

## REAL NUMBERS

# What We Learned From 25,775 Environmental Lawsuits

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Most of us don't spend much time thinking about the ways that environmental statutes, such as the Endangered Species Act, Clean Air Act, and Clean Water Act, are implemented and enforced. To the extent that we do, we might imagine someone like a bespectacled, clipboard-and-hard-hat-equipped Environmental Protection Agency (EPA) employee visiting industrial facilities to make sure that companies are complying with environmental rules and regulations.

That kind of work has, historically, been a key part of environmental enforcement. As the second Trump administration haphazardly works to downsize the federal workforce, many people reasonably worry that offices like EPA's Office of Enforcement and Compliance Assurance will have reduced capacity to hold firms and individuals accountable to environmental laws.

Direct, agency-led inspections, however, are only one small piece of the enforcement of federal environmental law in the United States. In fact, when Congress penned and revised many foundational environmental statutes in the 1970s, it assumed that federal agencies would be unlikely to robustly and reliably enforce these new environmental protections. To account for this, Congress drew on ideas from the public interest law movement and wrote so-called citizen suit provisions into most major environmental statutes. These clauses were written to allow any citizen to sue the federal government to hold it accountable for its legal obligations to enforce environmental laws.

In other words, Congress empowered civil society and the courts to hold the federal government's environmental feet to the legal fire. Thus, environmental advocacy groups—big ones, like the Natural Resources Defense Council, but also small ones like Friends of Mount Hood in Oregon or the Altamaha Riverkeeper in Georgia—play a critical role in enforcing and upholding environmental laws. Their role is especially important when actions by the president or pressure from Congress lead to less vigorous enforcement of environmental statutes by the executive branch.

So how well does civil enforcement work? Whose concerns are prioritized? What environmental harms are litigated—and which are overlooked? Until recently, there was no systematic, data-driven analysis to help answer these critical questions. Since 2021, the lab group I lead has been conducting a sweeping overview of federal civil environmental suits in the United States, which offers a starting place for some answers.

### Mapping the environmental-legal landscape

Overall, environmental civil conflict makes up a trivial fraction of all federal civil litigation—less than 1% each year since 1988. (We don't examine data earlier than that.) And while the total number of civil lawsuits in the entire federal court system has steadily grown since the late 1980s, the number of environmental suits has declined in both absolute and proportional terms. In 2022, out of 266,080 total cases, only 415, or 0.15% of all lawsuits, were environmental civil suits. Claims that environmental groups file large numbers of

frivolous lawsuits might make good talking points for critics of the environmental movement, but the data suggest that environmental civil enforcement has actually declined over the past four decades.

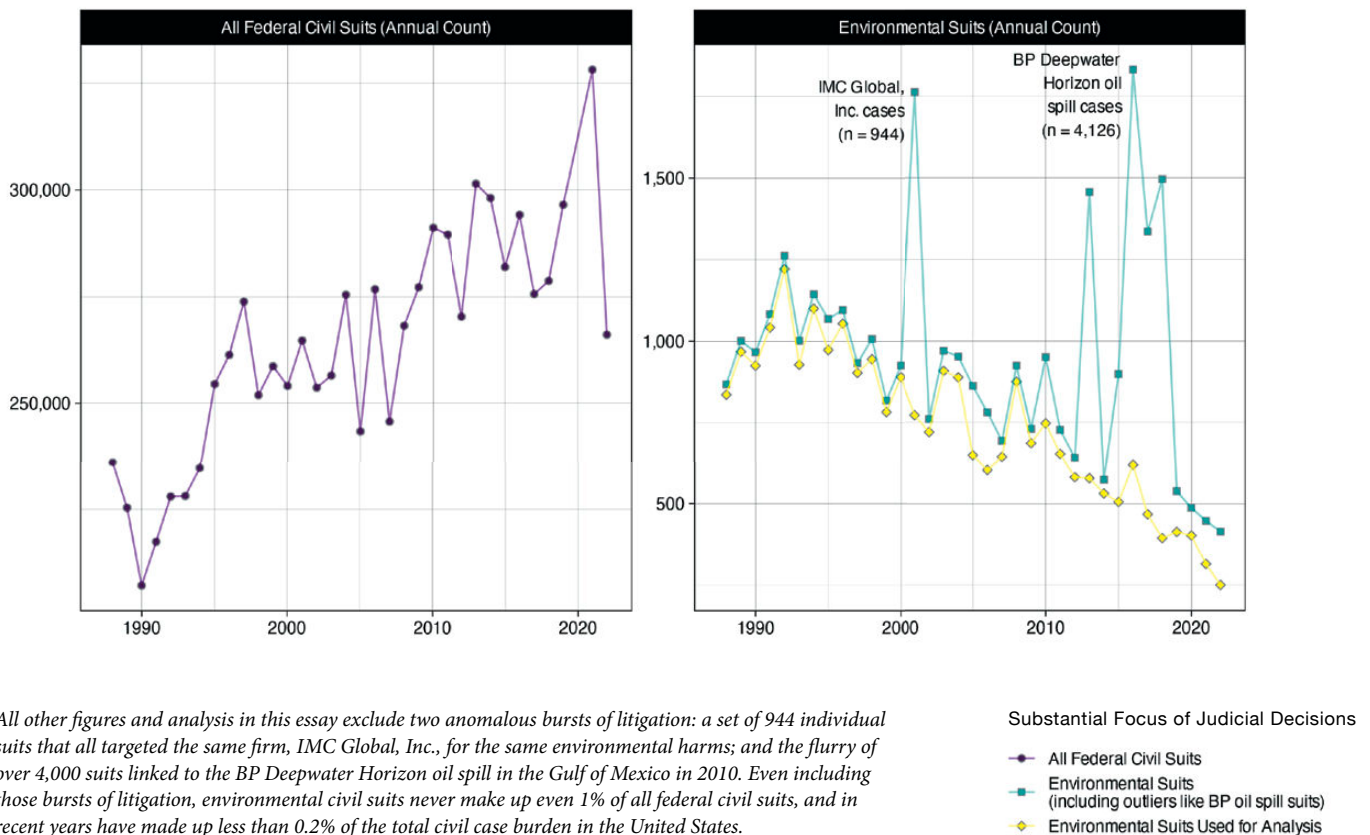
Of the environmental suits that are filed, it also turns out that most are not brought by environmental advocacy groups. The federal government itself often uses civil suits to enforce environmental laws—not just criminal prosecutions—and is the most common environmental-civil plaintiff overall. Environmental advocacy groups are a very close second, followed by firms, all of which drive roughly equal shares of environmental litigation. Together, these three plaintiff types account for just under three-quarters (73.9%) of all environmentally focused, federal civil litigation in the United States.

There are clear patterns to plaintiff-defendant pairings (Figure 2). When the federal government sues under environmental statutes, it overwhelmingly targets firms that it contends have violated environmental laws. For the most part, the courts seem to agree: The federal government wins about 70% of the cases that it brings (Figure 3). In

comparison, environmental advocacy groups win about half the cases they litigate. As plaintiffs, these groups tend to target the federal government and, secondarily, firms and trade associations, fulfilling the roles of citizen-enforcers imagined by Congress in the 1970s. Their 50% success rate suggests that civil society-driven environmental enforcement “works” inasmuch as it regularly forces the government and firms to more robustly comply with environmental laws.

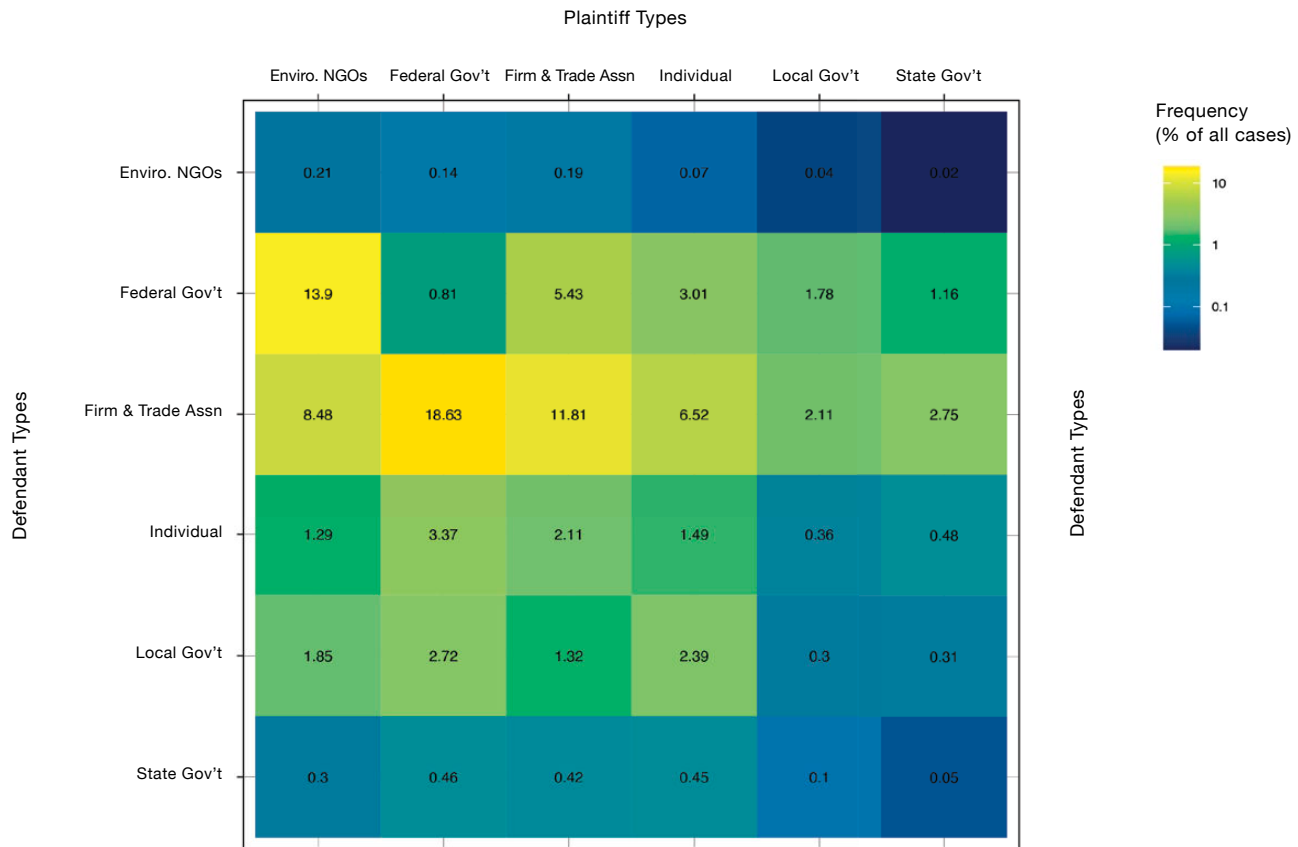
Firms seem mostly to *not* use the courts to fight back against environmental regulations. Just over half of firm-led suits are essentially business disputes: firms suing other firms over things like liability for cleanup costs under statutes that govern the disposal and cleanup of toxic and solid waste, such as the Comprehensive Environmental Response, Compensation, and Liability Act (a.k.a. Superfund) and the Resource Conservation and Recovery Act. Only about a quarter of firm-led suits target the federal government in cases that challenge environmental laws and rules. After excluding for cases where firms sue other firms (which, by definition, yield a 50% win rate), firms as plaintiffs win just over a third of disputes.

Figure 1. TOTAL FEDERAL CIVIL SUITS COMPARED TO ENVIRONMENTALLY FOCUSED SUITS



All other figures and analysis in this essay exclude two anomalous bursts of litigation: a set of 944 individual suits that all targeted the same firm, IMC Global, Inc., for the same environmental harms; and the flurry of over 4,000 suits linked to the BP Deepwater Horizon oil spill in the Gulf of Mexico in 2010. Even including those bursts of litigation, environmental civil suits never make up even 1% of all federal civil suits, and in recent years have made up less than 0.2% of the total civil case burden in the United States.

Figure 2. COMBINATIONS OF PLAINTIFF AND DEFENDANT TYPES



Across 25,775 environmental cases litigated between 1988 and 2022, the vast majority (73.9%) are brought by three types of plaintiffs: the federal government (26.3%), environmental nongovernmental organizations (26.2%), and firms and trade associations (21.4%).

Overall, the data show that although the federal government, advocacy groups, and firms participate in environmental litigation in roughly equal shares, environmental advocacy groups are by far the most effective at using the courts to shape federal environmental policy. This contrasts with other institutional arenas outside the courts. For example, firms and industry associations dominate energy-related lobbying and legislative policymaking.

**Strengths and gaps in civil enforcement**

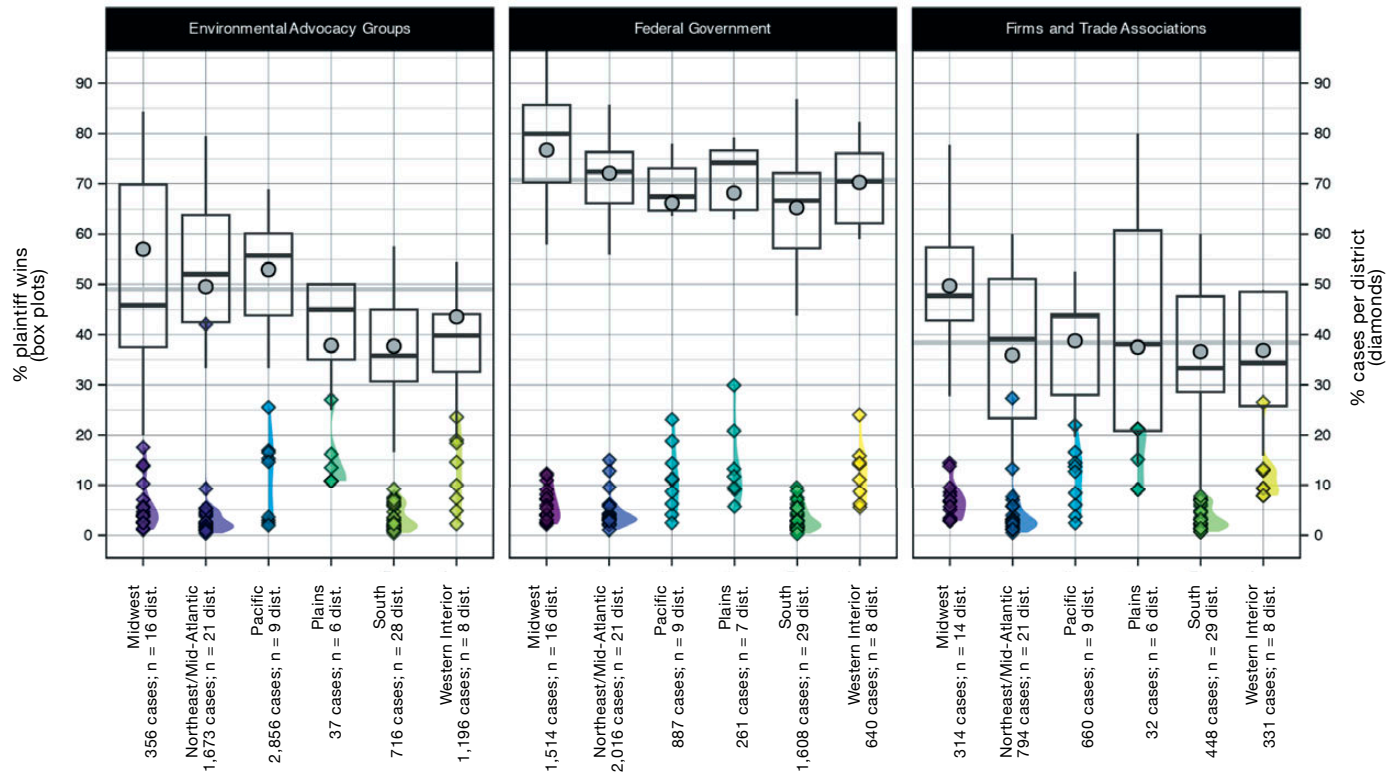
Civil society-driven enforcement may work in the sense that it regularly holds the government and firms accountable to environmental laws, but it also has significant drawbacks and blind spots. Most notably, this form of enforcement is decentralized and uncoordinated: No single entity is charged

with coordinating what areas of environmental law to focus on, or where, geographically, to target that enforcement.

Environmental civil litigation is informally led by the so-called Big Greens—well-known organizations like the Natural Resources Defense Council, the Sierra Club, Earthjustice, Environmental Defense Fund, the Center for Biological Diversity, and so on—but hundreds of other smaller organizations also bring suits focused on whatever topics and issues matter to them, wherever these groups are located. The result is an enforcement regime that reflects the collective and implicit biases of the amalgam of citizen groups that bring legal actions in the name of environmental protection. Those biases reflect the priorities and historic focus of the US environmental movement as a whole.

For example, the thinking and leadership of founding environmental luminaries such as John Audubon, George

Figure 3. PLAINTIFF WIN RATES



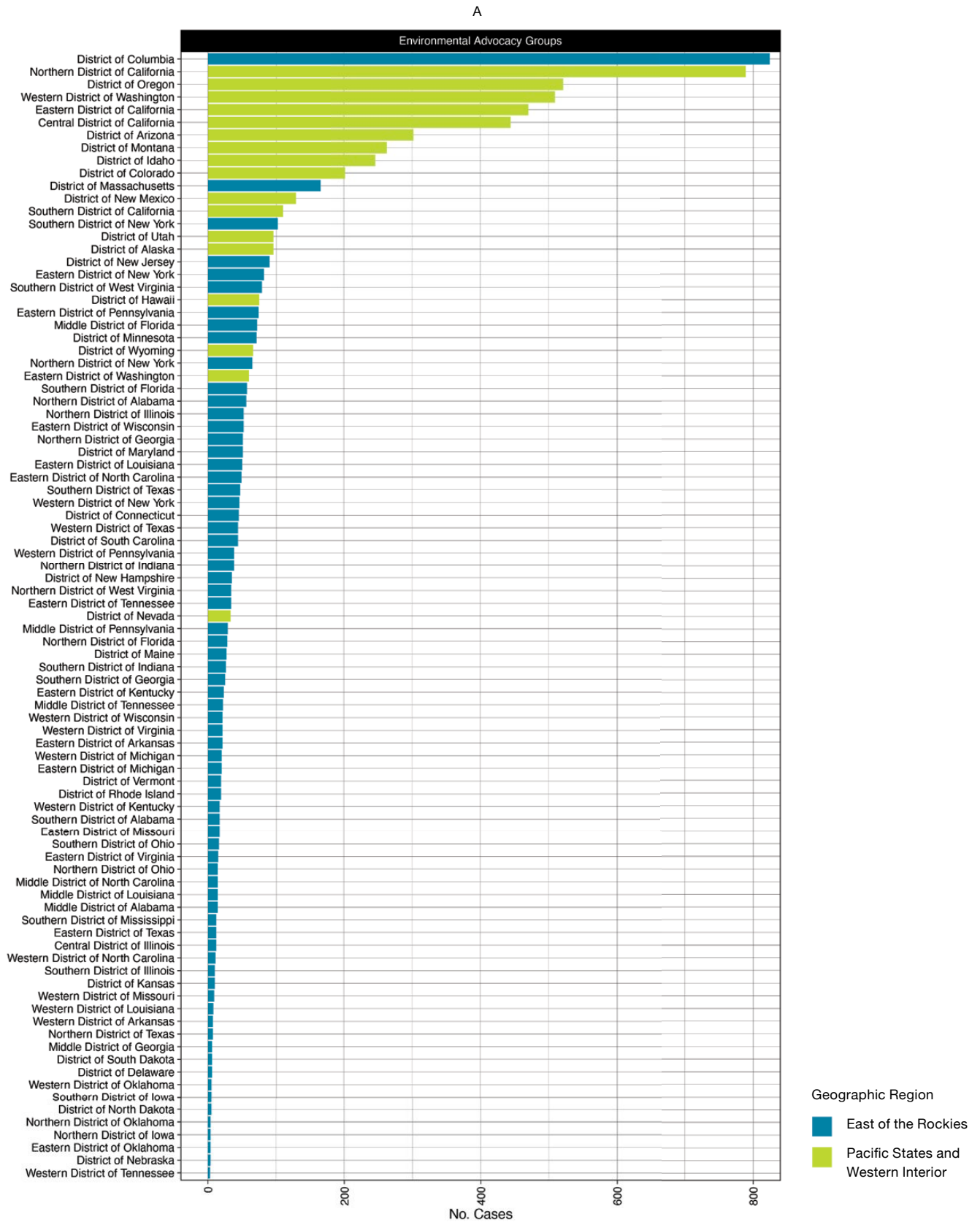
Plaintiff win rates across the 90 US federal court districts by plaintiff type and by six major regions across the United States (territorial districts are excluded). Further discussion of the method for coding win rates and other notes on methodology are explored in the lab group's supplemental materials for the project. Grey dots indicate mean win rate across districts within a region. For box plots, the heavy bar is the median, the box ends are the 25th and 75th percentiles, and the whisker ends represent the 5th and 95th percentiles. Light grey line is the mean win rate for all for each plaintiff type across all regions. Colored diamonds and associated density plots indicate the percent of cases in each district in a region and the distribution of cases across districts within a region, respectively.

Grinnell, Aldo Leopold, John Muir, and Henry David Thoreau were shaped by ideas about the “wild” American frontier and the vast “wilderness” landscapes of the West. The priorities and focus of contemporary environmental advocacy groups continue to emphasize the protection of the same places. The overwhelming majority of litigation driven by environmental advocacy groups is focused in the Pacific coast states, especially California, and in the Western interior, in states like Arizona, Montana, Idaho, and Colorado (Figure 4A)—places where the volcano-speckled rainforests of the Pacific Northwest, the mesas and red rocks of the Southwest, and the granite monoliths of the Sierra Nevada form iconic landscapes long celebrated by American conservationists. Federal court districts east of the Rocky Mountains, by contrast, barely register in terms of suits brought by environmental advocacy groups.

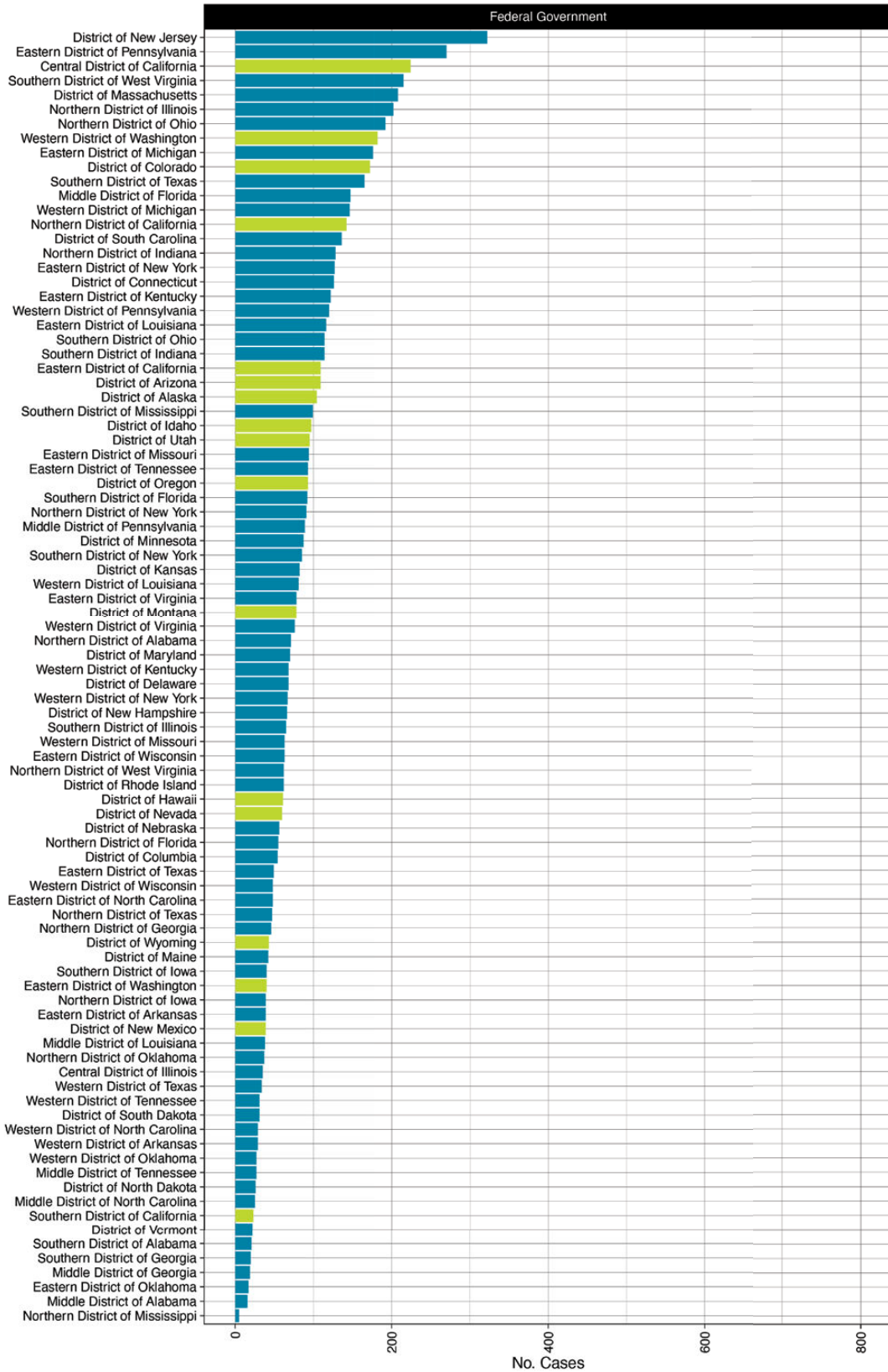
The topical focus of lawsuits brought by environmental advocacy groups also reflect a bias toward conflicts related to land use and conservation, in contrast to conflicts centered on issues directly affecting human health, like waste and pollution (Figure 5). These geographic and topical patterns imply that the forms of nature and the people of the western United States enjoy the benefits of a comparatively robust civil society-driven enforcement regime, while the rest of the country remains, by and large, off the radar of environmental civil society groups.

To be sure, there are many important environmental-legal battles to be waged in the West over land use and pollution and more recently, increasing conflicts over renewable energy siting that present new challenges for balancing conservation with the need to address climate change. Vast tracts of public land in the West also invite litigation targeting governmental actions. Our data show that the US Forest Service, not EPA, is the most

Figure 4. DISTRIBUTION OF SUITS

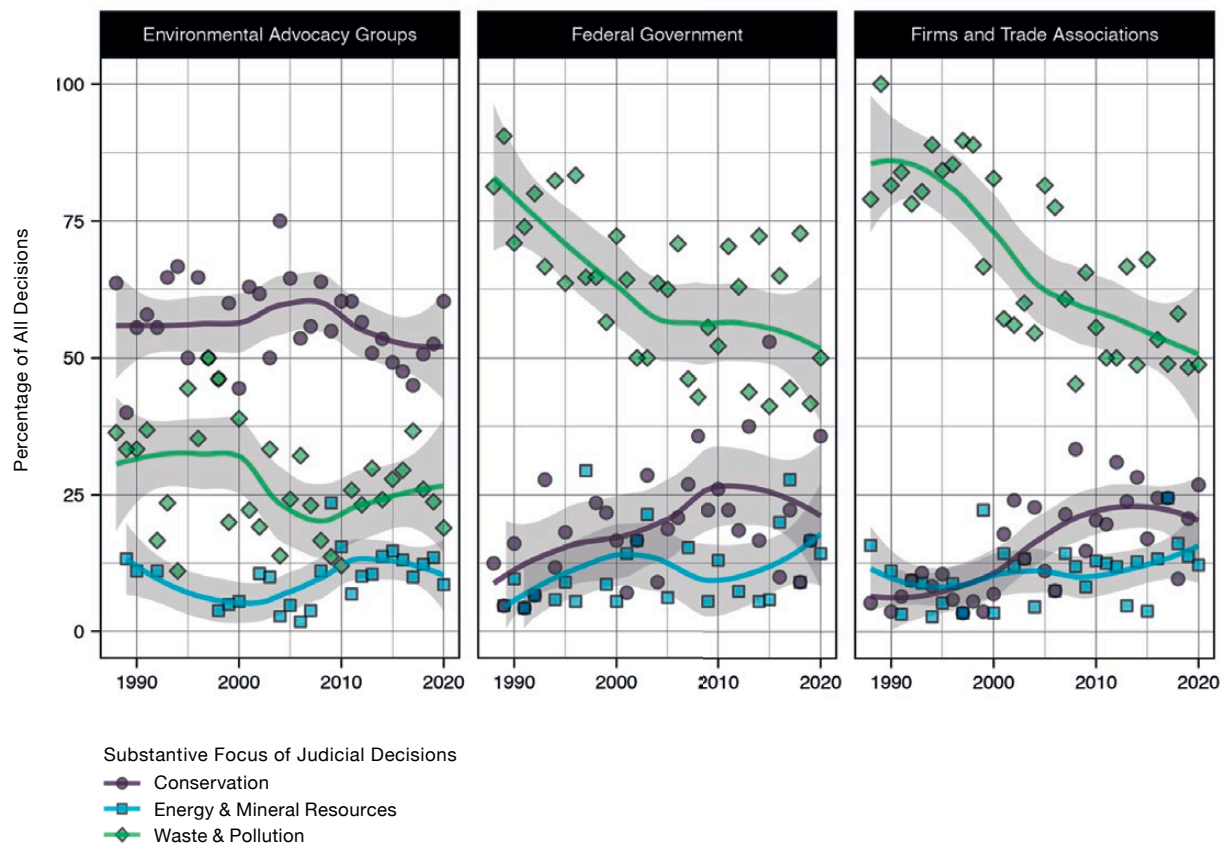


B



Distribution of suits brought by (A) environmental advocacy groups and (B) the federal government across 90 US federal court districts east (blue) and west (green) of the Rocky Mountains.

Figure 5. SUBSTANTIVE FOCUS OF LITIGATION BROUGHT BY DIFFERENT PLAINTIFF TYPES



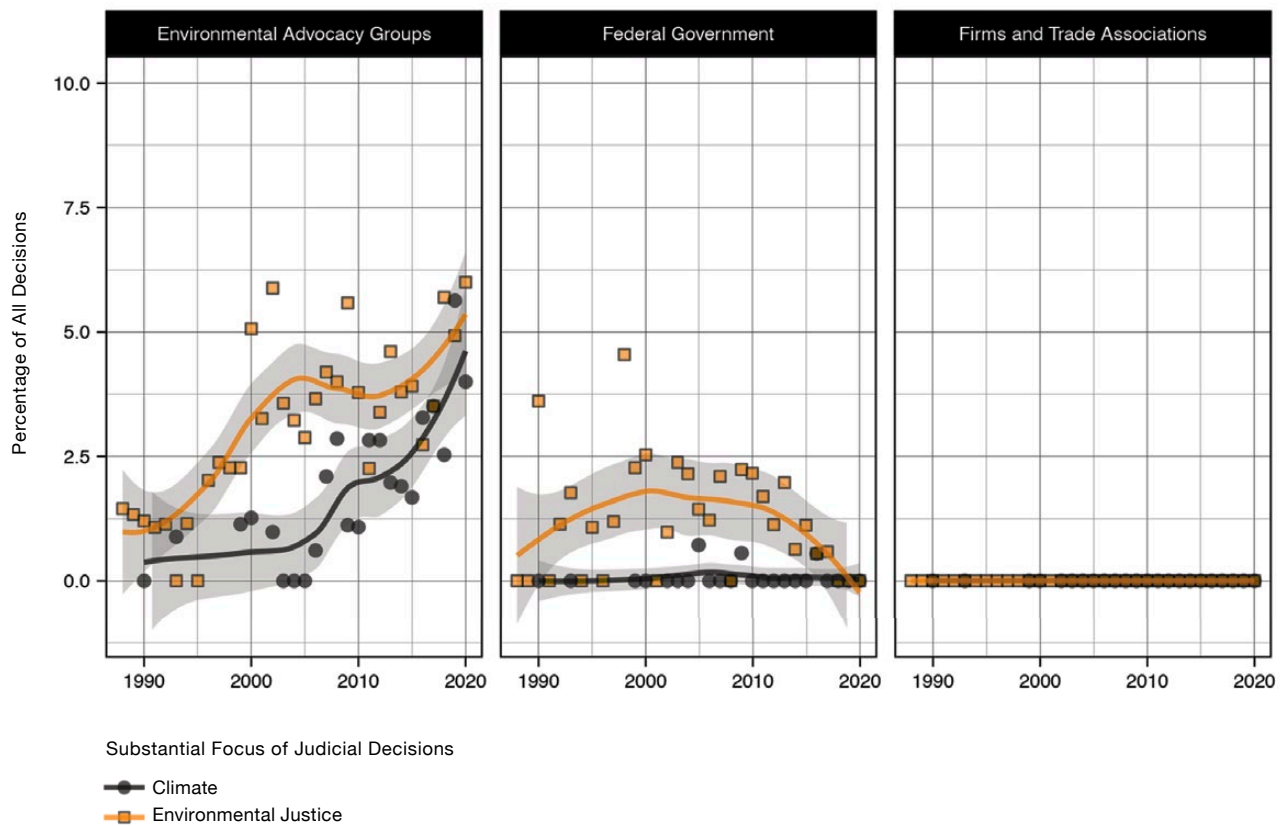
heavily litigated federal environmental agency; almost all of its activity is focused in Western states.

But serious environmental problems like toxic air pollution are disproportionately common in the Southeast, and threats to biodiversity loss plague the South and Northeast, in addition to the West. The postindustrial Midwest and Northeast are home to a disproportionate share of legacy sites of heavy industry and manufacturing, where toxic waste remains largely “unseen.” The Gulf states, the South, and Appalachia are still epicenters of pollution and environmental degradation driven by petrochemical refining, mountain-top mining, hydraulic fracturing, and other manufacturing industries. Environmental concerns are prominent and longstanding in these places. Because of its history of both lax environmental regulation and racial segregation, for example, the South is where the modern environmental justice movement was born. But despite the urgency and ubiquity of environmental harms in these places, they are not the areas where civil society groups focus most of their environmental-legal attention.

The data shows that the federal government’s approach to environmental litigation has been more geographically egalitarian (Figure 4B). The federal government focuses most of its legal-environmental attention on waste and pollution-related violations (Figure 5)—the focus of environmental justice advocates and the sorts of harms that are more likely to impact Black, poor, and other historically disadvantaged communities—over land use and conservation cases. Federal court districts with the most government-driven environmental litigation are in places like New Jersey, Pennsylvania, California, West Virginia, Massachusetts, Illinois, and Ohio—more populated districts with more industry and thus more risks of pollution and environmental harm.

To be clear, the federal government has not historically been an ally to the environmental justice movement. Agencies like EPA have been reticent to integrate environmental justice considerations into their regulatory work, and governments have often played a key role in supporting the industries and siting decisions, such as the locations of incinerators and

Figure 6. PREVALENCE OF KEYWORDS THAT SIGNAL A FOCUS ON CLIMATE CHANGE OR ENVIRONMENTAL JUSTICE BY DIFFERENT PLAINTIFF TYPES



chemical plants and refineries, that lead to environmental injustices. Since its inception, the environmental justice movement has been guided by civil society groups fighting these kinds of environmental wrongs, often directly in opposition to governmental entities.

But the civil society groups that bring most environmental suits in federal court are not, by and large, environmental justice organizations. Although the legal community is increasingly attentive to themes of environmental justice, and environmental advocacy groups have increasingly invoked these themes in the cases they litigate, those themes remain marginal overall, appearing in only 5% of cases brought by environmental groups in recent years (Figure 6). We observe these patterns by looking for terms related to environmental justice, like “discrimination,” “equal protection,” “protected class,” or terms that indicate ethnicity, like “Black” or “Latino,” in environmentally focused judicial opinions. Cases brought by the federal government are less likely to directly invoke environmental justice themes, but

substantively, by focusing on waste and pollution across a far more representative sample of the United States, the federal government is arguably doing much more to address the root causes of environmental injustice—harmful waste and pollution in the regions of the country where most people live.

Litigation is a powerful but imperfect political tool. Environmental advocacy groups play a key role in the enforcement of environmental laws. But the thousands of individual choices made by civil society leaders and environmental organizations about where to train their legal attention do not necessarily add up to a just and equitable environmental enforcement regime. Large-scale litigation data provide insight into the efficacy of decentralized, citizen-led enforcement efforts, revealing patterns that are especially important to keep in mind when the federal government steps away from its environmental-legal obligations.

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