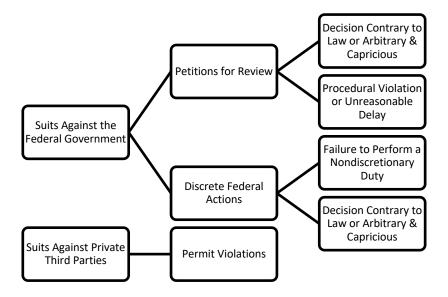
^{12.} See Lettie McSpadden Wenner & Lee E. Dutter, Contextual Influence on Court Outcomes, 41 W. Pol. Q. 115, 123–24 (1988); JAY E. AUSTIN ET AL., JUDGING NEPA: A "HARD LOOK" AT JUDICIAL DECISION MAKING UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (2004); Robert W. Malmsheimer et al., National Forest Litigation in the US Courts of Appeals, 112 J. FORESTRY 20, 22 (2004); Shorna R. Broussard & Bianca D. Whitaker, The Magna Charta of Environmental Legislation: A Historical Look at 30 Years of NEPA-Forest Service Litigation, 11 FOREST POLY & ECON. 134 (2009); Beth Gambino Portuese et al., Litigants' Characteristics and Outcomes in U.S. Forest Service Land-Management Cases 1989 to 2005, 107 J. FORESTRY 16 (2009); Amanda M.A. Miner et al., Twenty Years of Forest Service National Environmental Policy Act Litigation, 12 ENV'T PRAC. 116 (2010) [hereinafter Miner et al., NEPA Litigation]; Denise M. Keele & Robert W. Malmsheimer, Is the Ninth Circuit a Liberal Environmental Activist Court?, 37 JUST. SYS. J. 115, 115 (2016).

have contributed to misperceptions about citizen suits and their role in practice.

A. The Scope and Mechanics of Environmental Citizen Suits

Environmental litigation covers a wide variety of statutes, from the procedure-focused National Environmental Policy Act to the immensely complex regulatory framework of the Clean Air Act. We will focus on the statutes with the highest volume of litigation, but our aggregate data include an "other" category that lumps together litigation under less-prominent environmental statutes. As noted above, citizen suits may be filed against the federal government or against regulated, private third parties. Third-party suits are filed predominantly under the pollution statutes, both because of the limitations of citizen suit provisions under natural resource statutes and because most of the actions involve federal land and thus are filed directly against the federal agency with authority over it. The most important exception to this general rule is wetland permits under Section 404 of the Clean Water Act, which, for a variety of reasons, afford plaintiffs powerful legal claims that are often otherwise absent.

Figure 1: Environmental Litigation Map



The different regulatory frameworks incorporated in the major environmental statutes provide a diverse range of contexts for studying citizen suits (see Figure 1). This study focuses on three basic types of citizen suits: (1) petitions for review of agency rulemaking, which represent a form of wholesale litigation because they typically involve broadly applicable regulations; (2) challenges to discrete federal actions, which are a form of "retail" litigation; and (3) citizen enforcement actions against private third parties, typically around permit or other regulatory violations at a specific site. Given the complexity and the number of environmental statutes, we will outline the provisions of the most litigated statutes that are essential to understanding the context for citizen litigation under each.

 The Legislative Origins of Wholesale Rulemaking and Retail Enforcement Litigation Under the Major Pollution Statutes

The pollution-control statutes focus on controlling, enforcing, or providing information about air-, water-, and land-based pollution. The vast majority of citizen suits filed under the pollution statutes involve the Clean Water Act (CWA), the Clean Air Act (CAA), and, to a lesser extent, the Resource Conservation and Recovery Act (RCRA). Other pollution control statutes, such as the Toxic Substance Control Act and Federal Insecticide Fungicide, and Rodenticide Act, are infrequently the subject of citizen suits and thus will be treated together as a single class without discussing the details of their statutory regimes. The three classes of citizen suits outlined above will be used to frame the discussion of how the statutory frameworks shape the operation of citizen suits in practice.

Clean Air Act (CAA). The filing of citizen suits under the CAA is mediated by the framework of cooperative federalism built into the statute, particularly the broad delegation of

^{13.} Although also important, we do not discuss RCRA because it would be largely duplicative of the CAA and CWA; for very different reasons, we do not discuss the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) because the types and patterns of litigation are categorically different insofar as so much of the litigation is between private parties disputing liability.

permitting and enforcement to state environmental agencies, 14 and the complex mix of technology-based and air-quality-based standards with which sources emitting regulated air pollutants must comply. The CAA is perhaps most aptly conceptualized as a multilayered combination of interrelated pollution control regimes. The heart of the statute is the National Ambient Air Quality Standards (NAAQS), which establish minimum standards for the concentration of a select set of air pollutants widely emitted throughout the country. 15 These standards are complemented by three types of technology-based regulations: two sets of standards for "new" sources-New Source Performance Standards (NSPS)¹⁶ and New Source Review (NSR)¹⁷—and one for sources emitting toxic air pollutants—National Emissions Standards for Hazardous Air Pollutants (NESHAPs).¹⁸ Motor vehicle emissions are regulated separately by the Environmental Protection Agency (EPA) at the national level. 19 Each regime presents numerous opportunities for rulemaking challenges to be filed. Importantly, the CAA also has two judicial review provisions that define where challenges are filed: a citizen suit

^{14.} Most states have been delegated authority over Title V permit programs and NSR construction permitting. See, e.g., Air Permitting Delegations in EPA's New England Region, ENV'T PROT. AGENCY, https://www.epa.gov/caa-permitting/air-permitting-delegations-epas-new-england-region (last updated Sept. 16, 2016) [https://perma.cc/M83E-YZEZ].

^{15.} Once EPA establishes the NAAQS, the states carry the responsibility of achieving regional compliance with the NAAQS through State Implementation Plans (SIPs). 42 U.S.C. § 7410.

^{16.} For new major stationary sources, NSPS requires EPA to issue baseline technology standards for categories of sources that EPA has determined might "reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(B).

^{17.} Unlike NSPS, NSR standards are set by the *permitting agency* (generally the state), are more source specific, and are divided into two separate processes (PSD, NSR, and NNSR) based on whether or not the region is in attainment with the NAAQS.

^{18. 42} U.S.C. § 7412.

^{19.} *Id.* § 7545.

provision²⁰ and a direct appeal provision for certain types of rulemaking decisions.²¹

Citizen suits under the CAA account for a disproportionate share of the petitions for review in the Department of Justice (DOJ) database. This is driven by both the variety of regulatory programs and the vast range of sources subject to its regulations, which require many different rules. For example, a single large industrial source may be subject to overlapping regulation under State Implementation Plans (SIPs) designed to meet the NAAQS²² and technology-based standards under the NSPS, NSR, or NESHAPS programs. The scale of the regulated industries, aggregate environmental and human-health impacts, and costs of meeting CAA standards elevate the stakes of CAA rules. This leads almost inexorably to litigation, whatever the outcome, because EPA is likely to disappoint or incite one or another group of stakeholders to challenge its decisions. CAA rulemaking challenges are the prototypical wholesale litigation where a rule is challenged prior to its implementation.

By contrast, the small number of retail lawsuits filed in federal court is attributable to the broad delegation of authority under the CAA to states over issuing and overseeing compliance with CAA permits. Further, all stationary-source regulations for individual facilities—including applicable NESHAP, NSR, NSPS, and SIP requirements—are consolidated under a single "Title V" operating permit, which state and local air authorities typically administer.²³ The broad delegation to the states of implementation and enforcement limits the number of discrete decisions made at the federal level. Consequently, citizen suits involving individual facilities or state regulations are typically filed against state agencies or as third-party suits directly

^{20.} *Id.* § 7604 (providing federal question jurisdiction in district court for suits against (1) a party "who is alleged to have violated . . . or be in violation of (A) an emission standard or limitation under [the CAA] or (B) an order issued by [EPA] or a State with respect to such a standard or limitation," (2) EPA for "failure . . . to perform any act or duty [under the CAA] which is not discretionary," or (3) a party who constructs a facility without an PSD NSR or NNSR permit).

^{21.} *Id.* § 7607(b)(1) (mandating filing of petitions for review of all nationally applicable regulations in the D.C. Circuit Court and filing of petitions for review of approval or promulgation of SIPs and "any other final action . . . which is locally or regionally applicable" in the appropriate U.S. Circuit Court for the region or locality).

^{22.} Id. §§ 7408-7409.

^{23.} Id. §§ 7661-7661(f).

against the company alleged to be violating the Act.²⁴ As we will show empirically, the concentration of major industrial facilities in a small number of states in the Midwest and southeastern regions of the country further limits the number of such suits. Accordingly, most federal litigation under the CAA is in the form of wholesale petitions for review rather than retail litigation involving specific facilities.

Clean Water Act (CWA). The CWA is also based on a cooperative federalism model in which EPA sets national standards for "point sources" while states have the principal responsibility for implementing and enforcing the regulatory programs. The CWA differs from the CAA, however, insofar as the technology-based standards under the National Pollution Discharge Elimination System (NPDES) are the centerpiece of its regulatory framework—as opposed to technology-based standards backing up the air-quality-based NAAQS under the CAA. Waterquality-based standards, so-called "total maximum daily load[s]" (TMDLs) of discharged pollutants, come into play when the NPDES standards are insufficient. Further, states have principal responsibility for setting TMDLs, drafting plans to meet them, and implementing them once they have been approved by EPA.²⁵ Outside the NPDES program, the scope of and discretion inherent in the delegation to the states is therefore far greater under the CWA than the CAA. The one exception to this broad delegation is protection of wetlands, 26 which is essential to the ecological health of waterways. Wetland permitting is covered by Section 404 and overseen at the national level by EPA and the U.S. Army Corps of Engineers.²⁷ Similar to the CAA, the

^{24.} In practice, this means that most permitting challenges (e.g., New Source Review), apart from Title V operating permits, are filed in state court and most permit violations are filed in federal court.

^{25. 33} U.S.C. § 1313(d).

^{26.} Id. at § 1344(a); 33 C.F.R. §§ 320.2(f), 323.1–323.6 (2020); 40 C.F.R. pt. 230 (2020); $see\ also\ 33\ U.S.C.$ § 1362(7) (defining "navigable waters" as "the waters of the United States"); 33 C.F.R. § 328.3(a), (c) (2020) (more particularly defining "waters of the United States").

^{27. 33} U.S.C. § 1344. While the Army Corps leads the permitting process and administers the permits, EPA has authority to block any permits that would have "unacceptable adverse effect[s]." *Id.* § 1344(c). CWA § 404 also provides for the assumption of CWA § 404 permits by the states, with oversight from EPA. *Id.* § 1344(g)–(j). Only two states—Michigan and New Jersey—have assumed authority over CWA § 404 permits. *State or Tribal Assumption of the CWA Section 404 Permit Program*, ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/state-or-tribal-

CWA has a separate third-party citizen suit provision²⁸ and a direct appeal provision.²⁹

The structural difference between the CAA and the CWA leads to dramatically different opportunities for filing citizen suits and produces different patterns of litigation. At the national level, the industry-specific, technology-based standards under the NPDES program are the principal class of standards subject to rulemaking. Consequently, petitions for review figure much less prominently under the CWA than the CAA, and the localized nature of standard setting and planning under the CWA through TMDLs fragments policymaking geographically, which reduces the stakes and visibility of the petitions for review that are filed. The CWA is also distinctive insofar as it imposes strict reporting requirements under the NPDES program;³⁰ this public information has been instrumental in facilitating citizen enforcement of NPDES effluent limits. Section 404 wetland permitting is also the frequent subject of litigation, either for permit violations or for failure to obtain a permit altogether.³¹ Thus, while citizen suits under the CAA typically involve wholesale litigation of national standards, CWA citizen suits gravitate

assumption-cwa-section-404-permit-program (last updated May 2, 2019) [https://perma.cc/5R4Z-VR6W].

^{28. 33} U.S.C. § 1365 (providing federal question jurisdiction in district court for suits against (1) a party "who is alleged to be in violation of (A) an effluent standard or limitation under [the CWA] or (B) an order issued by [EPA] or a State with respect to such a standard or limitation," or (2) EPA for "failure . . . to perform any act or duty [under the CWA] which is not discretionary").

^{29.} *Id.* § 1369(b)(1) (mandating filing of petitions for review of actions promulgating federal effluent limitations for existing sources, new sources, or toxics, delegating NPDES authority, or denying an NPDES permit in the U.S. Circuit Court "in which [the petitioner] resides or transacts business").

^{30.} The NPDES program is replete with reporting requirements, many of which must be executed electronically. See 40 C.F.R. pt. 127; see also NPDES Electronic Reporting Rule, 80 Fed. Reg. 64,071–72 (Oct. 22, 2015) (providing an accounting of a wide array of NPDES reporting requirements impacted by implementation of the electronic filing system). A few important examples include discharge monitoring reports, 40 C.F.R. § 122.41(l)(4), sewage sludge and biosolids annual program reports, id. § 122.44(i)(2), CAFO annual reports, id. § 122.42(e)(4), MS4 program reports, id. § 122.42(c), pretreatment annual reports, id. § 403.12(i), sewer overflow and bypass incident event reports, id. § 122.41(l)(iii)(6)–(7), notice of intent to discharge under a general NPDES permit, id. § 122.28(b)(2), reports on continued compliance absent pretreatment, id. § 403.12(e), (h).

^{31. 40} C.F.R. \S 230.10(a). For example, no permit may be issued if the discharge would cause or contribute to a violation of CWA $\S\S$ 303, 307, or "[j]eopardize[] the continued existence of species listed as endangered or threatened." 40 C.F.R. \S 230.10(b)–(c).

towards state policies and retail litigation against private third parties.

2. Federal Oversight and Third-Party Enforcement Through Citizen Suits Under the Major Natural Resources Statutes

The most litigated natural resource statutes center on managing public lands, protecting of endangered species, and providing information on the impacts of federal actions and policies. Most citizen suits filed under the natural resource statutes involve claims under the Endangered Species Act (ESA) and National Environmental Protection Act (NEPA).³² Other natural resources statutes, such as the National Forest Management Act, Federal Land Policy Management Act, and the Historic Preservation Act, collectively account for less than 15 percent of the natural resource cases filed annually. The overview below will focus on the two most litigated statutes.

Endangered Species Act (ESA). The ESA, which is jointly administered by the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (collectively "the Services"), protects endangered³³ and threatened³⁴ species through (1) listing species that meet its criteria and designating habitat that is "critical" to their survival;³⁵ (2) requiring federal agencies to consult with FWS or NMFS when their actions have the potential to "jeopardize" the status of listed species;³⁶ and (3) placing strict limits under Section 9 on the "take" or "harm" to listed species on public or private lands.³⁷ The Section 7 consultation process has been particularly important because it places the burden on federal agencies to assess and mitigate the potential impacts of their actions on listed species.³⁸ By contrast,

^{32.} Though it is applicable to any federal action with "significant impacts" on the environment, NEPA figures most prominently in federal actions that impact natural resources and particularly public lands.

^{33.} A species can be listed as endangered if it is "in danger of extinction throughout all or a significant portion of its range." $16~U.S.C.~\S~1532(6)$.

^{34.} A species can be listed as threatened if it is "likely to become...endangered... in the foreseeable future." *Id.* § 1532(20).

^{35.} ESA § 4, 16 U.S.C. § 1533.

^{36.} ESA § 7, 16 U.S.C. § 1536.

^{37.} ESA §§ 9-11, 16 U.S.C. §§ 1538-1540.

^{38. 16} U.S.C. § 1536(a)(2). The ESA mandates that all federal agencies consult with the relevant agency to "insure that any action authorized, funded, or carried

Section 9's prohibition on "taking" listed species requires direct evidence, ³⁹ which is often unavailable due to the difficulty of monitoring and studying listed species. ⁴⁰ Moreover, the Services have broad discretion to issue permits allowing the "incidental" take of listed species, subject to mitigation and monitoring requirements. ⁴¹

Citizen suits have played a prominent role under the ESA's listing provisions. The ESA gives citizens the right to file petitions requesting the listing of species⁴² and, if there is substantial information available,⁴³ requires the Services to determine whether a listing is warranted within 90 days.⁴⁴ The strict deadlines and broad petition rights have prompted extensive litigation, including a series of suits early in the 21st century requesting the listing of hundreds of species.⁴⁵ While petitions rarely lead to a species being listed, they force the Services to take action that is then subject to judicial review.⁴⁶ Similarly, challenges to critical habitat designations, or failure to designate any at all, are subject to deadlines that provide powerful legal handles for litigation. Both types of cases are wholesale litigation similar in scope to the petitions for review under the CAA. Thus, most wholesale litigation under the ESA has centered on the

out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species" 16 U.S.C. § 1536(a)(2).

- 39. Id. § 1532(19); § 1538(a)(1)(B); 50 C.F.R. §§ 17.21(a), 17.31(a) (2018) (further defining take and extending the take provisions to protect threatened species under 33 U.S.C. § 1533(d) authority); $see\ also\ Babbitt\ v.$ Sweet Homes Chapter of Cmtys. for a Great Or., 515 U.S. 687 (1995) (defining the scope of "take").
- 40. See, e.g., Eric Biber, The Problem of Environmental Monitoring, 83 U. COLO. L. REV. 1, 34–52 (2011) (discussing wide ranging issues with environmental monitoring, including monitoring of species); Thompson, supra note 1, at 185, 190–92 (noting by way of example that there are significant "resources needed and obstacles involved in determining whether endangered species are being harmed . . ." in support of citizen monitors and informants); cf. Teresa Woods & Steve Morey, Uncertainty and the Endangered Species Act, 83 IND. L.J. 529, 531–33 (2008) (discussing similar monitoring issues for listing under the ESA).
 - 41. See 16 U.S.C. §§ 1539(a)(1), (2).
 - 42. 5 U.S.C. § 553(e); 16 U.S.C. § 1533(b)(3)(A).
 - 43. 16 U.S.C. § 1533(b)(3)(A).
- 44. *Id.* § 1533(b)(3)(B). The agency may not consider costs in this listing determination. *See*, *e.g.*, *id.* § 1533(b)(1)(A) (listing decisions are made "solely on the basis of the best [available] scientific and commercial data available").
 - 45. See infra notes 121-122 and accompanying text.
- 46. Challenges to the ultimate determination are difficult to make successfully due to the deference afforded federal regulators. *See, e.g.*, Ctr. for Biological Diversity v. Kempthorne, 466 F.3d 1098 (9th Cir. 2006).

listing of species and designation of critical habitat, whereas most retail litigation has involved the Section 7 interagency consultation process that is triggered by discrete federal actions.

National Environmental Policy Act (NEPA). NEPA is a procedural statute that requires federal agencies to prepare an environmental impact statement (EIS) for "major Federal actions significantly affecting the quality of the human environment."47 Federal actions include providing federal funding, permits, and decisions regarding federal facilities or land.⁴⁸ A preliminary step in the NEPA process is determining whether an action—either on its own or cumulatively with other related actions—has a significant environmental impact.⁴⁹ Federal regulations provide for two types of abbreviated processes: (1) reliance on administrative categorical exclusions (CEs), when a prescribed class of federal actions has no possibility of significantly impacting the environment; 50 and (2) environmental assessments (EAs), which are a foreshortened variant of an EIS that resolve whether a federal action could have significant environmental impacts.⁵¹ In addition, when the circumstances or plans for a federal action change significantly, the agency may be required to prepare a supplemental analysis that reevaluates the environmental impacts in light of these changes.⁵²

NEPA does not contain a citizen suit provision, which means that citizen suits are governed by the judicial review provision in the Administrative Procedure Act.⁵³ In practice, citizen suits have focused on violations of NEPA's procedures, particularly the timing of NEPA compliance and the level of analysis required,⁵⁴ as well as the adequacy of the analysis in EAs and

^{47.} NEPA § 102(2)(C), 42 U.S.C. § 4332(1)(C). "Federal actions" include decisions or programs involving federal land or facilities, federal money, or federal permits. See 40 C.F.R. § 1508.18(b).

^{48.} See NEPA §§ 101–102, 42 U.S.C. §§ 4321, 4331–4332 (2018). CEQ regulations are binding on all federal agencies. Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989).

^{49.~} See 40 C.F.R. §§ $1501.4,\,1508.27$ (2020) (providing ten intensity factors for assessing significance).

^{50.} Id. §§ 1501.4(a)(2), 1508.4.

^{51.} *Id.* §§ 1501.4(b)–(e), 1508.9, 1508.13.

^{52. 23} C.F.R. § 771.130 (2020).

^{53. 5} U.S.C. § 702.

^{54.} See, e.g., Paradise Ridge Def. Coalition v. Hartman, 757 F. App'x 536 (9th Cir. 2018) (citing Metcalf v. Daley, 214 F.3d 1135, 1143 (9th Cir. 2000)); see also 42 U.S.C. \S 4332(2)(C)(v).

EISs.⁵⁵ Similar to the Section 7 consultation process of the ESA, NEPA procedures are applicable to discrete federal actions and programmatic decisions and thus vary widely in their scope and geographic area. Challenges to CEs, though relatively rare, are close analogues of petitions for review of agency rules because CEs cover broad classes of federal actions and are themselves issued by agencies as rules.⁵⁶ Most citizen suits under NEPA, however, involve discrete federal actions and thus exist on the retail end of the spectrum.⁵⁷

B. The Threats and Promises of Environmental Citizen Suits

The citizen suit provisions contained in the statutes outlined above are novel for the breadth and authority they give citizens to file enforcement suits directly against private or public entities for alleged regulatory violations. Congress believed that such suits would supplement or prod agency enforcement through "shaming [an agency] or by forcing it to intervene." The justification for citizen suits was driven by concerns about the shortcomings of government enforcement: limited budgets, 59 challenges of detecting violations, 60 political or institutional

^{55. 40} C.F.R. §§ 1501.7, 1508.25. The scope of the agency action must include connected, cumulative, and similar actions. Id. § 1508.25(a)(1)–(3).

^{56.} Id. §§ 1501.4(a)(2), 1508.4.

^{57.} If an underlying federal-private nexus exists, the case is essentially a third-party citizen suit. This is common in NEPA litigation and typically occurs where the NEPA process is triggered by private actions that require a federal permit, such as a development on private land requiring a CWA § 404 permit. While facially a challenge to a discrete federal action, the principal subject of the suit is the underlying private project.

^{58.} Stephenson, *supra* note 2, at 110 (stating further that "private lawsuits can be a substitute for agency prosecutions in areas where the agency is excessively lax"); Thompson, *supra* note 1, at 186; JEFFREY G. MILLER, CITIZEN SUITS: PRIVATE ENFORCEMENT OF FEDERAL POLLUTION CONTROL LAWS 3–5 (1987) (arguing that citizen suits "[o]vercome obstacles . . . such as limited agency resources and the structural risk of agency underenforcement").

^{59.} Stephenson, *supra* note 2, at 107 (noting that "private enforcement can provide more enforcement resources and facilitate more efficient allocation of public resources"); Thompson, *supra* note 1, at 191 (stating that "[f]ederal and state enforcement programs are often woefully understaffed and underfunded").

^{60.} Stephenson, *supra* note 2, at 109 (suggesting that "private enforcement enables those citizens who value the public good more highly to [augment government] enforcement"); Thompson, *supra* note 1, at 190 (observing that "environmental violations are difficult or prohibitively expensive for the government to detect").

barriers to agency enforcement,⁶¹ and the potential for private enforcement to generate innovative litigation strategies that could be adopted by federal agencies.⁶² The legislative history of the first environmental citizen suit provision, under the Clean Air Act (CAA), reflects this perspective. The Senate and House reports state that citizen suits will "motivate governmental agencies"⁶³ and that "it is too much to presume that, however well-staffed or well-intentioned these enforcement agencies, they will be able to monitor the potential violations. . . ."⁶⁴ In addition, "democratic empowerment" was important insofar as it placed a premium on giving citizens "very broad opportunities to participate in the effort to prevent and abate air pollution."⁶⁵

Despite the many environmental battles that were fought during the 1970s, it was not until the mid-1980s and the deregulatory backlash under the Reagan Administration that citizen suits were filed in significant numbers, including challenges to major federal rules, compliance with procedures under NEPA and the ESA, and permitting under the CAA and the CWA.66

^{61.} Eric Biber & Berry Brosi, Officious Intermeddlers or Citizen Experts? Petitions and Public Production of Information in Environmental Law, 58 UCLA L. REV. 321, 345 (2010) (noting that "citizen suit provisions could help to ensure that agencies were not fully 'captured' by regulated entities"); Thompson, supra note 1, at 191 (stating that "political considerations and institutional structure may often lead agencies to ignore violations that are known and appropriate to prosecute").

^{62.} Stephenson, *supra* note 2, at 107 (suggesting that "private enforcement can foster innovative litigation strategies and settlement techniques, which may then be adopted by government regulators").

^{63.} COMM. ON PUB. WORKS, A LEGISLATIVE HISTORY OF THE CLEAR AIR AMENDMENTS OF 1970, S. DOC. NO. 93-18, at 138 (2d Sess. 1974); see id. at 127, 230, 263, 347; see also S. REP. No. 1196, 91st Cong., 2d Sess. 36–37 (1970) ("Authorizing citizens to bring suits for violations of standards should motivate government agencies charged with the responsibility to bring enforcement and abatement proceedings.").

^{64.} Id. at 280 (remarks of Senator Muskie, Sept. 21, 1970).

^{65.} Id. at 136, 138.

^{66.} See Cross, supra note 4, at 56 ("Certainly some of the recent proliferation of citizen suits is due to the Reagan Administration's reduction in enforcement actions."); David R. Hodas, Enforcement of Environmental Law in a Triangular Federal System: Can Three Not Be a Crowd When Enforcement Authority Is Shared by the United States, the States, and Their Citizens?, 54 MD. L. REV. 1552, 1608 n.320 (1995) (explaining the view that "the wave of citizen suits in the 1980s was motivated, in part, by the perception that 'the first Reagan Administration was rapidly undermining compliance with environmental laws"). According to one account, "[t]he number of sixty-day notices sent for environmental citizen suits swelled from 6 in 1981, to 178 in 1984, and to 200-300 in the early 1990's." Cassandra Stubbs, Is the Environmental Citizen Suit Dead? An Examination of the Erosion of Standards

The growth in citizen suits during the 1980s and 1990s elicited a critical response from regulated industries and within the academic community. Rather than helpfully supplementing agency enforcement, critics argued that such citizen suits would "disrupt government regulatory schemes and lead to wasteful or excessive enforcement."67 Perhaps most problematic, these critics contended that citizen suits "raise concerns about the democratic accountability of law enforcers, since private plaintiffs are not subjected to the same electoral checks that constrain executive officials."68 This lack of accountability has the potential to be most troublesome when a disparity exists between the private values of the person or organization bringing a citizen suit and the values of the community in which it is filed.⁶⁹ Critics argued further that misalignments of private and societal interests were inevitable because the implementation of laws and regulations often requires the exercise of discretion—either because rules are unrealistically strict or, on the other extreme, because they are broadly discretionary.⁷⁰

of Justiciability for Environmental Citizen Suits, 26 N.Y.U. REV. L. & Soc. Change 77, 81 (2000).

^{67.} Stephenson, supra note 2, at 106; id. at 114 (claiming that "private rights of action can lead to inefficiently high levels of enforcement"); see also Jim Rossi, Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking, 92 Nw. U. L. Rev. 173, 224 (1997) (asserting that citizen suits may "represent lost opportunities for the EPA to pursue alternative enforcement priorities"); Stephen J. Driscoll, Environmental Private Actions: Are Special Interest Groups Hobbling Comprehensive Programs Without "Standing" Themselves? 24 RUTGERS L.J. 469, 503–06 (1993) (arguing that private enforcement actions "may actually hobble comprehensive, environmental policies" by undermining EPA's enforcement authority).

^{68.} Jonathan H. Adler, Stand or Deliver: Citizen Suits, Standing, and Environmental Protection, 12 DUKE ENV'T L & POL'Y F. 39, 49 (2001) (claiming that plaintiffs filing citizen suits "face no significant political repercussions for setting unwise enforcement priorities"); Richard J. Pierce, Jr., Agency Authority to Define the Scope of Private Rights of Action, 48 ADMIN. L. REV. 1, 12 (1996) (stating that a critical shortcoming of citizen suits is the "lack of political accountability for important policy decisions"); Michael S. Greve, Friends of the Earth, Foes of Federalism, 12 DUKE ENV'T L. & POL'Y F. 167 (2001); Stephenson, supra note 2, at 119 (arguing that "executive agencies are accountable to the electorate for their exercise of [prosecutorial] discretion through the President and, more indirectly, through congressional oversight").

^{69.} Stephenson, supra note 2, at 115, 117.

^{70.} Cross, *supra* note 4, at 64 ("The Congressional perception that enforcement actions would generally be nondiscretionary turned out to be an unrealistic one"); Stephenson, *supra* note 2, at 116 ("[The risk of overdeterrence] is compounded by the tendency of agencies and legislatures, when faced with complex policy problems, to enact regulations that are deliberately overbroad").

The principal concern that animates much of the critical commentary has been that powerful environmental organizations with their own idiosyncratic priorities will highjack enforcement from federal agencies, which have primary responsibility for implementing the law under the Constitution.⁷¹ Under this view, citizen suits would have the perverse "effect of misdirecting the EPA's own enforcement efforts," as federal regulators may be compelled to closely track or intervene in actions initiated by citizen groups to prevent or mitigate negative repercussions. 72 Further, cooperation between regulators and industry often essential to effective implementation—is one of the mostcited casualties of the unconstrained use of citizen suits, because such use can generate regulatory uncertainty and threaten informal agreements between agency officials and regulated entities.⁷³ Some commentators have claimed that self-interest driven by the availability of attorney's fees in "easy" citizen suits, and not environmental values, has been responsible for the growth in citizen suits filed⁷⁴ and that this has spawned a groups."75 "cartel of environmental advocacy

^{71.} Cross, *supra* note 4, at 55 (expressing the concern that granting broad rights to file citizen suits "permits a leapfrogging of the administrative agencies that ordinarily apply our nation's environmental laws").

^{72.} *Id.* at 68 (noting that sixty-day notice requirement in environmental statutes were designed to "prompt government intervention in a citizen enforcement action," but that "[t]his system runs the risk . . . of 'enabl[ing] citizens and settling defendants to dictate an enforcement timetable to the federal government") (footnote omitted) (quoting Letter from Stephen D. Ramsey, Chief, Env't. Enf't Sec., U.S. Dep't of Just, to Judge H. Lee Sarokin, D.N.J. (Jan. 3, 1985)).

^{73.} *Id.* at 67 (asserting that citizen suits "threaten any cooperative compliance by their very nature"); Stephenson, *supra* note 2, at 117–18 (claiming that "citizen suits may disrupt the cooperative relationship between regulators and regulated entities that many argue is essential for long-term compliance with statutory mandates").

^{74.} Smith, *supra* note 11, at 371 (describing claims that "settlements from suits based on 'easy' violations [are used] . . . to finance the national environmental movement"); Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 TUL. L. REV. 339, 341, 355–58 (1990) (asserting that citizen suits "make enforcement financially attractive for almost no one except environmental advocacy groups" (emphasis omitted)); Nuno Garoupa, *A Note on Private Enforcement and Type-I Error*, 17 INT'L REV. L. & ECON. 423, 423 (1997).

^{75.} Greve, *supra* note 74, at 341–42, 362 (asserting that attorney's fees have created "what amounts to an environmentalist enforcement cartel" and that "environmental organizations almost always proceed against private industry, and almost never against government entities"); A.H. Barnett & Timothy D. Terrell, *Economic Observations on Citizen-Suit Provisions of Environmental Legislation*, 12 DUKE ENV'T. L. & POL'Y F. 1, 9 (2001) (claiming that generous settlements and above-cost attorney's fees have created a cartel of environmental advocacy groups);

commentators have raised similar concerns about citizen suits filed against agencies for failure to perform nondiscretionary duties; these suits also have the potential to divert agency resources from programs on which they would prefer to spend scarce time and resources.⁷⁶

Academics and others have challenged the economic and structural critiques of citizen suits. There is little evidence, for example, that attorney's fees are sufficient (outside securities cases) to provide adequate funding for even a nonprofit organization.⁷⁷ Moreover, the battle that must be fought with DOJ to obtain attorney's fees often leads organizations to forego them and many national organizations cannot seek attorney's fees under the Equal Access to Justice Act (EAJA). 78 Critics' claims also fail to consider the relative volume of state and federal actions filed by government officials versus the number of citizen suits. The available data suggests that if administrative actions are included, government enforcements outnumber citizen suits by at least a factor of ten. 79 Further, in the midst of the rise in citizen enforcement suits during the 1980s, government officials stated that "a large portion of citizen notices addressed violations that either were worthy of agency action but had escaped EPA attention or, though not on EPA's priority list, were

Nancy Perkins Spyke, *Public Participation in Environmental Decisionmaking at the New Millennium: Structuring New Spheres of Public Influence*, 26 B.C. ENV'T AFF. L. REV. 263, 294 (1999) (arguing that large environmental organizations create agendas focusing on national problems instead of local ones and reap mitigation benefits from settlements).

^{76.} See Biber & Brosi, supra note 61, at 345 ("Scholars have argued that citizen suits divert agencies from rational priority-setting by requiring them to attend to low-priority matters."); see also Eric Biber, The Importance of Resource Allocation in Administrative Law, 60 ADMIN. L. REV. 1, 23 (2008) (noting that if a court forces an agency to reconsider an invalidated rule, "the agency will have been forced to divert time and effort into redrafting the rule—time and effort that it otherwise likely would have spent on other priorities").

^{77.} Steven M. Dunne, Attorney's Fees for Citizen Enforcement of Environmental Statutes: The Obstacles for Public Interest Law Firms, 9 STAN. ENV'T L.J. 1, 22–24 (1990).

^{78.} Interview with Nada Culver, Senior Counsel and Director, BLM Action Center, The Wilderness Society, (Dec. 8, 2017).

^{79.} See Hodas, supra note 66, at 1573 (observing that between 1983 and 1993, nonprofit organizations filed 100–300 sixty-day notices annually under the Clean Water Act versus the thousands of administrative actions initiated by EPA and the states each year); see also Michael D. Montgomery, Raising the Level of Compliance with the Clean Water Act by Utilizing Citizens and the Broad Dissemination of Information to Enhance Civil Enforcement of the Act, 77 WASH. U. L.Q. 533, 539 n.59 (1999).

appropriate subjects of enforcement action."80 It is also a myth that environmental groups are not accountable to anyone. Advocacy groups cannot ignore public opinion, even if it is driven by economic concerns, and "few nonprofits benefit from running a valued company out of business."81 These realities combined with perennial concerns about legislative backlashes from a Congress that has become progressively more skeptical of environmental regulation run contrary to the most troubling critiques of citizen suits.82

The lack of data on citizen suits remains a significant barrier to assessing the grounds for critics' concerns. The questions such concerns raise are empirical because they turn on the balance between the benefits of supplementing government enforcement versus the potential shortcomings of overly zealous or counterproductive citizen-led suits. As one thoughtful commentator has put it: determining whether the benefits of citizen suits outweigh any disruptive effects "is clouded by uncertainty over what drives both public and private enforcement decisions, as well as disagreement over what enforcement actions actually benefit the public." These questions have normative and empirical elements that would benefit from a deeper understanding of the cases being filed.

C. The Mixed and Incomplete Empirical Record of Environmental Litigation

Despite the existence of conflicting narratives about the roles and importance of citizen suits, few empirical studies have been conducted on environmental litigation. This is principally because it is difficult to collect environmental litigation data and there are significant gaps in existing databases. Inconsistent data entry, fragmented data, and structural difficulties in obtaining complete, cross-linked records tracking essential

^{80.} ELI, supra note 11.

^{81.} Thompson, Jr., *supra* note 1, at 205; *see also* Austin, *supra* note 4, at 257 (questioning why the motivations of environmental groups should differ substantially from those of public enforcers since "[b]oth . . . are influenced by political pressure and their interest in political victory").

^{82.} See, e.g., David E. Adelman & Robert L. Glicksman, Reevaluating Environmental Citizen Suits in Theory and Practice, 91 U. COLO. L. REV. 385, 390–91 (2020) (describing legislative opposition to and efforts to limit citizen suits).

^{83.} Thompson, Jr., *supra* note 1, at 201.

information about cases also hampers empirical work.⁸⁴ These shortcomings create substantial impediments to gathering data and ensuring its integrity. A small number of studies over the years have navigated these barriers to provide valuable insights into litigation patterns and impacts. We will review these studies, highlighting their limitations and the empirical gaps that our work fills.

About a decade into the modern era of environmental litigation, EPA commissioned a study from the Environmental Law Institute (ELI) to better understand how citizen suits were being used. 85 In 1984, ELI published the study, which considered citizen suit activity between 1978 and 1984. ELI identified 349 citizen suits filed during the study period, including 214 citizen suits under the Clean Water Act. 86 Just a few large environmental organizations appeared to have brought the majority of the

^{84.} All empirical research requires the researcher to ensure that datasets are complete, consistent, and reliable. An incomplete or inaccurate dataset is often harmful as it creates "factual" support for conclusions that have no grounding in reality. Environmental litigation presents a special challenge. Unlike many areas, environmental litigation creates many data trails—court dockets, agency records, the U.S. Department of Justice's case management systems, and the litigants' own records, to name a few. But each of these data trails has unique limitations and there are structural differences between the datasets. To understand the challenge, imagine a CWA citizen suit filed in a federal district court. EPA and DOJ will have records of the notice of intent to sue and the case. The federal district court will keep records of the complaint and any court documents. Individual litigants will keep records of the case. For a single case, this doesn't present much of a challenge. A diligent researcher would simply get information from all of these sources. But what if you want to know about 10,000 filings, across dozens of statutes, over ten years, filed in every jurisdiction (including the circuit courts when direct filing is permitted), and impacting multiple agencies? The cost of individually tracing each individual case is self-evidently astronomical. All is not lost; researchers can instead turn to agency docketing systems, court docketing systems, and commercial aggregators such as Westlaw. But even then, the challenge is just beginning. Different agencies—and sometimes even different sections within a single agencykeep different records with different rigor or focus. Moreover, there is little uniformity in the data provided by the federal district courts to PACER or commercial aggregators through PACER. Some courts might provide complete docketing information that properly identifies a case as having been brought under an environmental statute but provide their entire docket as a .pdf, a file format with a research cost many times higher than a .csv or other data file easily handled by data analysis software. Others might not publicly provide electronic records. This is just a quick overview of some of the challenge presented by empirical research into environmental litigation.

^{85.} ELI, supra note 11.

^{86.} Id. at I-1 to -2, III-1 to -2.

suits,⁸⁷ and ELI posited that the observed trends were correlated with a decline in EPA's enforcement activity.⁸⁸ Consistent with some critics' concerns, the study found that regulated businesses' greatest concern about citizen suits was their disruptive effect on permit negotiations with EPA.⁸⁹ Nevertheless, ELI concluded that the patterns of citizen suits aligned with the original goals of Congress, namely, "to provide (1) a goad to EPA efforts and (2) an alternative to government enforcement."⁹⁰

Subsequent studies of citizen enforcement suits have been few and far between. Two of the best studies extended and updated the 1984 ELI report. In 2004, Kristi Smith published a study of government and citizen enforcement suits under EPA-administered statutes (e.g., CAA, CWA, RCRA) from 1995 through 2000. Unlike ELI's study, she found that small citizen groups filed a majority of the cases (60 percent), whereas large groups filed just 12 percent, and a third of the citizen suits were filed against public defendants. Roughly half (52 percent) of the cases were settled, with few meaningful differences observed across plaintiffs or statutes. The study's most important finding was the shift in the organizations filing citizen

^{87.} *Id.* at III-2, III-17 (finding that national environmental organizations were involved in 90 percent of the CWA cases, whereas local environmental organizations were involved in just 39 percent).

 $^{88.\} Id.$ at III-2, -25, -29 (observing that enforcement referrals from EPA to DOJ had declined from 184 referrals in 1979, to 47 referrals in 1982, with a rebound to 199 referrals in 1983).

^{89.} Id. at V-27 to -37.

^{90.} *Id.* at V-5.

^{91.} Studies include the following: Greve, *supra* note 68, at 352–54, 392–93 (study of suits under the CWA between 1984 and 1998 finding that large national /regional environmental groups were filing approximately two-thirds of all CWA enforcement suits); Naysnerski & Tietenberg, *supra* note 11 (econometric study of the influence of remedies and reimbursement procedures on citizen suits filed between 1978 and 1987); Smith, *supra* note 11, at 381–403 (excellent study of government and citizen suits under the six environmental laws studied in ELI's report filed between 1995 and 2000); Langpap & Shimshack, *supra* note 2 (study of 54 CWA cases filed against publicly owned treatments works finding evidence that citizen enforcement substitutes for government enforcement); Ben Tyson, *An Empirical Analysis of Sue-and-Settle in Environmental Litigation*, 100 VA. L. REV. 1545 (2014) (study of 88 sue-and-settle cases under the CWA and CAA during the Obama Administration).

^{92.} Smith, *supra* note 11, at 385 (finding that during this time citizens filed 287 lawsuits and the federal government filed 610 suits).

^{93.} *Id.* To put this in perspective, the government filed, on average, 102 cases each year or roughly twice the number of cases during this period. *Id.*

^{94.} Id. at 387.

^{95.} Id. at 387-88.

suits from large, national groups to local groups.⁹⁶ These findings challenged claims that a "cartel" of environmental groups was dominating citizen enforcement and suggested that citizen enforcement was continuing to provide a useful, though still modest, supplement to government programs.⁹⁷

Professor James May published a similar study covering the years 1995 through 2002 that compared litigation initiated by EPA to cases filed by citizen groups under several statutes.⁹⁸ Like Smith, he observed a shift towards small environmental organizations filing enforcement suits and found that roughly onethird (35 percent) of the suits were filed by other entities, such as companies, landowners, developers, and states.⁹⁹ The study examined broader administrative statistics, including EPA referrals to DOJ and citizen "notices of intent" to sue (NOIs) that are sent to EPA before a citizen suit is filed in federal court. From 1995 through early 2002, citizens sent an average of 650 NOIs annually to EPA and, from these, filed about 70 federal cases each year. 100 Professor May estimated that citizen suits accounted for three-quarters of the opinions in federal court involving environmental claims, which suggested that citizen suits have played a pivotal role in the interpretation and enforcement of environmental laws by federal courts.¹⁰¹

More recent studies have focused on specific statutes and have undertaken more detailed analyses over longer periods of time. Mark Ryan published a 2017 study of citizen suits under the Clean Water Act. ¹⁰² It covered activity from 2007 through 2016 and, like the present study, was based on data obtained from DOJ. Ryan found that 48 complaints were filed against

^{96.} *Id.* at 392. There is some indication that large environmental organizations stopped filing citizen enforcement suits in the mid-1990s due to budgetary, standing, and state preemption concerns. *Id.* at 393.

^{97.} *Id.* at 392–94. Citizen enforcement represents 32 percent of cases filed, which as noted above were overshadowed by the much higher volume (several thousand annually) of government administrative actions. *See infra* Section II.B.

^{98.} May, supra note 2.

^{99.} *Id*. at 3.

^{100.} *Id.* at 9. Professor May cautions, however, that these numbers may underestimate the volume of citizen actions and legal decisions given the incompleteness of the data collected by EPA and DOJ. *Id.*

^{101.} Id. at 8.

^{102.} Mark A. Ryan, Clean Water Act Citizen Suits: What the Numbers Tell Us, 32 A.B.A. SEC. PUB. NAT. RES. & ENV'T, no. 2, Fall 2017, at 20. Mr. Ryan limited his study to citizen suits under CWA § 505. Id. at 21.

federal defendants under the CWA¹⁰³ and 567 against nonfederal defendants.¹⁰⁴ Geographically, cases were heavily concentrated in California, which accounted for 219 (39 percent) of the suits filed against nonfederal defendants,¹⁰⁵ and a similar pattern was observed in cases with federal defendants.¹⁰⁶ Ryan also determined that the geographic distribution of cases was not correlated with either the number of industrial facilities in a state¹⁰⁷ or state politics.¹⁰⁸ Interestingly, for suits filed against nonfederal defendants, individual plaintiffs and regional environmental groups, rather than large national environmental groups, filed most of the cases,¹⁰⁹ and virtually all of these cases were settled under consent decrees,¹¹⁰ suggesting that plaintiffs were selective in the cases they filed.

Studies of enforcement actions against federal agencies have focused on litigation under NEPA and the ESA. The most detailed studies involve NEPA litigation against the U.S. Forest Service (USFS), which accounts for about a third of NEPA cases in district courts and a quarter of appeals with NEPA claims annually. ¹¹¹ Geographically, more than half of the cases were filed in the Ninth Circuit, ¹¹² which reflects, in part, the fact that over 60 percent of USFS lands are located in the states encompassed by the Ninth Circuit. ¹¹³ While the USFS won roughly 60 to 70

^{103.} Id. at 22.

^{104.} Id. at 21. These cases were filed under CWA § 505(a)(1). Id. There appears to have been some outlier data during 2007–2009 (with a total of 6 reported cases). Id

^{105.} *Id.* "The top 12 states by filing of complaints were California (219), Washington (90), Massachusetts (55), West Virginia (36), New York (24), Tennessee (19), Georgia (17), New Hampshire (13), Connecticut (13), Oregon (11), Alabama (10), and North Carolina (7)." *Id.* at 21–22.

^{106.} Id. at 22. The top 6 states by filing of complaints were Florida (8), Washington/Massachusetts (6), West Virginia (4), and Oregon/California (3). Id.

^{107.} Id. at 22 (noting that New Jersey had one suit and Michigan had zero suits). 108. Id. ("[A]lthough the top 3 states are all blue, the top 12 most active states are an even mix of blue and red states. . . .").

^{109.} $\it Id.$ ("[N]eighbors of violators and small local associations frequently exercise their right to enforce the CWA through [S]ection 505.").

^{110.} Id. at 21.

^{111.} See, e.g., Miner et al., NEPA Litigation, supra note 12; Keele & Malmsheimer, supra note 12, at 115.

^{112.} Broussard & Whitaker, *supra* note 12, at 137 (finding that 61 percent of the cases were filed in the Ninth Circuit, 12 percent in the Tenth Circuit, and 7 percent in the Eighth Circuit); Miner et al., *NEPA Litigation*, *supra* note 12, at 120 (finding that 64 percent of cases were filed in the Ninth Circuit).

^{113.} Malmsheimer et al., supra note 12, at 22 (observing that 63 percent of USFS land is located in the Ninth Circuit); Kirsten Rønholt, Where the Wild Things Were:

percent of the NEPA cases in which it was a defendant, ¹¹⁴ environmental organizations prevailed at higher rates than other plaintiffs. ¹¹⁵ Further, the findings do not display the kinds of pathologies highlighted by critics of citizen suits. The volume of cases is small relative to the number of potential federal actions, and the types of actions being challenged do not fit a model of organizational enrichment.

Despite the controversy surrounding citizen suits under the ESA, ¹¹⁶ only a handful of studies have been conducted. All of the empirical studies ¹¹⁷ have focused on petitions to FWS or NMFS requesting determinations on whether a species warrants listing as "threatened" or "endangered." This work was precipitated by concerns, including among environmental groups, that ESA listing suits were burdening FWS with so many court-ordered deadlines that the agency was unable to meet its other statutory obligations. ¹¹⁹

A Chance to Keep Alaska's Challenge of the Roadless Rule Out of the Supreme Court, 29 Alaska L. Rev. 237, 237 n.3 (2012) (reporting that, as of 2001, almost 60 percent of national forest acreage (122,092,000 acres) was located in the Ninth Circuit).

- 114. See Broussard & Whitaker, supra note 12, at 136–37 (finding that the USFS won 60 percent of district and 57 percent of circuit court cases); Amanda M.A. Miner et al., Twenty Years of Forest Service Land Management Litigation, 112 J. FORESTRY 32, 34 (2014) [hereinafter Miner et al., Forest Service Litigation] (finding that the USFS won 70 percent of the appeals and 64 percent of cases decided on the merits); Miner et al., NEPA Litigation, supra note 12, at 122 (finding that the USFS won 62 percent of the cases involving NEPA claims, but won the NEPA claim in 69 percent of cases).
- 115. Broussard & Whitaker, *supra* note 12, at 135; Gambino Portuese, *supra* note 12, at 20–21 (finding that repeat litigants, which were largely environmental organizations, were more likely to prevail in their claims); Miner et al., *Forest Service Litigation*, *supra* note 114, at 35, 39 (finding that the USFS won only 49 percent of the cases in which plaintiffs advocated for less resource use (typically environmental groups) versus 70 percent of cases involving plaintiffs greater resource use).
- 116. See Holly Doremus, Adaptive Management, the Endangered Species Act, and the Institutional Challenges of "New Age" Environmental Protection, 41 WASHBURN L.J. 50, 65 (2001) ("The ESA's citizen suit provision has often courted controversy....").
- 117. Biber & Brosi, supra note 61; Berry Brosi & Eric Biber, Citizen Involvement in the U.S. Endangered Species Act, 337 Sci. 802 (2012); U.S. Gov't Accountability Off., GAO-17-304, Environmental Litigation: Information on Endangered Species Act Deadline Suits (Feb. 2017) [hereinafter GAO].
- 118. 16 U.S.C. §§ 1532(5)(A), 1533(b)(1) (2012). The Services must, to the maximum extent practicable, respond to listing petitions within 90 days. *Id.* § 1533(b)(3)(A).
- 119. Benjamin Jesup, Endless War or End this War: The History of Deadline Litigation Under Section 4 of the Endangered Species Act and the Multi-District Litigation Settlements, 14 Vt. J. Env't L. 327 (2013); Jason M. Patlis, Riders on the Storm, or Navigating the Crosswinds of Appropriations and Administration of the

A 2017 study conducted by the Government Accountability Office (GAO) provides an inventory of citizen actions and their impacts on the Services. ¹²⁰ In the federal courts, 141 deadline suits involving 1,441 species were filed between 2005 and 2015. ¹²¹ Plaintiffs prevailed either through settlement or court order in about three-quarters of the cases, and just nine cases (6 percent) were decided by judicial opinion; together, these suits resulted in completion of 1,766 listing determinations. ¹²² The GAO report concludes that FWS, though not NMFS, was forced to delay completing other statutory duties to meet its obligations under the deadline-suit settlements. ¹²³ This finding is consistent with critics' worst fears—unaccountable environmental groups exploited rigid timing requirements for species listing determinations and this forced limited agency resources to be redirected.

The GAO report, however, did not assess the relative merits of the actions prompted by the deadline suits versus those that FWS would have otherwise pursued. A 2010 article by Professors Eric Biber and Berry Brosi uses FWS's metric for a species' "recovery priority" to assess the merits of ESA species listing petitions and deadline suits. 125 The authors find that "[t]here is little difference between petitions and agency initiation in

Endangered Species Act: A Play in Five Acts, 16 TUL. ENV'T L. J. 257, 259 (2003) (raising concerns about "the inundation of new listing and designation petitions to the FWS "); cf. John Charles Kunich, The Fallacy of Deathbed Conservation Under the Endangered Species Act, 24 ENV'T L. 501, 566 (1994) (arguing that ESA listing suits can undermine "order and priority in using scarce conservation resources. . . . ").

^{120.} At this time, FWS had responsibility for 1,586 species, whereas NMFS was responsible for just 96. GAO, *supra* note 117, at 5.

^{121.} Id. at 13 (about 90 percent of the cases were filed against FWS).

^{122.} *Id.* at 19, 22 (noting that 101 were settled, 31 were dismissed voluntarily, 6 were dismissed by courts, and 3 granted plaintiffs injunctive relief). According to DOJ officials, "most deadline suits are resolved through a negotiated settlement agreement because . . . it is undisputed that a statutory deadline was missed." *Id.* at 20

^{123.} *Id.* at 24–25 (finding that "[a]s of September 2016, FWS's backlog of overdue Section 4 actions included nearly 600 12-month findings on listing petitions and other listing-related actions that FWS has been unable to address while it focused on completing its litigation-related workload").

^{124.} Biber & Brosi, *supra* note 61, at 335 (describing a species' recovery priority as including: (1) the degree to which it is endangered, (2) potential for recovery, (3) biological uniqueness of the species, and (4) conflicts between species protection and economic development).

^{125.} Id. at 348-49.

overall listing success rates." ¹²⁶ Moreover, the species that were the subject of citizen actions were, on average, under greater biological threat than the species identified by FWS¹²⁷ and were more likely to be threatened by development. ¹²⁸ The authors suggest that, because of the politics surrounding pervasive conflicts with development, citizen actions often provided the only impetus for protecting many species. They conclude that "what is remarkable about [citizen actions] under the ESA is that they are able to achieve results that are, from a 'technical perspective' . . . as good as or better than those of the agency acting alone." ¹²⁹ Thus, far from undermining implementation of the ESA, Biber and Brosi argue that citizen suits have augmented agency technical information and bolstered meritorious species protections where economic conflicts appear to constrain agency action most.

Finally, David Adelman and Robert Glicksman published a study of citizen suits under NEPA and the ESA in 2019. The study covered litigation between 2001 and 2016 based on opinions and dockets in the Westlaw database. It evaluated geographic trends, different uses of litigation, and the influence of judicial politics in case outcomes. The authors found that litigation under the two statutes operated on the margins, as the number of lawsuits was vastly outnumbered by the number of federal actions subject to the two statutes. Moreover, contrary to the allegations leveled by critics, citizen suits tended to reflect local values—they were overwhelmingly filed in jurisdictions in which concerns about the environment were the highest and rarely filed where public concern was lowest. These findings contradicted the prevailing views of citizen suits and raised the

^{126.} *Id.* at 351–53 (finding, specifically, that 21 percent of the species listed in FWS's top candidate categories were ultimately listed under the statute versus 36 percent of species citizens petitioned for listing between 1973 and 1994).

^{127.} *Id.* at 358–62 (concluding that "[w]ith respect to threat level, species that were the subject of litigation were consistently at greater threat than non-litigated species").

^{128.} *Id.* at 358–59 (concluding that "with respect to potential development conflicts, petitioned species were more likely to present potential conflicts than agency-identified species . . .").

^{129.} Id. at 325.

^{130.} Adelman & Glicksman, supra note 82.

^{131.} *Id.* at 407–11.

^{132.} Id. at 447.

question of whether the observed patterns and trends also applied to litigation under other federal environmental statutes.

While the available empirical studies have provided important insights, our understanding of the volume and patterns of citizen suits—let alone the motivations for and objectives served by them—remains rudimentary. The evidence that exists suggests that resource constraints alone mitigate, if not preclude, concerns about citizen suits overriding government implementation and local interests. Nevertheless, evidence exists that at least one class of litigation, species listing suits under the ESA, can affect agency priority setting. These suits are unique, however, due to the volume of litigation, the large backlog of candidate species (almost 1,500), and the technical challenges of listing determinations.

The current study seeks to fill in several key gaps in the existing literature by providing more comprehensive estimates of the volume of litigation over time and how it varies geographically. This information is critical to informing public understanding about the influence that local politics has on the filing of citizen suits and the ways in which citizen suits complement (or frustrate) agency action and priority setting.

II. LITIGATION TRENDS DO NOT CONFORM TO PREVAILING VIEWS OF CITIZEN SUITS

This section reviews the major findings of our empirical work on environmental citizen suits and concludes that prevailing views and critiques of citizen suits must be reexamined in light of the structural and practical constraints reflected in the empirical record. Our principal findings are that (1) the number of citizen suits filed and concentration of cases in certain jurisdictions foreclose conflicts between agency priority setting and the values of local communities; (2) the practical barriers to filing citizen suits and the difficulty of obtaining attorney's fee awards exacerbate rather than mitigate disparities across states in the implementation and enforcement of environmental laws; and (3) almost 85 percent of citizen suits are filed against the federal government, rather than private entities, and a large share of these cases involve wholesale challenges to regulations, rather than retail litigation over discrete agency decisions.

The data for this study were obtained from DOJ through a Freedom of Information Request for data on environmental citizen suits contained in DOJ's "Case Management System." Our request covered cases filed or litigated between January 1, 2001, and December 31, 2016. The DOJ data were first cleaned to improve their integrity and usefulness. We began by removing duplicate, consolidated, and abandoned cases, which reduced the total number of cases to 5,612, with 3,680 federal defense cases, 1,364 petitions for review, and 568 private third-party cases. We also augmented the DOJ data by adding classifications for the types of cases filed and the parties. During the tagging process, we discovered a few classes of atypical litigation that were skewing data and were subsequently removed from the final dataset. 136

While the data on the federal defense cases and petitions for review contained complete information on nearly all cases, the DOJ data on private third-party cases had significant gaps. For example, while DOJ had general information on 568 citizen suit cases, it had final case outcome information on only four of these

^{133.} We focused on DOJ's Environment and Natural Resource Section Division (ENRD) because that Division handles most environmental litigation against federal agencies. 5 U.S.C. §§ 515–519; 28 C.F.R. § 0.65 (2019); U.S. DEP'T OF JUST., JUST. MANUAL §§ 5-1.100, 5-1.302, 5-1.325 (2018) [hereinafter JM]. But see 42 U.S.C. § 7605; 28 C.F.R. § 0.65a (2019); JM § 5-1.200 (2018); Memorandum of Understanding Between Department of Justice and Environmental Protection Agency, 42 Fed. Reg. 48,942 (Sept. 26, 1977) (outlining the rules for delegating civil litigation between DOJ and EPA). There are also other parts of DOJ that handle some environmental litigation, such as DOJ's Civil Division and U.S. Attorney's Offices (USAOs). See JM § 4-6370 (noting the Civil Division's authority of some programmatic litigation of the Departments of Agriculture, Interior, and Energy); JM §§ 5-1.300, 5-1.310, 5-1.323, 5-1.324, 5-1.326 (discussing the authority of USAOs over environmental cases).

^{134.} The information requested included: (1) general data in the "Case Management System" for environmental cases filed or litigated, including civil action case numbers, parties to the suit, lead plaintiffs, defendants, district courts with jurisdiction, statute(s), specific claims, case outcome, and any attorney's fees paid pursuant to the Equal Access to Justice Act; and (2) settlement agreements, voluntary or unopposed dismissals, and consent decrees in environmental cases filed or litigated.

^{135.} The first phase of classification process involved reviewing party data for inconsistencies (e.g., the plaintiff Sierra Club might be entered as "Sierra Club," "The Sierra Club," or "The Pennsylvania Chapter of the Sierra Club," among other permutations). We then classified all the parties that participated in at least three cases. The remaining parties were tagged through a mostly random sampling due to time and resource constraints. This resulted in 2,746 of 7,870 parties in the final database being tagged, which provided party information on 92 percent of the cases.

^{136.} These were mainly mass litigations including the CWA claims in the Deepwater Horizon mass litigation (Fifth Circuit) and the CAA claims in the Volkswagen mass litigation (Ninth Circuit).

cases. Further, although a number of the cases with missing information may not have been litigated to a judgment, we expect that many were not accurately tracked by the Department. Accordingly, the citizen suit data represent, at best, a sample of the citizen suits litigated during this period and, importantly, one that was not selected on a randomized basis. In order to fill the gaps in the DOJ data, we conducted independent studies of third-party citizen suits under the CAA and CWA in the Westlaw federal cases database. ¹³⁷ We also supplemented the DOJ data, using information from complaints in Westlaw, to categorize the cases ¹³⁸ for a subsample of cases to obtain a more precise understanding of the patterns and relative volumes of litigation. ¹³⁹

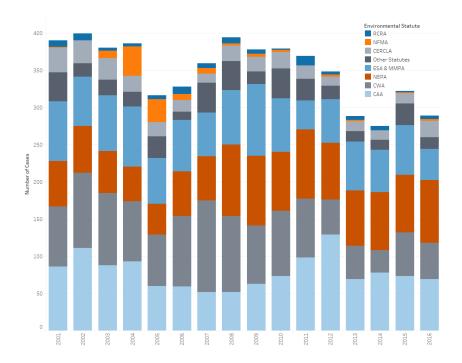
The analysis that follows employs a mix of descriptive and inferential statistics, including regressions on the explanatory variables for the number of citizen suits filed in a state. The principal methodological challenges for the study centered on ensuring the completeness and accuracy of the data. The descriptive statistics are straightforward, albeit challenging to capture fully in a small number of figures. Any limitations of the regressions and the inferences drawn from them are noted below.

Figure 2: Federal Environmental Cases by Year and Statute 2001–2016

^{137.} We ran complementary searches in three separate Westlaw databases. The primary database we used was Westlaw's "Trial Court Documents" database, in which we ran three different types of searches: (1) a multi-statute search series for third-party citizen suits under the CAA and CWA; (2) a multi-statute search series for all litigation under the CAA, CWA, RCRA, ESA, and NEPA; and (3) a single statute search series for third-party citizen suits under the CAA, CWA, and RCRA. We ultimately elected to use the data from the third search series, which resulted in 784 CWA citizen suits, 148 CAA citizen suits, and 320 RCRA citizen suits. We also checked cases in two secondary databases, Westlaw's "Cases" and "Dockets," to obtain party data.

^{138.} For example, we categorized cases that are part of an extended sequence of litigation as "connected litigation."

^{139.} This analysis was based on a random sample of 1,000 cases, 820 of which had accessible complaints in the Westlaw complaints database for federal cases.



The overall trend in the volume of federal environmental litigation is relatively flat (see Figure 2). The number of cases over the sixteen-year period of the study varied by roughly plus-orminus 15 percent of the average 350 cases per year, with arguably a modest decline during the second term of the Obama Administration. The volume of litigation under each of the statutes has also remained relatively stable over time with the possible exception of the CWA, for which the DOJ data show a decline after 2011. The data also make clear that litigation is unevenly spread across federal environmental statutes, with more than 80 percent of federal environmental litigation filed under the CWA, CAA, ESA, and NEPA, each of which accounted for roughly 20 percent of environmental litigation during this period.

Table 1: Types of Legal Challenges by Statute for the DOJ Data

Type of Challenge	CAA	CWA	ESA	NEPA	RCRA	Other Statutes	Total
Connected		25	_	٥	٥		
Litigation	3	25	7	3	0	52	90
Federal Action	3	10	57	109	4	13	196

NIMBY	2	0	1	4	0	1	8
Permit by							
Permittee	2	1	1	0	0	1	5
Rulemaking	197	42	70	13	6	52	380
Permit by							
Third-Party ¹⁴⁰	19	89	14	12	2	5	141
Total	226	167	150	141	12	124	820

The nature of the claims filed under each statute varied significantly across the statutes (see Table 1). For example, whereas challenges to rules were most common under the CAA (88 percent of the cases), the number of cases involving challenges to federal rules and discrete actions was much more balanced under the other statutes. ¹⁴¹ Table 2 fills the gap in the DOJ data with respect to third-party cases by using a sample of 400 cases from the Westlaw data that we collected on citizen suits. In addition to the predominance of CWA cases (almost 70 percent of the third-party cases), ¹⁴² we find that most of the CWA cases involved permits under the NPDES program (170 cases) or Section 404 wetland permits (30 cases). ¹⁴³ The number of third-party environmental justice suits is also strikingly low—with no jurisdiction standing out—and seemingly at odds with the prominence of environmental justice issues nationally. ¹⁴⁴

Table 2: Types of Legal Challenges by Statute for the Westlaw Citizen Suit Data

Type of Challenge	CAA	CWA	RCRA	Total
Connected Litigation	8	47	22	77
Environmental Justice	3	5	1	9

¹⁴⁰. Note that third-party suit data in Table 1 is incomplete due to the limits of the DOJ data.

^{141.} Similarly, connected litigation often spanning more than a decade occurred almost exclusively under the CWA and was limited to a handful of high-profile battles over major resources (e.g., the Sacramento Bay-Delta, the Chesapeake Bay).

^{142.} Similar to the DOJ data, a handful of high-profile battles over major waterways accounted for most of the connected actions, with disputes over public lands making up most of the rest.

^{143.} More than half of these cases were filed in Washington (43), California (38), Georgia (16), New York (14), or Massachusetts (12).

^{144.} To some degree, the low number of observed environmental justice complaints is likely to be a function of classification error, as it was not always clear whether a case fell within this category.

NIMBY	11	8	2	21
General Permit Challenge	9	181	60	250
Total	31	247	103	357

Overall, we find that 28 percent of the cases involved the federal government as a defendant and 54 percent were petitions for review. Combining the DOJ and Westlaw data provides a comprehensive picture of environmental litigation. Extrapolating from the Westlaw sample, we predict that, on average, about six environmental justice lawsuits are filed each year, roughly 36 "NIMBY" cases, 145 and 49 general permit challenges—volumes that, by any reasonable measure, are shockingly low. Conventional third-party citizen suits, defined here as environmental justice and general permit challenges, would account for about 18 percent of all environmental citizen suits filed annually based on this extrapolation. While still important, these statistics highlight the degree to which private third-party citizen suits are overshadowed by actions involving the federal government and thus contradict claims that citizen suits routinely override government enforcement and priority setting.

A. Most Environmental Litigation is in the Ninth and D.C. Circuits

Several patterns stand out with respect to the geographic distribution of cases. First, the Ninth Circuit and District of Columbia Circuit together accounted for about 67 percent of the cases filed under the natural resource statutes, ¹⁴⁶ 60 percent of

^{145.} In classifying NIMBY ("not in my backyard") and environmental justice cases, we used the following definitions. Environmental Justice: any case where (a) the complaint clearly reflects environmental justice matters (e.g., the facts assert there is a disparate impact on minority communities), (b) the parties are those that focus on environmental justice issues (such as tribal organizations), or (c) the complaint directly referenced environmental justice or a Title VI administrative action. NIMBY: (1) any case aimed at stopping a major infrastructure project or transportation funding project (e.g., targeting NEPA and USDOT Act § 4(f) for a highway construction project); or (2) any case aimed at stopping any environmentally impactful project prior to construction, including so-called "aggrieved neighbor" suits (e.g., targeting the validity of a CAA construction permit or CWA § 404 permits for pipelines, residential developments, water diversion structures, and other projects).

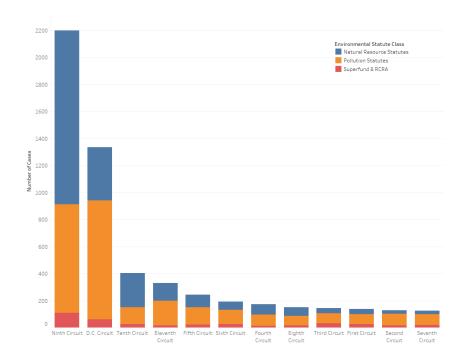
^{146.} The class of natural resource statutes includes the ESA, MMPA, NFMA, and NEPA.

the pollution statutes, ¹⁴⁷ and 43 percent of the cases filed under Superfund and RCRA. No other circuit exceeded 10 percent of the total number of cases filed over this period, and most were below 5 percent. While one would expect the D.C. Circuit to have a large share of the cases filed because it has original jurisdiction over many CAA cases and most federal agencies are based in D.C., the prominence of the Ninth Circuit lacks such structural explanations. This is particularly true of the pollution statutes given that, among the states encompassed by the Ninth Circuit, only California has a significant industrial base. While the large proportion of public lands within the Ninth Circuit can explain, in part, the large share of the natural resource cases, this reasoning does not apply to cases under the pollution statutes, which ought to be correlated with urbanization, large populations, and industrial development. ¹⁴⁸

Figure 3: Litigated Cases by Class of Environmental Statute and Circuit

^{147.} The pollution statutes included all of the statutes outside the other two classes of statutes.

^{148.} Our complementary study of third-party citizen suits using Westlaw data found that the Ninth Circuit still accounted for about 40 percent of the cases, but it also revealed that the Fifth Circuit was far more important (12 versus 4 percent for the DOJ data). Thus, while third-party suits were over-represented in the Ninth Circuit, corporate challenges were over-represented in circuits viewed as being more sympathetic to their interests and where major industrial facilities are geographically concentrated.



The most striking observation that emerges from the data is the low volume of litigation. For natural resource statutes, just two states (California and Oregon) averaged over 10 suits per year, and just a handful of states averaged between five and eight, whereas the vast majority of states averaged in the low single digits. Consistent with the Westlaw data described above, the volume of litigation under the pollution statutes in the DOJ data was even lower, with only two states (California and Washington) averaging more than four cases per year and only 18 states averaging more than one case per year. Relative to the number of federal actions taken each year, permits granted, and permitted facilities with potential violations, the volume of environmental litigation is extraordinarily low even within the top 15 states. 149 For the great majority of states in which environmental litigation averages no more than in the low single digits of cases annually, it is virtually negligible.

At the state level, California and the District of Columbia are in a class of their own (see Table 3). The concentration of

environmental cases in D.C., as noted above, is driven by the location of federal agencies in the District and statutory grants of original jurisdiction in the D.C. Circuit. The parallels between the natural resource and pollution statutes mirror those observed at the circuit level. Natural resource litigation is concentrated in western states, with the notable exception of Florida, which has the Everglades and significant tracts of federal lands. 150 California is exceptional for each class of litigation, even taking into account the size of its economy and population. 151 Oregon, Montana, and Idaho are also arguably in a league of their own for natural resource litigation, particularly in comparison to other similarly situated states (e.g., Wyoming and New Mexico). The variation among states with respect to the pollution statutes is similarly striking, with litigation in Washington and Oregon surpassing states with much larger populations and far greater levels of industrialization. 152 The lack of association between urbanization and industrial development is especially notable for heavily industrialized states such as Texas and Louisiana, as it demonstrates the disconnect between citizen suits and states with relatively lax environmental programs.

Table 3: Environmental Cases Litigated in Fifteen Top States

^{150.} Florida ranks 13th nationally with respect to the amount of federal lands in the state. CAROL HARDY VINCENT & LAURA A. HANSON, CONG. RSCH. SERV., R42346, FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA 1, 6–9 (2020) (Florida has just one third the total federal acreage of the 12th ranked state, Washington).

^{151.} The volume of environmental litigation in California is roughly 3.5-4.5 times the average for the top 15 states and 4.5-10 times the median. Even relative to Florida, which is closest in population and the size of its economy, litigation in California is 4.5-6 times greater.

^{152.} Based on reporting to EPA's ECHO database, the number of permitted facilities under the major pollution control statutes were as follows: California 204,430; Texas 57,320; Florida 54,461; Pennsylvania 51,910; New York 51,252; Georgia 48,403; Louisiana 38,417; and Ohio 33,881. See Enforcement and Compliance History Online, ENV'T PROT. AGENCY, https://echo.epa.gov (last updated Aug. 8, 2019) [https://perma.cc/29Z3-56TX] [hereinafter ECHO]. By contrast, Washington has 11,557 and Oregon has 8,764 facilities. See id. By this metric, Washington is as conspicuous in its high rates of litigation as Texas is in its low rates of litigation.

Natural Resource (81%) ¹⁵³		Pollution (76%)		CERCLA & RCRA (67%)	
California	499	California	345	California	57
D.C.	364	D.C.	213	Washington	20
Oregon	178	Washington	148	New Jersey	19
Montana	134	Georgia	57	Ohio	15
Idaho	112	Florida	55	Pennsylvania	15
Arizona	102	New York	37	New York	14
Washington	100	Colorado	33	Texas	14
Florida	90	Oregon	33	Arizona	13
Colorado	83	Louisiana	30	Illinois	13
New Mexico	76	Pennsylvania	30	D.C.	12
Alaska	65	Wisconsin	29	New Mexico	12
Texas	46	Alabama	28	Rhode Island	11
Wyoming	45	Idaho	27	Florida	10
Nevada	44	Ohio	25	Massachusetts	10
Utah	37	West Virginia	24	Alaska	8

The politics of the state also do not appear to be a major factor when selecting a venue to file citizen suits. Among the top 15 states, Democratic-leaning states are in the minority for both the natural resource and pollution statutes, and they constitute a bare majority for litigation under Superfund and RCRA. ¹⁵⁴ Although some of this may reflect forum shopping favoring the Ninth Circuit or forum aversion—for example, the disparities in natural resource litigation in Idaho and Montana versus Wyoming—other factors must be driving the patterns that we observe in the data at this level of aggregation. In the Westlaw data for third-party citizen suits, we find that California (109) and Washington (43) account for 40 percent of the cases. ¹⁵⁵ Extrapolating from the sample, the results suggest that just five states averaged more than three third-party suits each year. The

^{153.} The percentages for each category represent the percent of all cases in the class that were litigated in the top 10 states by volume of cases. The data reflected here represent all the cases in the DOJ database, including those for which there is no information on case outcome.

¹⁵⁴. Democratic-leaning states account for 6 of the top 15 states by volume of litigation under the natural resource and pollution statutes versus 9 of 15 for Superfund and RCRA.

^{155.} These numbers obscure how few organizations actually filed cases: 40 percent of the California cases were filed by one organization, the California Sportfishing Protection Alliance (43), and the plaintiffs in most of the others were associated riverkeeper (and other "keeper") organizations; similarly, 75 percent of the Washington cases were filed by two organizations—Puget Soundkeeper Alliance (15) and Waste Action Project (18).

outliers were California, averaging 20 cases per year, and Washington, averaging eight cases per year. Among the top five states, two were politically conservative, Georgia and Louisiana; however, outside of California and Washington, the simple truth is that few third-party citizen suits were filed in either liberal or conservative states.

The geographic distribution of third-party citizen suits effectively forecloses the arguments made by both critics and advocates of citizen suits. Critics' arguments that citizen suits preempt government implementation and priority setting, as well as local interests, are not borne out either by the low numbers of cases or the politics of the states in which they are concentrated. Proponents' claims that citizen suits operate as a backstop against lax federal or state enforcement are similarly refuted by the lack of cases in most states and the low number of cases overall.

B. Environmental Plaintiffs Sue the Federal Government Far More Often Than They Sue Private Third Parties

Environmental litigation largely involves environmental organizations, companies, or individuals suing the federal government. The model of citizen suits with an individual or organization acting as a private attorney general to enforce the law against private entities is the exception to this general rule. We will look more closely at these patterns under the CAA and CWA, which account for most of such third-party citizen suits, but even under these statutes, with the sole exception of permit violations under the CWA's NPDES program, actions against the federal government are the norm. Moreover, while a significant number of these cases involve underlying private actions, such as where a federal permit triggers NEPA or ESA procedures, the federal government is the decision-maker subject to judicial review.

^{156.} We have excluded Tennessee, which had 27 third-party cases, because 17 were negligence and takings cases filed against the Tennessee Valley Authority following the failure of a coal-ash impoundment in 2008.

Total

2,378 60

Trade Gr. | Individual | SLT Gov't Statute Env. NGO Company De. Pl. De. P1. De. Pl. De. Pl. Pl. De. CAA CERCLA CWA ESA/MMPA **NEPA NFMA** Other RCRA

Table 4: Environmental Cases by Statute and Party Class¹⁵⁷

The differences between the primary classes of plaintiffs and defendants across the major environmental statutes are either relatively modest or predictable. Environmental organizations were the most common plaintiffs, participating in more than 40 percent of the cases, and their cases were evenly split across the natural resource and pollution statutes (see Table 4). Corporations were plaintiffs frequently, but most of their litigation was under the pollution statutes. State, local, and tribal governments (SLTs) were also important, but they filed far fewer cases and most were in a handful of states. Corporations, individuals, and, to a lesser extent, SLTs were frequently defendants, but most of the cases involved CWA permit challenges (Section 404/NPDES) or ESA Section 7 consultations.

Figure 4 displays the litigation volumes by circuit and statute; it reveals the divergence in litigation patterns across the four classes of plaintiffs and statutes. The trade groups and corporate plaintiffs filed most of their cases in the D.C. Circuit and, while the Ninth Circuit had the second highest number of cases, the Fifth Circuit was third—with the number of cases under the pollution statutes in the Ninth and Fifth Circuits roughly the same. By contrast, environmental NGOs and SLTs filed most of their cases in the Ninth Circuit, less than half this number in the D.C Circuit, and a small fraction in the Fifth Circuit. The large number of cases under the pollution statutes filed by

^{157.} Because we were not able to categorize all the parties, the data in this table represent about 80 percent of the cases in the DOJ database (3,960 out of 5,617 cases, with 1,657 cases remaining uncategorized).

environmental NGOs in the Ninth Circuit sets them apart from the other classes of plaintiffs, suggesting that they may be particularly sensitive to the forum. We observe broadly similar patterns in the complementary Westlaw sample data for third-party citizen suits.

The most significant trend in the Westlaw third-party-suit data is the even higher concentration of cases filed by environmental NGOs in the Ninth Circuit and other liberal circuits. ¹⁵⁸ These results conflict with critics' claims that third-party suits routinely override agency priorities and local values. The concentration of third-party cases in liberal circuits highlights the degree to which such retail lawsuits follow local politics and augment enforcement in jurisdictions where it is already likely to be strong. The dominance of CWA cases, more than 85 percent of the cases filed by environmental organizations, is also notable because reporting requirements under the NPDES program make it relatively easy for groups to monitor and enforce permit violations. ¹⁵⁹

^{158.} Corporations also engage in forum shopping, with 34 percent of their cases filed in the Fifth Circuit and just 25 percent in the Ninth Circuit, with most of these cases representing challenges to state permitting decisions.

^{159.} For NPDES reporting requirements, see *supra* note 30.

Figure 4: Distribution of Environmental Litigation by Plaintiff Class

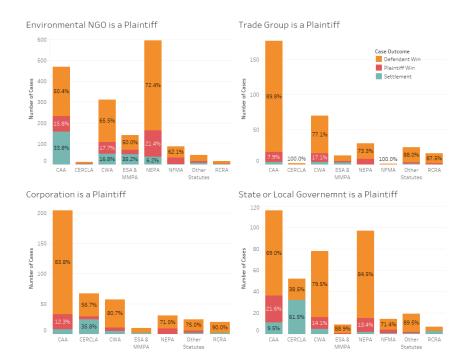


Due to the limitations of DOJ coding noted above, we focus on the relative rates (percentages) at which plaintiffs prevailed, as opposed to the absolute number of cases won. 160 The most significant trend (see Figure 5) is the consistency with which environmental NGOs succeeded at higher rates than the other plaintiff groups. This suggests that environmental NGOs were more selective in the cases they filed and undermines critics' claims that lawsuits are often filed for purely strategic reasons. The higher success rates across a broad range of statutes also counter assertions that environmental NGOs file "easy" cases to obtain attorney's fees. Further countering these assertions, there is a clear lack of association between the success rates of environmental NGOs under each statute and the number of

^{160.} This mitigates inconsistencies in case coding, particularly across sections within ENRD, and focuses the analysis on the factors of greatest salience to debates over citizen suits.

cases filed. Although not reflected in Figure 5, we also observe a difference of about 8 percent¹⁶¹ in the success rates of environmental and other NGOs between the Ninth and D.C. Circuits and all other circuits, whereas consistent differences are not observed across circuits in the success rates of the other classes of plaintiffs.¹⁶² This observation suggests that the higher preference for the Ninth Circuit among environmental NGOs is supported empirically, and that forum is a salient factor determining where cases are filed rather than, say, the rigor of local permitting and enforcement.

Figure 5: Case Outcomes by Statute and Class of Plaintiff



Environmental plaintiffs' focus on litigating against the federal government, outside of limited contexts, further upsets the

^{161.} Environmental NGOs won 40 percent of their cases in the Ninth Circuit, 44 percent in the D.C. Circuit, and 32 percent in all other circuits; other NGOs won at similar rates as well.

^{162.} For example, companies won 36 percent of their cases in the Ninth Circuit, 20 percent in the D.C. Circuit, and 30 percent in all other circuits.

arguments made by both critics and advocates of citizen suits. Critics' arguments that citizen suits preempt government implementation and priority setting, as well as local interests, are simply not supported by the demonstrated heavy focus on federal action and the forum choices of both business and environment NGOs. Further, the apparently highly discerning case selection by environmental NGOs belies critics' arguments that citizen suits are filed to farm attorney's fees. Meanwhile, proponents' claims that citizen suits operate as a backstop against lax federal or state enforcement is again not borne out if the majority of litigation is brought in forums where state priorities already encourage relatively strong enforcement. The data show that we are left with a trend where, instead, environmental plaintiffs reinforce geographic disparities in environmental protection and most litigation surrounds high-level policy decisions by the federal government.

C. The Low and Declining Rates at Which Attorney's Fees Are Awarded

Beyond perceptions that plaintiffs are more successful in obtaining attorney's fee awards in certain circuits, the low rates at which they are granted may be exacerbating regional disparities in the number of environmental citizen suits filed. The DOJ data on attorney's fee awards are limited largely to petitions for review and defensive cases against the federal government. However, we do not believe that the frequency or amount of attorney's fee awards will differ significantly for this subset of cases, and thus, we will generalize the trends for suits involving discrete federal actions and petitions for review to third-party citizen suits.

Overall, the DOJ data suggest that environmental plaintiffs receive attorney's fees in a small fraction of the cases, and that

^{163.} Attorney fee awards are one of the more problematic data sets for research in environmental litigation. First, DOJ generally does not keep records of dispositions (including fee awards) for cases that do not directly include DOJ. This limits DOJ primarily to those cases involving the federal government (petitions for review and defensive cases). Second, perhaps because the fee award is one of the last elements of the case, it often does not get reliably (or consistently) entered into DOJ's case management system. Finally, there is very inconsistent reporting of fee awards to aggregated databases from the federal courts through PACER, making it difficult to augment the DOJ data with a secondary database.

while the low rate of granting attorney's fees is relatively stable, the average and median amount of attorney's fees awarded declined substantially over the period of the study. 164 The number of fee awards granted annually in the DOJ dataset varied between 350 to 400 awards most years. A downward trend is observed in the total fee awards nationally, with the average attorney's fee award declining by roughly a factor of three (see Figure 6). This was largely driven by a decline in the number and amount of fee awards in the ESA and NEPA cases, 165 as well as a dramatic drop in the average and median fee awards under the CAA. 166 While we are confident in the representativeness of the trends in the amount of fees awarded per case, we are less confident in the accuracy of the trends in the total sum of attorney's fees awarded annually given the uncertainties surrounding the completeness of the DOJ data.

^{164.} We would expect to see some lag in fee awards data, given the lifecycle of litigation, which may impact some data on the tail end of the 16-year study period.

165. Under the ESA, several large awards impacted the mean fee award in 2003 and 2005, whereas the median ESA fee award is poisier and declines more gradual.

and 2005, whereas the median ESA fee award is noisier and declines more gradually.

^{166.} The median fee award dropped from about \$100,000 to \$20,000 during the study period; the mean fee award dropped from about \$140,000 to \$40,000.

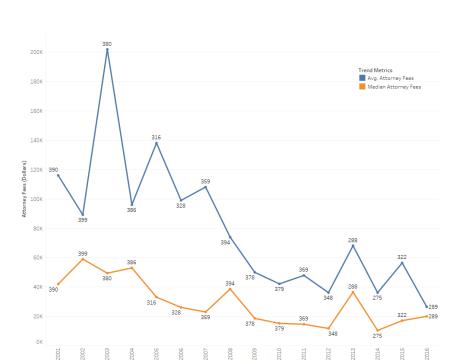


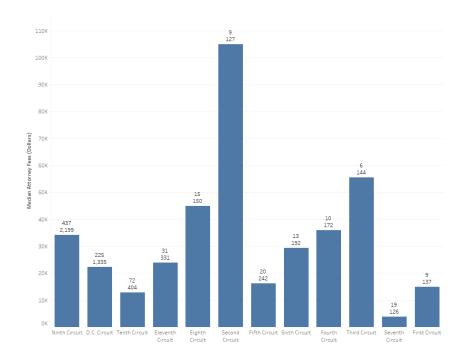
Figure 6: Average and Median Attorney's Fee Awards by Year

Somewhat surprisingly, while there is some variability in the rate at which fees were awarded, ¹⁶⁷ it is overshadowed by the infrequency of fee awards overall (see Figure 7). Two-thirds of the circuits awarded fees in less than 10 percent of the cases filed. Over a third of the circuits awarded fees at a rate closer to 5 percent. Focusing on environmental NGOs, which received almost 60 percent of the awards and 50 percent of the total sum of awards, on average they were awarded attorney's fees in only 17 percent of the cases they litigated. Even in the Ninth Circuit, which awarded attorney's fees at the highest rate, judges awarded fees in 18 percent of all cases filed and 19 percent for

^{167.} The percentage of cases with fees awarded by circuit are as follows: Ninth Circuit (18.4 percent), Tenth Circuit (15.5 percent), Seventh Circuit (12.3 percent), D.C. Circuit (11.5 percent); the remainder of the circuits ranged between 4–9 percent.

environmental plaintiffs.¹⁶⁸ Thus, assuming the DOJ data are fairly representative, even a 50 percent increase in the fee-award rate would still result in (1) most circuits awarding attorney's fees in less than 15 percent of cases and (2) the Ninth Circuit awarding attorney's fees in about 35 percent of cases. Using such conservative assumptions to account for potential gaps in the DOJ data, the granting of attorney's fees is exceptionally rare in all but one or two circuits and, even then, rises to no more than roughly a third of the cases filed.

Figure 7: Median Attorney's Fee Awards by Circuit



Overall, attorney's fee awards are rare and declining everywhere. While the rates at which attorney's fees are awarded varied modestly (most were between 15 and 20 percent), the disparities in the median size of the awards were dramatic, ranging from below \$4,000 in the Seventh Circuit to about \$45,000 in the

^{168.} Environmental plaintiffs were awarded attorney's fees at higher rates in only two other circuits, the Seventh (25 percent) and Eighth (22 percent), but the numbers of cases, 65 and 41, respectively, were low.

Eighth Circuit.¹⁶⁹ Thus, the low frequency at which attorney's fees are awarded likely exacerbates the economic barriers to filing citizen suits.¹⁷⁰ This effect is often most pronounced in jurisdictions where citizen suits are rarely filed. Together, these trends could reinforce the geographic and socioeconomic disparities in the filing of citizen suits because they elevate the importance of having the necessary resources for such complex litigation. In other words, litigation will gravitate to jurisdictions where local resources or the potential for significant attorney's fees are highest—which our data consistently show are both strongly associated with states where public support is highest and environmental organizations are most common.

D. Support for Environmental Policies and Perceptions About Judicial Forums Are the Strongest Determinants of Where Citizen Suits are Filed

The preceding descriptive statistics cannot resolve the relative importance of the factors that influence the number of cases filed in a state because they do not account for interactions between variables or allow for control variables. We conducted regressions on a broad range of explanatory variables, including the following state-level data: population, politics, amount of federal lands, number of environmental NGOs, attorney's fee awards, number of permits, government inspection and enforcement rates, and location of a state within the Ninth Circuit. Given the substantive differences in the natural resource and pollution statutes, particularly the importance of public lands in the former and permitting in the latter, we ran regressions on the two classes of cases separately. Tables 6 and 7 contain the results from two separate regressions with the explanatory variables that we find to be significant statistically or practically worthy of discussing.

^{169.} The Second Circuit is an outlier in large part due to the small number of cases, nine in total, for which attorney's fees were awarded.

^{170.} Environmental litigation costs vary wildly depending on the complexity of the case, if experts are required, and many other factors. As such, many commentators simply observe that costs are known to be high without much—if any—effort to quantify the costs. However, in 1984, ELI estimated that environmental litigation costs averaged \$40,000 per case—or put another way, between \$4,000 and \$200,000 per case. ELI, *supra* note 85, at V-25 to -27. Those costs have no doubt risen significantly in the last 35 years, due to inflation if nothing else.

Table 5: Regression on Number of Cases Per State for the Natural Resource Statutes¹⁷¹

Independent Variables	Coefficient	Standard Er.	p-value	Beta
No. Environmental NGOs	0.5115	0.0362	0.000	0.8618
Ninth Circuit	46.770	17.299	0.012	0.2382
Percent Public Lands	0.8858	0.3181	0.010	0.2312
Mean Income	-0.0019	0.0006	0.002	-0.2459
Attorney's Fees Expectation	0.0010	0.0004	0.013	0.1781
PPI 538	-0.5660	0.3627	0.131	-0.1231
Intercept	83.672	41.622	0.055	_

Table 5 shows that the number of environmental NGOs in a state, location in the Ninth Circuit, and mean state income explain most of the variation observed in the number of natural resource cases filed in a state (R² of 0.91).¹⁷² We expected that the political polarization of a state (PPI 538)¹⁷³—whether it leans conservative or liberal politically—would be an import explanatory variable, but under a wide range of model specifications it was never statistically significant.¹⁷⁴ Similarly, because of concerns that attorney's fees could create perverse incentives, we tested whether the "expected" attorney's fee award—mean award level multiplied by the rate at which they were granted—

^{171.} ALAN C. ACOCK, A GENTLE INTRODUCTION TO STATA 302–04 (3d ed. 2012) (describing the meaning of each of the statistics in Table 5).

^{172.} The variable for percent of state land controlled by the federal government was included as a control variable because most of the natural resource cases involved public lands.

^{173.} The metric used for state politics was the website FiveThirtyEight's "Partisan Propensity Index" (PPI), which ranges from -46, the most conservative state, to +36, the most liberal; the mean for all 50 states is -6. Nate Silver, *Introducing Partisan Propensity Index (PPI)*, FIVETHIRTYEIGHT (July 30, 2010), https://fivethirtyeight.com/features/introducing-partisan-propensity-index [https://perma.cc/WZ5 3-97C2].

^{174.} Mean income in a state is of interest because concern about environmental issues is often associated with wealthier demographic groups. The regression bears this out in only a qualified way; mean income was statistically significant, but practically it was of marginal importance. The median state had 17 cases over the 16-year study period, whereas a state one standard deviation (\$13,300) above the median had 18.5 cases.

was a significant predictor. While the effect was statistically significant, it was not of practical significance because it corresponded to one additional case per year for the top 15 percent of states.

The strongest predictors for natural resource cases were the number of environmental organizations in the state and whether the state was located in the Ninth Circuit. For states in the top 15 percent based on number of environmental organizations, such as California, Oregon, and Washington, the volume of cases was projected to be five times higher than the median state (85 versus 17 cases). Similarly, states within the Ninth Circuit would, all else equal, have on average 47 more citizen suits filed during the study period than the median state. Natural resource cases are therefore filed disproportionately in states where environmental organizations are located, as well as where the judicial forum, the Ninth Circuit, is perceived to be favorable for environmental litigants. We conducted additional regressions on cases in which at least one environmental NGO was a plaintiff¹⁷⁵ and a second series for major environmental NGOs, ¹⁷⁶ defined as organizations that filed more than 40 cases during the study period. Overall, the results mirrored those for the full population of cases, 177 but major environmental organizations, such as the Sierra Club, the various River Keeper organizations, and Natural Resources Defense Council, were slightly more willing to file cases in conservative states and, at the same time, had a greater bias towards filing cases in the Ninth Circuit.

We view the number of environmental organizations in a state as a useful proxy for public support of environmental issues, which implies that natural resource suits are more likely to be filed in jurisdictions where public support is higher. This association suggests that environmental organizations tend to

^{175.} For environmental NGOs, the Beta coefficients for the number of environmental NGOs, location in the Ninth Circuit, the expectation value for attorney's fees granted, state politics were 0.853, 0.265, 0.175, and 0.136, respectively.

^{176.} For the major environmental NGOs, the Betas for state politics, number of environmental NGOs, location in the Ninth Circuit, the expectation value for attorney's fees granted, state politics were 0.812, 0.331, 0.154 and -0.208, respectively.

^{177.} The likelihood of a major environmental organization filing a citizen suit in the Ninth Circuit was more than six times greater than in the median state (6 versus 37 cases). The coefficients for the politics of the state were statistically significant; however, in practical terms added on average half a case per year above the median state among the top 15 percent of conservative states.

be parochial; they file litigation where they and their members are located. The association with attorney's fee awards, however, is more nuanced because it is necessarily tied to plaintiffs' success rates, as prevailing in suit is a precondition to obtaining an award. Indeed, when we added a variable for plaintiffs' success rates, the attorney's fee variable became statistically insignificant (p-value 0.152). 178 As a consequence, we believe that attorney's fee awards are unlikely to be a meaningful predictor of where natural resource citizen suits are filed and thus, contrary to critics' claims, not a factor that drives the filing of citizen suits. 179

Table 6: Regression on Number of Cases Per State for the Pollution Statutes

Independent Variables	Coefficient	Standard Er.	p-value	Beta
No. Environmental NGOs	0.314976	0.045568	0.000	0.768016
Ninth Circuit	53.35449	13.86705	0.001	0.340381
CWA & CAA Permits	0.008302	0.004001	0.050	0.181519
CWA & CAA Enforcement	3.768331	23.15368	0.872	0.015077
PPI 538	-0.56866	0.346738	0.115	-0.16089
Attorney's Fees Expect.	0.000939	0.000853	0.283	0.092798
Intercept	-48.3089	11.63913	0.000	_

The regressions for the pollution statutes included controls for the number of permits in each state and the rigor of government inspections and enforcement in each state. ¹⁸⁰ Table 6 displays the results, which show that the number of environmental NGOs and location in the Ninth Circuit were the principal predictors for the number of citizen suits filed in a state (R² of 0.85). Similar to the natural resource cases, the regression predicts that a state in the top 15 percent based on the number of

^{178.} For our hypothesis testing (significance tests), we used a 95% confidence interval and a corresponding significance level (alpha) of 0.05.

^{179.} These trends are consistent with other studies finding no evidence that attorney's fees are sufficient to distort the priorities of nonprofit organization. *See* Dunne, *supra* note 77.

^{180.} After running regressions using several different measures of program implementation and enforcement, we find that the best metrics were the composite enforcement rates and number of permits under the CWA and CAA. None of the inspection data proved to be statistically significant.

environmental organizations would have almost five times more cases filed than the median state (49 versus 11). The Ninth Circuit was also a statistically significant predictor of cases filed. States within the Ninth Circuit were projected on average to have 53 more citizen suits filed under the pollution statutes than the median state. Neither the politics of a state nor the expectation value for attorney's fees was a significant predictor of the number of cases filed. These results indicate that litigation under the pollution statutes is also parochial and concentrated where environmental organizations are located; they also highlight once again the importance of judicial forum and specifically the Ninth Circuit. 181

The regression results contradict the narrative of both critics and proponents of citizen suits. Critics focus on the disruptive impact and unaccountability of citizen suits. Yet, both the volume and geographic distribution of citizen suits mitigate these concerns. The low number of citizen suits in most jurisdictions negates the potential for significant disruptions. Similarly, the concentration of cases in states with larger numbers of environmental organizations and the lack of associations with

^{181.} Meaningful differences did not exist in the regressions limited to cases with at least one environmental organization or those with at least one of the top-litigating environmental organization.

^{182.} By contrast, the number of EPA-initiated civil judicial and administrative enforcement actions filed nationally was roughly 2,400–3,300 during the study period. See Enforcement Annual Results Analysis and Trends for Fiscal Year 2017, ENV'T PROT. AGENCY, https://www.epa.gov/enforcement/enforcement-annual-results-analysis-and-trends-fiscal-year-2017 (last visited Aug. 31, 2019) [https://perma.cc/TJ65-JTXH].

^{183.} The number of environmental organizations in a state is a useful proxy for local preferences because it is an indicator of regional political, social, and donor support for the organizations' missions. For instance, our research reflected that Delaware has relatively few environmental organizations (between 21 and 95, with approximately 0 very large environmental organizations). This starkly contrasts with California, which is a very popular location for environmental organizations (between 854 and 3,226, with approximately 50 very large environmental organizations). Our analysis relies on aggregate data on organizations' IRS-990 documentation that was collected from Guidestar and Charity Navigator. See generally GUIDESTAR, https://www.guidestar.org/ (last visited Aug. 7, 2019) [https://perma.cc /WA89-FP33]; CHARITY NAVIGATOR, https://www.charitynavigator.org (last visited Aug. 7, 2019) [https://perma.cc/7H9S-2LZZ]. Though useful for purposes of our regressions, we do not contend that this data is comprehensive or perfectly accurate, and it should not be treated as such. For example, Charity Navigator sets a minimum threshold for donations, resulting in a significant undercount of smaller environmental organizations. By comparison, Guidestar tends to overcount environmental organizations by applying a very broad definition of "environmental" and by including organizations with \$0 in donations or revenue.

state politics mitigate the potential for substantial divergences between citizen suits and local values. To the contrary, environmental litigation tends either to be parochial or to gravitate to states in which interest and support are highest. This is especially true of the private third-party suits that are of greatest concern among critics. Our results are also inconsistent with the common narrative that citizen suits operate as a backstop to weak state enforcement of environmental laws. If this were true, one would expect citizen suits to be associated with the rigor of enforcement activities in a state, but we find no association whatsoever. In fact, the skewed geographic distribution of citizen suits suggests that they may exacerbate disparities in enforcement and implementation more than they mitigate them. The section that follows reassesses the role and promise of citizen suits in light of our empirical findings.

III. REASSESSING THE PROMISE OF CITIZEN SUITS

Citizen suits were created to address concerns about the shortcomings of government enforcement: limited budgets, practical constraints on monitoring compliance, and political or institutional barriers to implementation and enforcement. ¹⁸⁴ They were also viewed as a form of democratic empowerment, enabling direct public enforcement of environmental rights rather than relying solely on government officials. ¹⁸⁵ These aspirations were mirrored in the expectations of commentators and environmental advocates, most importantly that citizen suits would provide a backstop to lax or ideologically antagonistic administrations. ¹⁸⁶

Critics of citizen suits emerged in response to the first significant wave of environmental enforcement suits, when it was still unclear what the volume of litigation would be in the long-term. Anticipating a flood of litigation, critics raised a litany of concerns, ranging from constitutional objections that citizen suits would usurp executive branch authority to fears about delegating enforcement to politically unaccountable entities. 187 They also worried that citizen suits would be driven by extreme

^{184.} See supra Section I.B.

^{185.} Id.

^{186.} *Id*.

^{187.} Id.

views that were unrepresentative of local values or the financial gain from laws that overcompensated organizations for attorney's fees. In this light, citizen suits threatened to undermine the exercise of politically accountable agency expertise and the efficient functioning of regulatory programs.¹⁸⁸

Detailed understanding of how citizen suits operate in practice has been fragmentary, with studies providing global statistics or glimpses into specific programs. These empirical gaps are unnecessary because many of the conflicting assertions about citizen suits are susceptible to verification. For example, are citizen suits filed in jurisdictions where violation rates are high and enforcement is lax? Is there evidence that citizen suits level the regulatory playing field across states? Is a "cartel" of environmental groups filing citizen suits disproportionately against private third parties and reaping excessive compensation for attorney's fees? Are citizen suits filed in sufficient numbers that they divert agency resources, override agency priority setting, or undermine efficient oversight of permit programs? More broadly, do citizen suits provide a check on agency discretion over its management of federal programs or enhance the transparency of government decision-making?

In the sections that follow, we will discuss the empirical observations that respond to these questions. We find little evidence that bears out either the optimistic vision of proponents or the fears of critics. The filing of citizen suits is, above all, limited by resources and thus reflects socioeconomic inequities that exist across states and federal circuits. The judicial forum and local environmental interest are the other principal drivers of where citizen suits are filed. These structural factors foreclose the worst fears of critics and place practical limits on the roles that citizen suits can play.

A. The Practices and Resource Constraints That Limit the Impact of Citizen Suits

While not all of the questions posed above can be resolved definitively, the data we have collected rule out several of the most common claims about citizen suits. We observe three central patterns in the data: (1) the number of citizen suits filed and concentration of cases in certain jurisdictions foreclose conflicts

between agency priority setting and the values of local communities; (2) the practical barriers to filing citizen suits and the difficulty of obtaining attorney's fee awards exacerbate rather than mitigate disparities across states in the implementation and enforcement of environmental laws; and (3) the vast majority of citizen suits are filed against the federal government rather than private entities, and a large share of these cases involve broad, wholesale challenges to regulations rather than retail litigation over discrete agency decisions. We discuss each of these observations below and then turn to an examination of the policy implications.

Geographic Concentration and Low Numbers
 Limit Conflicts Between Citizen and Government
 Enforcement

In absolute and relative terms, the number of citizen suits is remarkably modest. The DOJ data reveal that just two states, California and Washington, averaged more than 10 citizen suits per year under the natural resource statutes. Only a handful of states averaged more than five suits per year, and most averaged in the low single digits. Under the pollution statutes, only California and Washington averaged more than five suits per year, and most averaged fewer than one per year. The supplementary Westlaw data for private third-party cases yielded comparable results. Once again, only California and Washington averaged double-digit numbers of third-party cases per year, and just five states averaged more than three cases per year. Moreover, 40 percent of the third-party cases in California were filed by a single environmental organization, and 75 percent of those in Washington were filed by just two organizations. This is not, however, evidence of an environmental "cartel." Instead, the small volume of cases causes individual organizations that regularly file even a modest number of cases to account for a disproportionate share of the litigation.

The national statistics reveal a gap between the academic and policy debates over citizen suits and their impacts in practice. An average of about 2,500 administrative and judicial orders are issued to regulated entities in federal enforcement

actions under the major pollution statutes annually, 189 versus roughly 80 third-party citizen suits filed annually under the CAA, CWA, and RCRA.¹⁹⁰ These numbers are dwarfed by the roughly 9,000 informal enforcement actions undertaken by EPA and state agencies annually.¹⁹¹ Relative to formal federal enforcement alone, the number of third-party citizen suits is marginal—conservatively off by a factor of 30 or about 3 percent of federal enforcement levels. 192 Similarly, tens of thousands of federal actions are potentially subject to NEPA or the ESA annually, 193 but the DOJ data revealed an annual average of just 82 and 78 citizen suits challenging those actions, respectively. With such enormous disparities, citizen suits will necessarily operate at the margins. Moreover, the imbalances are much greater in the most heavily industrialized states, such as Texas and Louisiana, and in states outside of the Ninth Circuit with large tracts of land, such as Wyoming, New Mexico, and Colorado.

The neglect of the practical limits on filing citizen suits is all the more surprising given the extensive literature on the limits of government environmental enforcement. Much of this literature is premised on using meager government resources efficiently to deter noncompliance. 194 Yet, commentators have

^{189.} EPA-initiated civil judicial and administrative enforcement actions have declined from about 3,300 in 2010 to roughly 2,400 in 2016. See Enforcement Annual Results Analysis and Trends for Fiscal Year 2016, ENV'T PROT. AGENCY, https://archive.epa.gov/epa/enforcement/enforcement-annual-results-analysis-and-trends-fiscal-year-2016.html (last updated Feb. 18, 2018) [https://perma.cc/R6NU-K8AT] (click on "Government Performance and Results Act (GPRA)" drop down).

^{190.} See Hodas, supra note 66, at 1573 (observing that between 1983 and 1993, nonprofit organizations filed 100–300 60-day notices annually under the Clean Water Act versus the thousands of administrative actions initiated by EPA and the states each year); Montgomery, supra note 79.

^{191.} ECHO, supra note 152.

^{192.} One might also argue that notices of intent to sue (NOIs) in enforcement suits against regulated entities should also be considered in an assessment of citizen suits. Professor May found that roughly 650 NOIs were filed annually during the late 1990s and early 2000s. May, *supra* note 2, at 8–9. Some NOIs undoubtedly prompt action by agency officials and private actors, but given that slightly more than 1 in 10 NOIs leads to a case being filed, the number of NOIs that result in meaningful action should be discounted. If we assume generously that half of the NOIs lead to some kind of material action, then government administrative and judicial enforcement actions would still outnumber them by about a factor of 10.

^{193.} Under NEPA and the ESA, federal actions potentially subject to the two statutes exceed 100,000 annually. Adelman & Glicksman, *supra* note 82, at 392.

^{194.} See, e.g., David L. Markell & Robert L. Glicksman, Dynamic Governance in Theory and Application, Part I, 58 ARIZ. L. REV. 563, 594–600 (2016) (describing

routinely presumed that citizen suits have the capacity either to offset the deficiencies of government programs or, through sheer volume, to override government priority setting and discretion. A comparison of state and federal enforcement budgets against the budgets of typical environmental organizations would have readily exposed this myth. 195 The resources of even the wealthiest organizations pale in comparison to those of the federal government and many states. 196 These simple comparisons alone would have demonstrated that government enforcement could not be significantly augmented or overwhelmed given the resources available.

a. Citizen Suits Are More Likely to Exacerbate Rather Than Mitigate Disparities in the Enforcement and Implementation of

impact of declining resources on EPA enforcement of environmental statutes); Thompson, supra note 1, at 200 (highlighting the importance of "enabling the government to focus [the uses of] its limited resources"); J. Maria Glover, The Structural Role of Private Enforcement Mechanisms in Public Law, 53 WM. & MARY L. REV. 1137, 1153–54 (2012) ("[P]ublic governmental enforcement bodies have limited resources that are often insufficient to perform the functions with which they are tasked.").

195. For example, an estimation of EPA's enforcement budget can be obtained by looking at EPA's yearly budgets for a breakdown of past expenditures on compliance monitoring, civil and criminal enforcement, forensics support, and legal advice. From September 2011 to September 2016, a low-end estimate indicates that EPA alone committed over \$540 million per year to federal enforcement activities across the environmental statutes. See ENV'T PROT. AGENCY, FY2018 EPA BUDGET IN BRIEF (2017): ENV'T PROT. AGENCY, FY2017 EPA BUDGET IN BRIEF (2016): ENV'T PROT. AGENCY, FY2016 EPA BUDGET IN BRIEF (2015); ENV'T PROT. AGENCY, FISCAL YEAR 2015 JUSTIFICATION OF APPROPRIATION ESTIMATES FOR THE COMMITTEE ON APPROPRIATIONS (2014); ENV'T PROT. AGENCY, FY2014 EPA BUDGET IN BRIEF (2013). This is approximately a factor of 10 to 20 times higher than the entire yearly operating expenditures on all program activities—much of which is not enforcement related, let alone third-party enforcement—at the most active environmental plaintiffs, such as Sierra Club (around \$60 million), and the largest litigating environmental nonprofits, such as Earthjustice (around \$50 million per year) and Southern Environmental Law Center (around \$25 million per year). See CHARITY NAVIGATOR, https://www.charitynavigator.org/ (last visited Dec. 16, 2019) (providing recent financials for Earthjustice and SELC); SIERRA CLUB, FORWARD FASTER ANNUAL REPORT 2018 (2018) (providing recent financials for Sierra Club).

196. See, e.g., Hope M. Babcock, How Judicial Hostility Toward Environmental Claims and Intimidation Tactics by Lawyers Have Formed the Perfect Storm Against Environmental Clinics: What's the Big Deal About Students and Chickens Anyway?, 25 J. ENV'T L. & LITIG. 249, 301 (2010) (noting "the imbalance of resources between environmental plaintiffs and industrial or government defendants").

Environmental Laws

A central assumption among proponents of citizen suits is that they will be filed in response to lax or politically antagonistic state or federal agencies. Yet, the regressions we conducted show that third-party suits under the pollution statutes are not associated with the rigor of enforcement programs. In other words, the effectiveness of government enforcement is not a statistically significant factor in determining where citizen suits are filed. These results are complemented by our finding, across both the pollution and natural resource statutes, that the number of environmental organizations in a state is a significant predictor of the number of citizen suits filed annually. While the parochial tendencies of organizations filing citizen suits may be unsurprising, they undermine the counterbalancing role that Congress believed, and many commentators have maintained, that citizen suits would play. Further, insofar as the number of environmental organizations in a state is a useful proxy for public support of environmental policies, these results suggest that rather than conflicting with local values, citizen suits more often reflect them.

The local bias of organizations filing citizen suits also suggests that they may exacerbate interstate inequities in implementation and enforcement of environmental laws rather than mitigate them. This inference is reinforced by the low number of environmental justice suits—an estimated average of just six cases each year. Far from mitigating "races to the bottom" between states, citizen suits are more likely in practice to raise up the top performing states in which public support is high and the resources necessary for supporting costly litigation are available. Moreover, to the extent that citizen suits target industrial development or expansion in a state, the geographic disparities observed in our data may have indirect impacts as well. If litigation, or the threat of it, impacts development costs or uncertainty (as is claimed by some critics in states such as California), ¹⁹⁷ the disparities could redirect development to states in which development costs and uncertainty are lower. Put differently, it is

^{197.} See, e.g., Blair W. Will, The Clean Water Act Citizen Suit Shakedown, HMS L. GRP. NEWS (June 4, 2013), https://www.hmslawgroup.com/clean-water-act-citizen-suit-shakedown [https://perma.cc/TPE6-J72S] (discussing the costs of environmental citizen suits under the CWA and how such litigation imposes costs and uncertainty that could force businesses out of California).

irrelevant whether regulatory disparities between states arise from weak enforcement in lax states or elevated standards in states with well-supported environmental organizations. In either case, it is the interstate *differences* in regulatory costs that exacerbate inequities. Thus, from the standpoint of equity, a race to the top can cause disparities that mirror those of a race to the bottom.

Similar disparities are observed under the natural resource statutes. The principal factors were whether a state is located within the Ninth Circuit and the number of environmental organizations in a state. Neither public support, as reflected in the number of environmental organizations, nor a favorable judicial forum is likely to be associated with weak implementation of federal natural resource laws. Nevertheless, lacking a metric for the adequacy of federal implementation or enforcement, we cannot control for this source of variation as we did with the pollution statutes. It seems likely, though, that filing citizen suits under the natural resource statutes would also be parochial organizations will focus on protecting the lands that they and their members encounter and use directly. Further, although regional variation undoubtedly exists, control at the federal level reduces the potential for such differences to arise and, in any event, the "races to the bottom" that are associated with statelevel regulation would not exist. These inferences are bolstered by the consistency in the geographic patterns of natural resource litigation, including disputes over wetland permits, which involve federal land much less often. Strong evidence therefore exists for concluding that the judicial forum and public support are mutually reinforcing factors that concentrate litigation under the natural resource statutes in a few select states.

The availability of attorney's fees was not a significant factor in determining where cases were filed largely because they were granted at such low rates. However, if attorney's fees were a factor, they would only compound the geographic disparities noted above: (1) attorney's fees were granted more liberally in the Ninth Circuit, where most third-party and natural resource citizen suits were filed; and (2) the states in which attorney's fee awards were available least-often were the states in which resources for filing citizen suits are often most lacking. The low rates at which attorney's fee awards were granted nationally (averages across states ranged roughly between 10 and 25 percent of the cases) and the dramatic declines in awards observed

over the last decade, including within the Ninth Circuit, ¹⁹⁸ highlight the degree to which resource constraints will remain a rate-limiting factor for citizen suits.

2. Patterns of Wholesale and Retail Environmental Litigation

The patterns of citizen suits that we observe under the major environmental statutes exist along a continuum ranging from largely wholesale to largely retail litigation. The CAA is at the far extreme of wholesale litigation, with almost 90 percent of the cases involving petitions for review of EPA regulations. On the other extreme, litigation under NEPA is almost exclusively retail, with more than 90 percent of the cases involving discrete federal actions. Citizen suits under the CWA and the ESA reside in the middle. The CWA is weighted towards more retail litigation by virtue of the ease of bringing enforcement actions under the NPDES program, the prominence of challenges to wetlands permits, and the preservation of state authority over many of the most important sources of water pollution. The ESA is more evenly balanced between wholesale and retail litigation. It is a hybrid statute insofar as it contains provisions that require issuance of high-stakes rules (e.g., species listing, designation of critical habitat) analogous to those under the CAA and strict procedures that mirror those under NEPA. The structural differences between environmental statutes therefore provide insights into the influence that the substantive and procedural elements of a statute have on the filing of citizen suits.

The predominance of wholesale litigation under the CAA is driven by the scope of the statute and the variety of regulatory programs that it encompasses, as well as the technical and administrative obstacles to filing enforcement suits against private third parties. The complexity and large number of regulatory programs under the CAA generate numerous major rules, most of which are challenged by the affected industry, at minimum.

^{198.} See infra Section III.C. Among the cases in which plaintiffs prevailed, attorney's fee awards were granted in roughly 50 percent of the natural resource cases (mean 48 percent, median 50 percent) and 40 percent of the citizen suits filed under the pollution statutes (mean 40 percent, median 38 percent). Among the states with the highest volumes of cases, the average was typically 30 to 40 percent for the citizen suits under the pollution statutes and 50 to 70 percent for those under the natural resource statutes.

While one might expect that a similar, or greater, number of retail actions to be filed against permitted facilities in federal court, the complexity of CAA permits and the difficulties of verifying violations drastically limits the number of enforcement suits. ¹⁹⁹ Indeed, retail litigation under the CAA is starkly lower than that under the CWA, which is distinguished by mandatory reporting requirements and relatively simple performance standards against which potential violations can be readily assessed. ²⁰⁰ Accordingly, it is both the volume of rulemaking and the difficulty of bringing enforcement actions that have led to the strong bias in favor of wholesale litigation under the CAA.

The experience under NEPA is just the inverse. Because of its procedural focus, implementation of NEPA requires relatively few rules to be issued. Furthermore, many of the rules are centralized under the Council on Environmental Quality, which has primary authority for implementing NEPA.²⁰¹ While individual agencies may issue implementing regulations, particularly rules regarding when specific classes of actions are "categorically excluded" from compliance with NEPA, they are relatively obscure and consequently are rarely challenged.²⁰² Similarly, although agency programmatic decisions can be subject to NEPA, courts have consistently limited the application of NEPA to programmatic decisions.²⁰³ As a consequence, virtually all of the litigation under NEPA involves discrete federal actions. Thus, both the trigger for NEPA—a federal action or nexus—and its procedural focus favor retail litigation over discrete federal decisions.

The ESA has elements of the CAA and NEPA. ESA rules on endangered or threatened species often have the high stakes of major rules under the CAA, while the consultation process under

^{199.} Karl S. Coplan, Citizen Litigants Citizen Regulators: Four Cases Where Citizen Suits Drove Development of Clean Water Law, 25 Colo. NAT. Res. Energy & Env't L. Rev. 61, 67–71 (2014); David T. Buente, Citizen Suits and the Clean Air Act Amendments of 1990: Closing the Enforcement Loop, 21 Env't L. 2233, 2234–36 (1991).

^{200.} Coplan, supra note 199, at 70–71.

^{201.} See 42 U.S.C. §§ 4332(2)(B)–(C), 4344 (establishing CEQ to coordinate NEPA across the federal government); Exec. Order No. 11,991, 42 Fed. Reg. 26,967, 26,968 (May 24, 1977) ("In carrying out their responsibilities under [NEPA] and this Order, [all agencies must] comply with the regulations issued by [CEQ] except where such compliance would be inconsistent with statutory requirements.").

^{202.} David E. Adelman & Robert L. Glicksman, Presidential and Judicial Politics in Environmental Litigation, 50 ARIZ. St. L.J. 3, 16 (2018).

^{203.} See, e.g., Kleppe v. Sierra Club, 427 U.S. 390 (1976).

ESA Section 7 follows multitiered procedures that mirror environmental reviews under NEPA. Together these provisions of the ESA create opportunities for procedural and substantive challenges. By contrast, the rulemaking under the CWA often has lower financial stakes and a relatively narrow scope (a specific industry),²⁰⁴ albeit with some exceptions, such as jurisdictional rules governing what constitutes "Waters of the United States."205 Furthermore, many of the most important sources of water pollution are exempted from federal regulation.²⁰⁶ Retail litigation under the CWA, meanwhile, remains important because there are a significant number of large industrial sources (roughly 6,500 nationally) and both the reporting requirements and relative simplicity of permits are designed to facilitate citizen monitoring and enforcement.²⁰⁷ Nevertheless, even with these facilitating elements, the frequency of citizen challenges remains strikingly low under the CWA in most states—even if, relative to the CAA and ESA, the reduced barriers to filing citizen suits are apparent in the wider geographic distribution of cases across states.

The differences we observe in the types and volume of litigation under the four major statutes suggest that there may be feedbacks between wholesale and retail litigation. Given the importance of resource constraints and the need to triage cases, the

^{204.} David A. Keiser et al., *The Low but Uncertain Measured Benefits of US Water Quality Policy*, 116 PNAS 5262, 5264 tbl.1 (2019) (citing costs that are typically in the tens of millions of dollars for NPDES regulations); ENV'T PROT. AGENCY, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT FROM 1990 TO 2020, at 3–8 (Mar. 2011), https://www.epa.gov/sites/production/files/2015-07/documents/fullreport_rev_a.pdf [https://perma.cc/ZTS7-N9WX] (citing costs for major industry regulations that are often in the hundreds of millions of dollars)

^{205.} See Clean Water Rule, 80 Fed. Reg. 37,054 (June 29, 2015) (establishing a broad vision for the jurisdictional definition of "Waters of the United States"); The Navigable Waters Protection Rule, 85 Fed. Reg. 22,250 (Apr. 21, 2020) (substituting a far narrower vision for the jurisdictional definition of "Waters of the United States").

^{206.} Further, while 507,982 sources were covered by the NPDES program in 2015, 19,209 were major sources, 87,920 were minor sources, and all other facilities operated under "general permits," which are issued under rules for broad classes of sources. ENV'T PROT. AGENCY, ANNUAL NONCOMPLIANCE REPORT, CALENDAR YEAR 2015 (Aug. 2016), https://echo.epa.gov/system/files/2015_ANCR.pdf [https://perma.cc/CS5C-XLFX].

^{207.} While litigated less frequently, the procedures associated with obtaining wetland permits also facilitate citizen oversight and permit challenges. *See supra* Section II.B.

high cost and complexity of filing private third-party enforcement actions likely reinforces the bias observed towards wholesale litigation. In other words, the relative difficulty of retail litigation may elevate the importance of litigating over strict standards, as they represent both high-profile legal actions and may make it easier for government and public enforcement. We observe this pneumatic effect most directly in the contrast between litigation under the CAA and the CWA, but we also find evidence of it under the ESA, where third-party suits under Section 9 of the statute are extraordinarily rare and difficult to support with adequate evidence. ²⁰⁸ The obstacles to retail litigation under the ESA therefore may place greater emphasis on wholesale litigation over regulations, such as controversial or symbolic efforts to compel the federal government to preserve critical habitat for protected species. With only limited options, environmental organizations may use the legal handles available to them—even if the scope and effect of the litigation are poorly calibrated to address their central concerns.

The other notable pattern that emerges from the data is the prominence of procedural challenges under NEPA and the ESA. Upwards of 40 percent of environmental litigation is procedural if one includes consultation cases under ESA Section 7, which have both procedural and substantive elements. Indeed, the disparity in litigation under ESA Section 9—which precludes the harming of endangered species on public and private land—and Section 7 highlights the critical importance of procedural protections to the filing of citizen suits. The relative ease of filing procedural cases also suggests that access to scientific and technical expertise may be a limiting factor for many environmental organizations and individual citizens, which in turn may reflect the limited financial resources and access to individuals with the necessary expertise. The lower barrier to filing a citizen suit under NEPA also appears to be reflected in lower success rates (almost a factor of two) than cases filed under the CAA and ESA.²⁰⁹ The relative ease of procedural challenges apparently supersedes substantive objectives, perhaps in part due to the high level of deference afforded agencies on substantive regulatory decisions.

^{208.} We estimate that there were no more than a handful of Section 9 cases filed against private third parties.

^{209.} See Figure 5.

The structural differences between the major environmental statutes provide further insights into the factors that limit the use of citizen suits and the relative importance of wholesale and retail litigation. The central challenges are socioeconomic and judicial, and both limit the volume of litigation and concentrate it in certain jurisdictions. Statutory frameworks can mitigate these impediments by lowering the barriers to filing citizen suits, as reflected in the dramatic differences observed in the volume and types of litigation under the major environmental statutes. In particular, the availability of procedural claims and reporting requirements are associated with higher levels of litigation and appear to mitigate pervasive resource constraints. Nevertheless, as we have shown, the number of cases filed under even the most accessible statutes remains tiny in comparison to government enforcement actions. As a consequence, absent dramatic increases in financial resources or incentives, it is unlikely that wholesale litigation on rulemaking could be significantly augmented or that retail litigation will evolve beyond the modest and geographically concentrated role it plays today. The final section wrestles with this dilemma and discusses both a more realistic vision for citizen suits and the policies best situated for achieving it.

B. Reforming Our Vision for Citizen Suits and the Policies Needed to Realize It

What is a realistic vision for citizen suits when the statutes with the most favorable frameworks fall woefully short of aspirations? Should the objective be simply to increase the volume of litigation, perhaps through a bounty mechanism similar to those for qui tam actions involving fraud against the federal government? Or should expectations be reexamined in light of the realities noted above and a recognition that citizen suits will never be able to play more than a minor role in augmenting agency enforcement or checking agency implementation of environmental laws? Alternatively, is a third option viable between these extremes? Perhaps, for example, policies that create incentives or provide support for citizen suits, but focus on specific deficiencies in environmental programs that Congress and many commentators have cited as justifications for citizen suits, such as chronic underenforcement, weak implementation, repeat violators, or disparate impacts on underserved communities? These measures could be paired with reporting requirements that would facilitate compliance oversight and lower barriers to filing citizen suits. In an ideal world, these types of reforms would also include liberalization of standing requirements, which can raise litigation costs and complicate the logistics of filing a suit.²¹⁰

The central challenge is determining what reforms are possible when the annual number of citizen suits will inevitably fall far short of the ideal volume needed to address the thousands of agency actions and third-party violations each year. Any recommendations for reform must also recognize the difficult legislative politics that persist around environmental policy in the United States. For example, we do not believe that legislation dramatically increasing the number of citizen suits filed annually is feasible in the current political environment. Yet, neither is the status quo acceptable, particularly in light of the gross disparities that exist across states and communities, including underserved communities struggling socioeconomically. The central question is whether any politically viable reforms exist for mitigating the barriers to filing citizen suits or promoting a more equitable distribution of their benefits.

Recognizing these constraints, we have identified three types of legal and strategic reforms: (1) targeted legislative reforms for lowering the barriers to filing citizen suits and creating incentives for filing them where they are most needed; (2) enhanced transparency about the filing of citizen suits and coordination among environmental organizations; and (3) education of judges about the types and importance of environmental citizen suits, including the volume of litigation, the tangible benefits, and the rates at which attorney's fee awards are granted. Importantly, the second type of reform will provide information that could help bolster the case for legislative reforms and generate information essential to educating federal judges. Transparency should also mitigate the concerns critics have raised about the accountability of environmental plaintiffs and

^{210.} See, e.g., William A. Fletcher, The Structure of Standing, 98 YALE L.J. 221 (1988); Elizabeth Magill, Standing for the Public: A Lost History, 95 VA. L. REV. 1131 (2009); Heather Elliott, Congress's Inability to Solve Standing Problems, 91 B.U. L. REV. 159, 170–71 (2011) (discussing the problems with modern standing doctrine, including that it is "confusing and unpredictable" and generally a barrier that places a higher burden on environmental beneficiaries than regulated entities).

^{211.} See Adelman & Glicksman, supra note 202, at 15.

misperceptions that have proliferated in the absence of reliable information on citizen suits.

1. Targeted Reforms to Facilitate and Support Citizen Suits

A set of criteria for deriving an optimal volume of citizen suits does not exist. However, government enforcement rates under the pollution statutes show that the current volume of citizen suits is far below the level that even limited government funding permits.²¹² Similarly, given the enormous number of federal actions potentially subject to suit, a huge disparity exists between the volume of citizen suits and the number of federal actions reasonably subject to legal challenge. We infer from this disparity that resource constraints are the limiting factor. Studies of agency rulemaking also suggest that environmental organizations participate in a small proportion of agency proceedings that occur annually and that, by extension, the volume of litigation is substantially lower.²¹³ Moreover, even if citizen suits were filed at higher rates, opposition within Congress likely would have risen more rapidly than it has and would exceed the high level that exists today in the current deregulatory political climate.²¹⁴

Any reforms to liberalize access to citizen suits must consider these political realities and the absolute limits posed by the enormous disparity that exists between the number of citizen suits filed annually and the potential universe of cases. It is unlikely that political opposition can be neutralized, but reforms

^{212.} We acknowledge that there is a pneumatic relationship between federal /state enforcement of environmental standards and third-party citizen suits, given that enforcement against a third party generally precludes a third-party citizen suit. See, e.g., 33 U.S.C. § 1365(b)(1)(B); 42 U.S.C. § 7604(b)(1)(B) (precluding CAA and CWA citizen suits if the federal or state government "has commenced and is diligently prosecuting" an enforcement action). As such, a perfect federal/state enforcement regime that caught and prosecuted all violations would leave no space for third-party citizen suits. However, comparing government and private enforcement rates is a useful exercise because it is widely acknowledged that governmental enforcement does not even come close to such a perfect enforcement regime (due to funding, monitoring, and other practical constraints).

^{213.} See, e.g., Wendy Wagner, Rulemaking in the Shade: An Empirical Study of EPA's Air Toxic Emissions Standards, 63 ADMIN. L. REV. 99 (2011) (describing the low level of public engagement in agency rulemaking).

^{214.} Adelman & Glicksman, supra note 202, at 20.

can nevertheless circumvent the greatest sources of opposition and critique of citizen suits. The most potent sources of opposition to citizen suits have been driven by perceptions that they are not in the interest of the general public, that they are filed principally for obstructionist objectives, or that they undermine government regulatory programs and priority setting. The challenge is to mitigate these concerns and misperceptions while still addressing the structural barriers to filing citizen suits that are of greatest importance—particularly distributional inequities.

Relative to the other environmental statutes, the CAA stands out for the paucity of citizen enforcement suits. Most CAA litigation involves wholesale challenges to national regulations, which are often driven by the complexity of CAA permits and state-level programs. Although the permitting process (and permits themselves) could be simplified and made more transparent, the inherent complexity of air emissions from major industrial sources will remain a significant obstacle. In short, CAA permits could never reach the simplicity of permits under the CWA, which maximize transparency and facilitate citizen oversight. Thus, while permitting reforms are an attractive option, practical constraints and industry opposition are likely to limit their viability and efficacy. Similar issues are likely to arise for permitting under other statutes, such as RCRA, which involve equally complex permitting regimes.

It goes without saying that the most promising reforms will focus on citizen suits for which there is broad support and opposing arguments are weakest. One of our central findings is the concentration of citizen suits in a few states and the absence of any significant association between numbers of citizen suits and permit compliance rates. Creating incentives for the filing of citizen suits based on low local enforcement rates, the impacts of violations on human health or welfare, or disparate impacts on underserved communities would minimize opposition. Moreover, it would align incentives for filing citizen suits with the goals that prompted Congress to authorize them in the first place. The simplest way to augment incentives would be to create a strong presumption in favor of attorney's fee awards in cases that meet these types of criteria. Alternatively,

^{215.} The difficulty of obtaining attorney's fee awards is viewed as a significant barrier among representatives of environmental organizations. Interview with Nada Culver, *supra* note 78, at 15. Attorney's fee awards are also unavailable for

organizations or individuals filing such cases could be given a portion of the fines levied against a defendant. Such reforms would offset recent trends in attorney's fee awards and leverage the limited resources available for filing citizen suits by focusing resources on critical lapses in enforcement and structural inequities reflected in the geographic distribution of citizen suits. We also considered direct, upfront forms of support, such as federal grants or tax incentives for private-sector funding of citizen suits, but we expect that the political opposition and weak economics would be fatal strikes against them. More equitable distribution of foundation resources and other funding are the only other realistic options in the current political climate.

Identifying similar criteria for enhancing incentives to file citizen suits under the natural resource statutes is more challenging and likely to be more politically contentious. Because most of these cases involve challenges to federal action, there is nothing analogous to the enforcement data that is available under the pollution statutes. Instead, the claims turn on allegations that a federal agency is violating a statutory requirement over which it typically has a significant degree of discretion. While clear geographic disparities are apparent in the natural resource cases, even taking into account the amount of federal land in each state, this alone would not be a reliable metric for prioritizing cases, as other legitimate factors can influence the number of cases filed. Chronic agency lapses below legal requirements would be a more direct metric, but evidence of them would be dependent on independent reports (e.g., Congressional Research Service) or, somewhat circularly, a related series of successful citizen suits. Accordingly, a reliable set of criteria for conditioning incentives does not appear to be available for natural resource cases. Nevertheless, if sufficient political support could be organized, lowering the bar for obtaining attorney's fees, such as through shifting the presumption to favor litigants, would be justifiable simply based on the low numbers of citizen suits filed and could be a valuable component of legislative reforms. The challenge is that few, if any, options exist for finessing the

many of the largest environmental organizations. 28 U.S.C. § 2412(d)(2)(B) (2012) (limiting EAJA to civil suits by or against a federal agency to "parties," which are defined as organizations whose net worth did not exceed \$7 million and did not employ more than 500 people at the time suit was filed).

entrenched political opposition, which makes even modest reforms exceedingly unlikely to succeed.

2. Facilitating Coordination of and Transparency About Citizen Suits

The dearth of information on citizen suits is one reason misperceptions about them persist. No one has had a clear understanding of how citizen suits operate in practice, whether they serve the ends Congress had in mind, or whether they do so effectively and equitably. Making information about the filing of citizen suits publicly available in a centralized database would enhance accountability, correct misperceptions about environmental litigation, and facilitate coordination between environmental organizations and other plaintiffs. Moreover, this information is already public; it merely exists in an inaccessible form or the information is incomplete as with the DOJ data. Centralizing the collection and improving the quality of litigation data would also be of great value to researchers and policymakers. This reform should also be attractive to critics of citizen suits insofar as it would enhance transparency and simplify the monitoring of cases.

New legislation could establish a program for compiling data on environmental citizen suits within the Council on Environmental Quality (CEQ), which already collects data and issues reports on litigation under NEPA. An expanded database for environmental citizen suits would require dedicated funding to ensure data quality and could be facilitated by reporting requirements for lead litigants. The new legislation could be readily integrated with citizen suit provisions under each of the federal environmental statutes or as a stand-alone provision for cases filed under the Administrative Procedure Act.

In essence, this reporting provision would be an expansion of existing sixty-day notice provisions for environmental citizen suits, which generally require "notice of the alleged violation (i) to the Administrator, (ii) to the State in which the alleged violation occurs, and (iii) to any alleged violator of the standard, limitation, or order."²¹⁶ The proposed revision would modify these

^{216. 33} U.S.C. \S 1365(b)(1)(A); see, e.g., 42 U.S.C. \S 7604(b)(1)(A) (providing a similar provision in the CAA); id. \S 6972(b)(1)(A) (providing a similar provision in RCRA).

requirements to extend to all citizen suits²¹⁷ and require notice to CEQ.²¹⁸ To minimize the burden of this more robust reporting requirement, CEQ could be required to establish a database linked to CEQ, the federal courts, the agencies responsible for impacted statutes, and DOJ.²¹⁹ This would allow CEQ to create a single portal for reporting information to the federal government and would allow the courts to monitor compliance with the reporting requirement. The information would then be made available by CEQ through its website.

If legislation is not feasible, a similar, though less comprehensive database could be established by members of the environmental community and supported by interested funders. Based on conversations with lawyers at environmental organizations, we find that litigation is often decentralized within organizations and that communication between groups is frequently limited, particularly in cases of retail litigation that are of primarily local concern.²²⁰ Thus, environmental organizations typically lack the capacity to coordinate and track the filing of citizen suits relevant to their work. Similarly, beyond the organizations themselves, foundations and other funders are likely to be interested in this information, as litigation figures so prominently in the work of many environmental organizations. Having a perspective not only on individual or closely associated cases but also on the broad trends and outcomes of citizen suits would enhance funders' ability to evaluate the effectiveness of the organizations that they support.

A centralized and publicly accessible database for citizen suits, whether supported publicly or privately, would also put

^{217.} The existing reporting provisions only apply to causes of action brought under the particular statutory citizen suit statutes, and not to other citizen suits such as those brought under the APA.

^{218.} Instead of merely requiring advanced notice of intent to sue, it would require the lead party in the suit to provide basic docket information (e.g., parties, causes of action, filing date, jurisdiction) to CEQ on citizen suits as a case progress. Additionally, the lead party would be required to provide updates on dispositive ruling (e.g., motions to dismiss, motions for summary judgment, grants of attorney-fee awards), parties joining or leaving the litigation, and the parties reaching a settlement.

^{219.} The State could also be included ad hoc if they choose to participate and establish systems capable of interfacing with the federal database.

^{220.} This information is based on conversations, albeit anecdotal, with attorneys at the Natural Resources Defense Council and National Wildlife Federation with broad knowledge of environmental litigation nationally and among both large and small organizations.

positive pressure on organizations to consider the distributive impacts of their decisions. The resulting transparency would enhance the perceived legitimacy of citizen suits and provide an antidote to unfounded criticisms of them. In the longer-term, this information would raise awareness and understanding of the important roles that citizen suits play and ideally generate the political support needed for the types of reforms discussed in the preceding section.

3. Educating Judges About the Patterns, Impacts, and Value of Citizen Suits

Judges play a central role in the filing and outcomes of citizen suits as the final arbiters. Yet, as our data show, outside the D.C. Circuit and several federal districts, most judges hear fewer than a handful of environmental citizen suits over the span of a decade. Most judges, therefore, have only episodic exposure to cases and anecdotal impressions of citizen suits. Informing them about the broader context of environmental litigation and the factors that motivate it would help to neutralize potential biases judges may have about environmental disputes and litigants. This is particularly important today because high-profile, intensely politicized cases, such as the litigation over oil and gas pipelines and coal-fired power plants, often have high salience in the media and thus may cause judges to form inaccurate views about citizen suits.²²¹ For example, misperceptions would be mitigated through information about the low-volume and selective nature of the citizen suits filed, including the success of environmental plaintiffs relative to other classes of administrative challenges.

Combating judicial bias is of greatest importance for rulings over which judges have especially broad discretion. We are thinking particularly of decisions on attorney's fee awards, but this may also be true of constitutional standing determinations and rulings on compliance with administrative procedures, where judges tend to be less deferential to agencies. Similarly, in the context of suits involving private, third-party defendants, courts may view cases differently if they recognize just how rare

^{221.} See, e.g., Friends of the Earth v. Laidlaw Env't Servs., 528 U.S. 167, 209 (2000) (Scalia, J., dissenting) (describing a "plaintiff pursuing civil penalties . . . as a self-appointed mini-EPA" who acts "without meaningful public control").

they are. For example, a judge may be more reluctant to allow state agencies to preempt a citizen suit without a clear showing of a state agency's intent to adequately follow through with meaningful enforcement measures if the suit is not viewed as part of a flood of special-interest litigation.²²²

Concerns about judicial discretion are especially important in light of the dramatic declines recently observed in median attorney's fee awards. For the cases in which plaintiffs prevailed, courts in some states granted attorney's fee awards in as few as 10 percent of cases, while courts in other states granted attorney's fee awards at much higher rates. It is difficult to square the national average for granting attorney's fees—roughly 45 percent of the cases in which plaintiffs prevailed—with either the low overall volume of citizen suits or the high success rates of environmental plaintiffs. The recent declines in attorney's fee awards, for similar reasons, appear to be completely unwarranted. Having a broader perspective on citizen suits and their social value, we hope, would provide a useful corrective to unfounded skepticism about environmental plaintiffs and the devolving trend in attorney's fee awards across the country. It would also help to counteract environmental plaintiffs' aversion to filing cases in circuits outside the Ninth Circuit and counteract the concentration of citizen suits in a small number of states.

CONCLUSIONS

Citizen suits, by almost any measure, are underperforming. In most states, citizen suits are rarely filed, and they are concentrated in states where public support is high and environmental programs are, as a consequence, relatively robust. Contemporary debates about citizen suits are fixated on narratives that are disconnected from these realities and thus are blind to the shortcomings of citizen suits that matter in practice. This Article draws on data collected over two presidential administrations to correct misperceptions about citizen suits among proponents and critics and to reevaluate the appropriate role of citizen suits in light of the severe resource limits.

^{222.} Most of the citizen suit provisions found in federal environmental laws require that the federal or delegated state government be given notice before a suit is filed and give them the authority to intervene and essentially take over the case. See, e.g., 33 U.S.C. § 1365(b); 42 U.S.C. § 7604(b).

We find little to no evidence of the pathologies that critics commonly raise and little evidence that citizen suits systematically offset the shortcomings of government implementation or enforcement of environmental laws. Citizen suits can establish important precedent, provide effective checks on agency rulemaking, and draw attention to grave deficiencies in federal programs. They do not, however, backstop day-to-day implementation or enforcement of federal laws; the numbers of permits and government actions are simply overwhelming relative to the number of challenges that can feasibly be brought by nongovernmental organizations and individuals. As a consequence, environmental plaintiffs and organizations must wield citizen suits strategically and triage cases carefully.

These realities place a premium on thoughtful prioritization and coordination of citizen suits, including consideration of distributional inequities. Our empirical work reveals deep inconsistencies and inequities in the filing of citizen suits that are overlooked by commentators across the political spectrum. This Article seeks to ground the debate over citizen suits in the empirical record, identify reforms that are politically viable, and address the most pressing shortcomings of the current legal framework.