HOW PRIVATE ENFORCEMENT EXACERBATES CLIMATE CHANGE

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Private enforcement—the practice of allowing private actors to directly enforce statutes or regulations—has been a fixture of environmental law for the last fifty years. In the absence of comprehensive climate legislation, climate change has been brought under the fold of the environmental regime and its emphasis on private enforcement. Yet climate change presents a distinct global challenge from those harms that the 1970s environmental regime was designed to address. This Article investigates how private enforcement is limiting our ability to respond to the crisis of climate change. The central claim is that private enforcers are using the mantle of environmental protection to prioritize private interests in ways that are paradoxically exacerbating climate problems, deepening inequality, and placing a disproportionate burden on those with the least voice.

In advancing this claim, this Article makes three main contributions. First, I show how the political foundations of private enforcement in environmental law grew out of an era of crisis and were based on a widespread distrust of government. Second, I challenge the traditional rationale that private enforcers provide a powerful check on the influence of special interests and ideology in government. I argue that while private enforcers take on a range of actions related to environmental protection and climate change mitigation, private enforcement also operates as a largely unchecked form of special interest whose priorities serve to deepen the climate crisis. This reinforces not just particular interests but particular visions of environmentalism that are often at odds with the broader public interest in tackling climate change. This failure of private enforcement suggests the need to reexamine the ways in which private and public enforcement serve, or fail to serve, as checks upon the other. As a third contribution, I

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consider the benefits and drawbacks of potential prescriptions to address this particular failure of private enforcement.

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INTRODUCTION

In 1989, Maryland began exploring options to expand mass transit for residents of Montgomery County and Prince George's County to commute around Washington, D.C.[1] Years of planning determined that a "Purple Line" light rail would provide faster and more reliable East-West transit connections to major activity centers and employment. At the time, the only public transit option in that corridor was an unreliable network of buses running on congested roads and highways. Not only would the project improve the work commute for thousands by replacing long bus rides, but the light rail would also reduce traffic congestion. An environmental impact review stated that the decreased congestion would improve air quality and curb greenhouse gas emissions, and that any adverse environmental impacts would be minimal.[2] Initial estimates projected the light rail to cost $1.93 billion and take nine years to complete.[3]

For years, residents of Chevy Chase, Maryland, a wealthy D.C. suburb through which the Purple Line would pass, voiced their opposition to the project. During a town hall meeting in 2007, a resident argued that the project was "trying to solve the problem of the people out in Silver Spring and P.G. County . . . . And we live here. We have to live with this thing . . . and I see it simply as a nuisance, more than a nuisance. I see it as a very negative thing for our town."[4] In 2014, a nonprofit made up of Chevy Chase residents sued, arguing the environmental review was deficient and that, in fact, the project would destroy the habitat of a

1 BENJAMIN ROSS, DEAD END: SUBURBAN SPRAWL AND THE REBIRTH OF AMERICAN URBANISM 165–66 (2014).

2 1 FED. TRANSIT ADMIN. & MD. TRANSIT ADMIN., PURPLE LINE: FINAL ENVIRONMENTAL IMPACT STATEMENT & DRAFT SECTION 4(F) EVALUATION 4-97 to 4-99 (2013), https://www.purplelinemd.com/about-the-project/studies/11-feis-document [https://perma.cc/9KDB-ELKT]. The Purple Line would use an existing transportation corridor, and the impact to land and water resources would be minimal. The final environmental impact statement (EIS) noted that there would be moderate noise and some vibration to a few properties. *Id.* at 4–10.

3 Carolyn M. Proctor, *The Purple Line's Many Twists and Turns on the Road to Completion*, WASH. BUS. J. (Mar. 2, 2021, 4:33 PM), https://www.bizjournals.com/washington/news/2021/02/26/purple-line-twists-turns-timeline.html [https://perma.cc/5UA4-H9J2].

4 Veda Charrow, Remarks at the Town of Chevy Chase, Maryland Town Council Meeting on the Purple Line 74–75 (June 6, 2007), https://www.townofchevychase.org/Archive/ViewFile/Item/373 [https://perma.cc/JM6H-PB5D].

transparent, microscopic invertebrate known as an amphipod.[5] Upon this allegation, a judge enjoined the project until scientists could assess the impact on the amphipod. Yet, after additional scientific analysis and agency coordination, no evidence could be found that any such amphipod existed in the region.[6] Over the next several years, the nonprofit sued twice more, raising various new claims ranging from the legality of the project's funding to the validity of a wetlands analysis.[7] Ultimately, this project remains under construction, years over deadline, and with an extra cost of nearly $4 billion.[8] Similar stories have been playing out for decades in urban and rural places across the country.

Public transportation, clean energy infrastructure, and urban housing are critical components of federal, state, and local government responses to climate change. Large-scale implementation of these types of climate-mitigating projects is urgently needed and long overdue. As the latest Intergovernmental Panel on Climate Change (IPCC) report makes clear, action must proceed on an accelerated time scale to avoid the worst effects of climate change and minimize compounding the effects of past impacts.[9] Despite significant public support for climate action,[10] one main obstacle to achieving these goals is the public itself. Rather than taking action that supports climate change, the environmental rules and regulations that govern these projects are often "weaponized" by private citizen enforcers to advance narrowly motivated interests that interfere with climate action.[11] The same laws that so successfully tackled the pollution and public health woes of the 1970s are frustrating attempts to address today's environmental and social ills. They are also deepening a crisis that disproportionately burdens

5 Jerusalem Demsas, *Why Does It Cost So Much to Build Things in America?*, VOX (June 28, 2021, 7:00 AM), https://www.vox.com/22534714/rail-roads-infrastructure-costs-america [https://perma.cc/66KR-6LNB]; Proctor, *supra* note 3; *see* Friends of the Cap. Crescent Trail v. Fed. Transit Admin., 255 F. Supp. 3d 60, 73–74 (D.D.C.), *aff'd*, 877 F.3d 1051 (D.C. Cir. 2017).

6 *See Friends of the Cap. Crescent Trail*, 255 F. Supp. 3d at 73.

7 Friends of the Cap. Crescent Trail v. Fed. Transit Admin., No. 17-1811, 2019 WL 1046889, at *2–3 (D.D.C. Mar. 5, 2019); Friends of Cap. Crescent Trail v. U.S. Army Corps of Eng'rs, 453 F. Supp. 3d 804, 811–12, 815–16 (D. Md. 2020), *aff'd*, 855 F. App'x 121 (4th Cir. 2021).

8 *See* Proctor, *supra* note 3.

9 *See generally* Press Release, Intergovernmental Panel on Climate Change, Climate Change Widespread, Rapid, and Intensifying—IPCC (Aug. 9, 2021) [hereinafter IPCC Press Release], https://www.ipcc.ch/site/assets/uploads/2021/08/IPCC_WGI-AR6-Press-Release_en.pdf [https://perma.cc/Q8DM-76AJ].

10 Almost 80% of U.S. adults support developing alternative energy sources over expanding fossil fuels, and almost 60% agree that government regulation is necessary to encourage increased reliance on renewable energy. ALEC TYSON & BRIAN KENNEDY, PEW RSCH. CTR., TWO-THIRDS OF AMERICANS THINK GOVERNMENT SHOULD DO MORE ON CLIMATE (2020).

11 Demsas, *supra* note 5; David E. Adelman & Robert L. Glicksman, *Reevaluating Environmental Citizen Suits in Theory and Practice*, 91 U. COLO. L. REV. 385, 387 (2020).

socioeconomically disadvantaged communities, which often lack the necessary resources to challenge federal action.

The United States has a long tradition of relying on private enforcement. Since the 1800s, Congress has taken a decentralized approach to regulatory enforcement in many sectors, authorizing citizens to protect underlying rights and statutory goals.[12] The early- and mid-twentieth century saw several major regulatory shifts during the New Deal era with Congress further vesting enforcement power in private citizens.[13] The most recent period of major regulatory reform came in the 1960s and 1970s in response to more than a decade of social unrest and protest against massive industrial pollution and the racialized impacts of urban redevelopment during the mid-century that resulted from both federal action and inaction.[14] Across many domains of public law, including antitrust, civil rights, and employment, Congress empowered citizens to enforce the new public regulatory regime. More than simply aiding the government, this legislation "empowered citizens with institutional tools to translate preferences into government outcomes."[15] In authorizing private enforcement for environmental regulation, Congress sought to "spur and supplement" citizen participation in the regulatory system through a series of incentives.[16] "[T]he 'citizen suit' clauses found in . . . [these] environmental statute[s] . . . were explicitly justified as a mechanism that would deputize 'private attorneys general' to assist the Environmental Protection Agency ('EPA') and other federal

12 *See* ROBERT A. KAGAN, ADVERSARIAL LEGALISM: THE AMERICAN WAY OF LAW 9 (2001) (describing the "American way of law" as a system that emphasizes litigant participation and activism); *see also* Donald H. Zeigler, *Rights, Rights of Action, and Remedies: An Integrated Approach*, 76 WASH. L. REV. 67, 75, 83 (2001) (tracing evolution of private enforcement from "the late 1800s and early 1900s, [during which] American state courts routinely allowed private remedies for violations of statutes containing other sanctions" to the late 1960s when "suddenly the Court sharply differentiated between rights, rights of action, and remedies"); J. Maria Glover, *The Structural Role of Private Enforcement Mechanisms in Public Law*, 53 WM. & MARY L. REV. 1137, 1147–53 (2012) (briefly describing the history of private enforcement in the regulatory state and noting the increasing reliance on agencies and private enforcers in the early 1900s and again during the New Deal era).

13 *See, e.g.*, Securities Exchange Act of 1934 § 15, 15 U.S.C. § 78o; Act of Oct. 21, 1976, Pub. L. No. 94-574, 90 Stat. 2721 (codified at 5 U.S.C. § 702) (amending Administrative Procedure Act, Pub. L. No. 79-404, 60 Stat. 237 (1946)).

14 ALAN ALTSHULER & DAVID LUBEROFF, MEGA-PROJECTS: THE CHANGING POLITICS OF URBAN PUBLIC INVESTMENT 22–25 (2003); *see* 116 CONG. REC. 32901 (1970) (statement of Sen. Edmund Muskie).

15 Leah Brooks & Zachary Liscow, *Infrastructure Costs* 4 (Hutchins Ctr. on Fiscal & Monetary Pol'y at Brookings, Working Paper No. 54, 2019), https://www.brookings.edu/wp-content/uploads/2019/08/WP54_Brooks-Liscow_updated.pdf [https://perma.cc/D8SG-C2VA]; *see also* ALTSHULER & LUBEROFF, *supra* note 14.

16 Comm. on Env't & Pub. Works, Clean Water Act Amendments of 1985, S. Rep. No. 99-50, at 28 (1985).

agencies in the enforcement of environmental regulations."[17] Thus, a central feature of nearly every major environmental law was the recognition that citizens could and should play a vital role in supporting the government's police power to regulate private activities "that adversely affect[ed] public health and welfare" through their "impact . . . on the natural environment."[18]

In a 1970 address to Congress shortly after ushering in an "environmental era," President Nixon invoked an ideal vision of shared governance:

> The task of cleaning up our environment calls for a total mobilization by all of us. It involves governments at every level; it requires the help of every citizen. It cannot be a matter of simply sitting back and blaming someone else. Neither is it one to be left to a few hundred leaders. Rather, it presents us with one of those rare situations in which each individual everywhere has an opportunity to make a special contribution to his country as well as his community.[19]

Over the next several decades, private enforcement would evolve into a powerful regulatory tool due to a confluence of factors, including distrust of centralized government,[20] growth of public interest organizations,[21] and judicial decisions that expanded citizen standing and judicial review over executive agency action.[22] Today, private enforcers are a fixture in the environmental regulatory process at the federal and state levels.

President Nixon's ideal theory of democratic mobilization to address environmental harm by holding polluters and the government accountable is both laudable and rife with complexity. Indeed, scholars, reformers, and legislators have celebrated citizen enforcement as instrumental in fulfilling the mission of the modern environmental

17 Matthew C. Stephenson, *Public Regulation of Private Enforcement: The Case for Expanding the Role of Administrative Agencies*, 91 VA. L. REV. 93, 99 (2005) (footnote omitted).

18 RICHARD J. LAZARUS, THE MAKING OF ENVIRONMENTAL LAW 50 (2004). The only major modern American environmental statutes that lack citizen suit provisions are the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136, and the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321, 4331–4335, 4341–4347. However, courts have recognized the propriety of private suits under the Administrative Procedure Act (APA) for failure to comply with NEPA. *See* 5 U.S.C. § 702 (citizen suit provision); Pub. Citizen v. Off. of the U.S. Trade Representatives, 970 F.2d 916, 918 (D.C. Cir. 1992); *see also* Bradley C. Karkkainen, *Environmental Lawyering in the Age of Collaboration*, 2002 WIS. L. REV. 555, 556.

19 Current Documents, *President Nixon's Message on the Environment, 1970*, 58 CURRENT HIST. 362, 364 (1970).

20 *See* PAUL SABIN, PUBLIC CITIZENS: THE ATTACK ON BIG GOVERNMENT AND THE REMAKING OF AMERICAN LIBERALISM (2021).

21 "For example, the Environmental Law Institute was founded within two weeks of NEPA's passage in 1970." Brooks & Liscow, *supra* note 15, at 21.

22 Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402 (1971).

regime.[23] But private enforcement can also come at the expense of the public's interest in a clean, healthy environment. For instance, the results of private lawsuits to enforce the National Environmental Policy Act of 1969 (NEPA) in the climate context are more mixed. On the one hand, citizen suits have successfully supported the goal of climate mitigation by, for instance, blocking oil and gas leases, at least temporarily, and contributing to efforts to halt further development of oil and gas infrastructure, such as the Keystone Pipeline.[24] But in other arenas where the transition to a new energy future is most urgent, private enforcement is having a paradoxical effect of hamstringing efforts to address climate change. Despite the urgent public interest in climate change action, private actors are using the cloak of environmental protection to resist projects that would form the infrastructure of a clean energy future for mitigating greenhouse gas emissions. A similar dynamic plays out at the state level where powerful NEPA corollary statutes similarly empower citizens to enforce the law, to both the benefit and detriment of climate goals.[25]

This use of citizen suits could limit the effect of historic multi-billion-dollar climate-related initiatives at the federal level[26] and in some key states.[27] The recently passed Inflation Reduction Act of 2022 (IRA) invests nearly $370 billion in energy security and climate change programs, building on the earlier proposed "generational"[28] trillion-dollar federal infrastructure bill, an ambitious congressional effort known as the Build Back Better plan.[29] These initiatives aim to mitigate the worst effects of climate change by modernizing the nation's electric grid;

23 *See generally* Barton H. Thompson, Jr., *The Continuing Innovation of Citizen Enforcement*, 2000 U. ILL. L. REV. 185.

24 Jeff Brady & Neela Banerjee, *Developer Abandons Keystone XL Pipeline Project, Ending Decade-Long Battle*, NPR (June 9, 2021, 5:59 PM), https://www.npr.org/2021/06/09/1004908006/developer-abandons-keystone-xl-pipeline-project-ending-decade-long-battle [https://perma.cc/7HUT-BSJ9].

25 *See* CAL. PUB. RES. CODE § 21177 (West 2022).

26 Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818.

27 Letter from Gavin Newsom, Governor, California, to Liane Randolph, Chair, Calif. Air Res. Bd. (July 22, 2022), https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6 [https://perma.cc/PY8N-L7BJ]; Press Release, Off. of Governor Gavin Newsom, Governor Newsom Calls for Bold Actions to Move Faster Toward Climate Goals (July 22, 2022), https://www.gov.ca.gov/2022/07/22/governor-newsom-calls-for-bold-actions-to-move-faster-toward-climate-goals [https://perma.cc/6626-36EZ].

28 Adie Tomer, *The Senate Infrastructure Bill Puts America Close to Another New Deal*, BROOKINGS (Aug. 5, 2021), https://www.brookings.edu/blog/the-avenue/2021/08/05/the-senate-infrastructure-bill-puts-america-closer-to-another-new-deal [https://perma.cc/3Q26-98NZ].

29 Kelsey Snell, *After Spiking Earlier Talks, Manchin Agrees to a New Deal on Climate and Taxes*, NPR (July 27, 2022, 9:00 PM), https://www.npr.org/2022/07/27/1114108340/manchin-deal-inflation-reduction-act [https://perma.cc/ZT8M-GHA8].

investing in clean energy infrastructure and public railways and transportation projects, like Amtrak; and fortifying natural disaster response, particularly in vulnerable communities.[30] Because climate change compounds and its effects worsen the longer greenhouse gas reductions and mitigation efforts are delayed, constructing alternative clean energy infrastructure in a timely manner is critical.[31] As in the example of the Purple Line, citizen suits risk creating fatal delays and other obstacles to implementation.

Although citizen suits have been the topic of scholarly debate for decades, and the modern Supreme Court has grown skeptical of such suits as an enforcement tool, there has been little systematic legal discussion about the role of private claims in mitigating climate change and its effects through enforcement of existing statutes.[32] This Article seeks to fill that gap. The traditional rationales for private enforcement—that private enforcement supplements and thus conserves limited government resources, protects against lax enforcement and the effects of regulatory capture, and enhances innovation and democratic participation[33]—are compelling in other contexts. I argue, however, that private enforcement in the context of NEPA claims is producing failures in our collective ability to address climate change by enabling suits that exacerbate the environmental problem the projects are intended to solve. As such, private enforcement reinforces existing patterns of participation and unequally distributes climate impacts, which have significant political, social, and environmental consequences. As one solution, I propose an agency gatekeeper. Agency gatekeepers can play a valuable role in environmental citizen suits in the climate era, but not for some of the reasons that are traditionally advanced related to overenforcement. Rather, I argue that agency gatekeepers are better suited to manage this task because they can mediate among competing interests brought by private enforcers through the lens of the public interest and climate change. More specifically, they can weigh the pros and cons across a range of issue areas in a way that legislation and the courts cannot provide. I advance this claim in four steps.

In Part I, I frame this problem within the current private enforcement literature focusing on the primary arguments in favor of and against citizen suits.

30 Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021); Emily Cochrane, *Senate Passes $1 Trillion Infrastructure Bill, Handing Biden a Bipartisan Win*, N.Y. TIMES (Nov. 15, 2021), https://www.nytimes.com/2021/08/10/us/politics/infrastructure-bill-passes.html (last visited Mar. 3, 2023).

31 *See generally* IPCC Press Release, *supra* note 9.

32 *See infra* Part I.

33 *See infra* Section I.A.1.

In Part II, I situate private environmental enforcement in an era of environmental reform and distrust—both public distrust of the government and congressional distrust of the executive. Citizen suit provisions aim to mobilize interested citizens as checks against executive power and to aid the executive in carrying out the law in the public interest, a task that neither the public nor Congress trusted the executive to discharge. Congress thus designed the private enforcement structure not only to address pollution but also to ensure the government remained accountable. As the environmental regime took shape, significant progress was made to control the problems it was designed to solve, namely, pollution. While the regime was built in some ways to expand as new problems emerged,[34] the phenomenon of climate change has posed a distinct environmental challenge. While known to some scientists at the time, its urgency and concrete human effects would take decades to emerge.

In Part III, I show how the primary arguments in favor of private enforcement fail in scenarios in which climate is an overriding public concern. One such argument, stemming from the concern for public accountability, is that private enforcement provides a backstop against lax government action and prevents regulatory capture. Yet what has evolved is a form of procedural capture by a private regulator who can claim the mantle of social and environmental protection—and may have more parochial environmental concerns at heart—but whose actions instead are leading to environmental degradation. This turns the literature on its head. That citizen enforcers can employ environmental law to block urgent climate action reveals a paradoxical quality of the private enforcement regime. While agency enforcers must prioritize actions in line with long-term, sometimes competing, regulatory objectives, private enforcers are not so bound.[35] This Part reveals that while public enforcers

34 The Clean Air Act of 1970 (CAA) established the National Emission Standards for Hazardous Air Pollutants, which can be modified upon a finding that a pollutant endangers human health. *See* 42 U.S.C. § 7412.

35 The types of entities that bring citizen suits are diverse. Many organizations that commonly act as private enforcers are environmental organizations that identify as acting in the public interest. Such public interest organizations, including environmental organizations, are also bound by other objectives, such as their mission, budget, and other limiting factors. Scholarly research on public interest organizations finds that these groups represent the motivations and objectives of their members, not the broader public. An organization's goals sometimes overlap with the broader public interest but may not and need not always. *See* Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 TUL. L. REV. 339, 344 (1990) (arguing that constraints on public servants make them more accountable to the public than private citizen enforcers). *See generally* JEFFREY M. BERRY, LOBBYING FOR THE PEOPLE: THE POLITICAL BEHAVIOR OF PUBLIC INTEREST GROUPS 3–5 (1977) (recognizing that the specific scope of the term "public interest" is contested). Other common citizen suit plaintiffs are not environmental organizations, but entities representing the

are subject to political currents and capture in the conventional sense, these are important limitations to private enforcement as well.

Part IV explores a set of prescriptions to address the particular aspects of private enforcement that are constraining well-designed climate change mitigation policies. I first examine the benefits and drawbacks of technical solutions to bypass citizen participation for projects intended to have a climate benefit through streamlining. Second, I propose to apply a form of agency gatekeeping to NEPA. The gatekeeper could limit private enforcement action to those activities that provide the greatest environmental and societal benefit. Moreover, as an accountability mechanism, the agency gatekeeper could also improve the nature of private enforcement as a more equitable, distributive, and democracy-enhancing tool.

Climate change is outpacing our capacity to respond to it on a daily basis. This project unveils private action as a deeply entrenched issue at the heart of our ability to react effectively to climate change. The effects of environmental private enforcement throw into relief current questions about the role and balance of public versus private power in the United States. These questions are central to our system of government and current debates about democracy and how we value, protect, and improve our democracy. The way in which these debates play out in the environmental and climate sphere is emblematic of these broader debates.

While this project focuses primarily on private environmental enforcement at the federal level, this dynamic, the relative balance of public and private power to address issues of social and environmental concern, is occurring at state and local levels as well. Future projects will explore the dynamics of who holds the powers to determine our collective response to climate change and the ecosystem of private enforcement and climate policy across federal, state, and local systems. The reality of citizen suits in the climate change setting draws into vivid relief the paramount importance of comprehensive climate legislation and interagency coordination; in an era defined by global ecological interdependence, we

interests of a particular community, industry, or other interest group. These groups may not have any environmental nexus or concern beyond fulfilling the limited mission of serving their members' private interests. For some of these groups, there is, decidedly, no corresponding public interest obligation. In the examples of the Conservation Congress and the Friends of the Capital Crescent Trail, described in this Article, two different types of organizations exhibit similar behavior in litigating the interests of their organizational members, a small subset of the overall population. They focus on the singular objective of protecting a particular species, the northern spotted owl and the amphipod, respectively, to the exclusion of a broader public concern with climate change and the ways in which the agency action they are contesting would benefit this broader objective.

can no longer afford to rely on enforcement models built for less existential, global environmental threats.[36]

I. PRIVATE ENFORCEMENT DEBATES

Private enforcement is neither a new phenomenon nor a rare one.[37] It first became a prominent feature of the federal statutory regime during the Progressive Era of the early twentieth century.[38] Yet for much of the twentieth century, statutory regulation was the realm of a centralized bureaucracy.[39] The renaissance of private enforcement as an essential component of the enforcement lexicon dates to the 1960s and 1970s and the growth of the administrative state.[40] During this era, private rights of action emerged as a tool to assist the government in its primary role as legal and regulatory enforcer across a swath of new legislation addressing civil rights, workers' rights, and the environment.

Civil procedure scholars have long debated the benefits and drawbacks of vesting private citizens with the powerful tool of enforcement.[41] This Part draws on these conversations to identify the relevant arguments for and against private enforcement and their dominant role in the environmental statutory regime. These debates lay the groundwork for why private enforcement is both attractive and problematic in the climate context.

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36 Purdy refers to the 1970s as an era of "ecological interdependence." Jedediah Purdy, *American Natures: The Shape of Conflict in Environmental Law*, 36 HARV. ENV'T L. REV. 169, 215–26 (2012). A central thesis of this Article is that we are moving beyond ecological interdependence as a local or regional concept to an international one.

37 Stephen B. Burbank, Sean Farhang & Herbert M. Kritzer, *Private Enforcement*, 17 LEWIS & CLARK L. REV. 637, 643–44 (2013) (describing historical periods involving private enforcement dating back to the mid-1800s). Courts can also find that a right of action is "implied" even if the text lacks a private enforcement provision. *See* Cort v. Ash, 422 U.S. 66, 78 (1975) (setting forth the factor test to determine if a statute has an implied right of action); Caroline Bermeo Newcombe, *Implied Private Rights of Action: Definition, and Factors to Determine Whether a Private Action Will Be Implied from a Federal Statute*, 49 LOY. U. CHI. L.J. 117, 120 (2017) (discussing how private rights of action are express and can also be implied).

38 Prior to that era, "there was virtually no federal statutory or administrative law available to solve unremedied systemic problems through private enforcement." Burbank, Farhang & Kritzer, *supra* note 37, at 647. Burbank, Farhang, and Kritzer's research of enforcement regimes specified in legislation between 1947 and 2002 identifies "24% of the enforcement regimes include private enforcement mechanisms, although only about one-tenth of those rely exclusively on private enforcement." *Id.* at 685.

39 David Freeman Engstrom, *Agencies as Litigation Gatekeepers*, 123 YALE L.J. 616, 627 (2013).

40 *See* Burbank, Farhang & Kritzer, *supra* note 37, at 647; Glover, *supra* note 12, at 1147–50.

41 *See, e.g.*, William M. Landes & Richard A. Posner, *The Private Enforcement of Law*, 4 J. LEGAL STUD. 1, 15 (1975); Stephenson, *supra* note 17, at 106; Burbank, Farhang & Kritzer, *supra* note 37, at 662; Thompson, *supra* note 23, at 200.

The case for private enforcement rests on the assumption that private enforcers are efficient regulatory enforcers who will respond to incentives to sue and bring actions that align with the public interest. These debates help assess how effectively private enforcement meets the twin legislative purposes of spurring and supplementing agency enforcement. Matthew Stephenson describes the controversy succinctly: "Though private enforcement suits may, under some conditions, improve both overall compliance with the law and the efficient allocation of enforcement resources, under other circumstances private suits may disrupt government regulatory schemes and lead to wasteful or excessive enforcement."[42]

A. *The Debates*

1. Proponents' Arguments

Private enforcement has numerous advantages.[43] Among these, three rationales for private enforcement—augmenting public enforcement capacity with private sector resources, countering regulatory capture, and enhancing democracy—stand out for their ability to address some of the key structural limitations of agency enforcement, particularly as it relates to the vast and complex nature of environmental regulation.

A "core and recurring" structural constraint on government enforcement capacity is that agencies are overstretched and suffer from manpower and budgetary limitations.[44] Proponents argue that one main advantage of private enforcement is to address such a lack of government resources and resulting enforcement inefficiencies by supplementing the system with "private information, expertise, and resources."[45] Private citizens can fill a gap in enforcement while shifting the burden and costs of enforcement to the private sector. In this sense, private enforcers multiply government enforcement capabilities. A regime that includes private enforcement "can actually enhance the efficient use of scarce

42 Stephenson, *supra* note 17, at 106.

43 For a detailed list of the main benefits of private enforcement, see Burbank, Farhang & Kritzer, *supra* note 37, at 662.

44 *Id.*; *see also* Steven D. Shermer, Note, *The Efficiency of Private Participation in Regulating and Enforcing the Federal Pollution Control Laws: A Model for Citizen Involvement*, 14 J. ENV'T L. & LITIG. 461, 462 (1999).

45 Engstrom, *supra* note 39, at 630; *see also* Glover, *supra* note 12, at 1145–60 (discussing the rise and functions of private enforcement); Stephenson, *supra* note 17, at 107–13 (reviewing the advantages of private enforcement); Thompson, *supra* note 23, at 190 (observing that "environmental violations are difficult or prohibitively expensive for the government to detect").

bureaucratic resources by allowing administrators to focus enforcement efforts on violations that do not provide adequate incentives for private enforcement, while resting assured that those that do will be prosecuted by private litigants."[46] Moreover, as Senator Edward Muskie remarked during congressional hearings on the Clean Air Act (CAA), the sheer size of the growing regulatory state, and the environmental regime in particular, meant that even the most "well staffed or well intentioned"[47] agencies would struggle to monitor potential violations. Private citizens could help to fill that gap.

A second powerful rationale for private enforcement is that private enforcers play a valuable role in ensuring public accountability by defending against regulatory capture.[48] During the early 1970s, there was a general distrust in Congress of the Nixon administration's genuine commitment to uphold and enforce the new laws over time.[49] Proponents feared that as administrations changed hands, powerful lobbies or regulated business interests would "capture" the agencies who regulated them, causing them to water down or roll back existing laws or their enforcement if deemed harmful to their business or industry.[50]

46 Burbank, Farhang & Kritzer, *supra* note 37, at 663; *see also* Shermer, *supra* note 44, at 463; John C. Coffee, Jr., *Rescuing the Private Attorney General: Why the Model of the Lawyer as Bounty Hunter Is Not Working*, 42 MD. L. REV. 215, 218 (1983); Thompson, *supra* note 23, at 200.

47 *See* 116 CONG. REC. 32927 (1970) (statement of Sen. Edmund Muskie); S. REP. NO. 91-1196, at 36–37 (1970) (establishing a citizen suit provision under the CAA § 304); *see also* ENV'T POL'Y DIV., CONG. RSCH. SERV., 93D CONG., A LEGISLATIVE HISTORY OF THE CLEAN AIR AMENDMENTS OF 1970, at 127 (Comm. Print 1974) (statement of Sen. Edmund Muskie) (reaffirming the importance of the citizen suit to "apply important pressure" toward the goal of enforcing the Act's standards and remarking that "[a]lthough the Senate did not advocate these suits as the best way to achieve enforcement, it was clear that they should be an effective tool").

48 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 23, at 191 (stating that "political considerations and institutional structure may often lead agencies to ignore violations that are known and appropriate to prosecute").

49 LAZARUS, *supra* note 18, at 49–54.

50 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, 75 (2014). Coplan describes how citizen enforcers took the lead in cases against both the powerful gun lobby manufacturers who produced lead shells that polluted the water after being fired and the agricultural lobby, to regulate concentrated animal feeding operations whose contaminated runoff was degrading waterways. *Id.* at 86–99. This is not always the case, however. For instance, the automobile industry has sought standardized regulation on fuel emissions standards. During the Trump administration rollbacks of Obama-era emission standards, the industry favored stronger standards over the looser emissions standards that the Trump administration sought to enact. *See* Sean O'Kane, *Trump Rolls Back Obama Fuel Economy Rule, Increasing Emissions During a Climate Crisis*, VERGE (Mar. 31, 2020, 11:28 AM), https://www.theverge.com/2020/3/31/21201036/trump-

Congressional reports at the time of the CAA reflected the hope that citizen suits would "motivate governmental agencies."[51] In the deregulatory mood that characterized much of the Reagan[52] and Trump administrations,[53] the EPA faced budget cuts and adopted deregulatory agendas. During each of these periods, the prevalence of private enforcement rose to check the government's tendency to pursue its own agenda and that of influential but unrepresentative groups. In these instances, private enforcement "performs an important failsafe function by ensuring that legal norms are not wholly dependent on the current attitudes of public enforcers."[54] Where a particular agency might be swayed by lobbying or the fear of budget cuts, private enforcers provide "stability of legal norms by preventing abrupt transitions in enforcement policy that have not been sanctioned by the legislature."[55] That is, private enforcers can increase accountability and prod recalcitrant agencies to carry out Congress's legislative will even where political or administrative support is weak.[56]

Third, private enforcement has also been touted as a tool that does more than merely deter statutory violations: it also drives innovation in litigation and promotes democracy through citizen involvement in identifying and monitoring harm.[57]

epa-obama-fuel-economy-rule-rollback-emissions-consumer-cost [https://perma.cc/8ZJA-LYHR].

51 116 CONG. REC. 32926 (1970); ENV'T POL'Y DIV., CONG. RSCH. SERV., 93D CONG., A LEGISLATIVE HISTORY OF THE CLEAN AIR AMENDMENTS OF 1970 (Comm. Print 1974); *see also* COMM. ON PUB. WORKS, NATIONAL AIR QUALITY STANDARDS ACT OF 1970, S. REP. NO. 91-1196, at 36–37 (1970) ("Authorizing citizens to bring suits for violations of standards should motivate governmental agencies charged with the responsibility to bring enforcement and abatement proceedings.").

52 STEPHEN B. BURBANK & SEAN FARHANG, RIGHTS AND RETRENCHMENT: THE COUNTERREVOLUTION AGAINST FEDERAL LITIGATION chs. 1–2 (2017). Under the Reagan administration in 1980 and 1983, the EPA lost one-third of its budget and one-fifth of its staff. Underfunded and understaffed, these cuts had a lasting effect on the agency, leaving it without the resources to fulfill all of its functions. *See id.* at ch. 2.

53 Rebecca Beitsch & Rachel Frazin, *Trump Budget Slashes EPA Funding, Environmental Programs*, HILL (Feb. 10, 2020, 2:18 PM), https://thehill.com/policy/energy-environment/482352-trump-budget-slashes-funding-for-epa-environmental-programs [https://perma.cc/G77W-T4AB].

54 Coffee, *supra* note 46, at 227.

55 *Id.*

56 Adelman & Glicksman, *supra* note 11, at 434–36.

57 Thompson, *supra* note 23, at 187–88; *see also* SEAN FARHANG, THE LITIGATION STATE: PUBLIC REGULATION AND PRIVATE LAWSUITS IN THE U.S. 20 (2010); Coffee, *supra* note 46, at 227–28.

2. Critics' Arguments

Skeptics of citizen involvement, or interference,[58] point to three main problems that afflict private enforcement. A primary concern is that because private enforcement lacks central coordination, it can interfere with a delicate regulatory regime designed to permit certain actions while prosecuting other violations. This can "lead to wasteful or excessive enforcement"[59] where citizens sue to enforce legitimate violations of the law, remediation of which does not align with legislative and broader public policy goals.[60] This introduces procedural and substantive inefficiencies that realign government resources from current priorities toward lower priority matters, further burdening scarce government resources rather than freeing them up.[61] Still, others have argued that the volume of private enforcement might ultimately overwhelm the courts, effectively displacing the resource constraints from the executive agency level to the judiciary[62] and disrupting the regulatory agenda in an entirely different way.

A second related argument is that private enforcement is less socially inefficient than public enforcement because private parties driven by private economic calculations choose to litigate based on private costs and benefits, not social ones.[63] As such, they may not fully consider the costs and trade-offs in making litigation decisions, including costs to the public.[64] Indeed, the private motivations may even be entirely misaligned with the public interest. For skeptics purporting this argument, they believe that private enforcers will act based on economic calculations

58 For a list of skeptics' views of private enforcement, see Burbank, Farhang & Kritzer, *supra* note 37, at 667.

59 Stephenson, *supra* note 17, at 106.

60 Engstrom, *supra* note 39, at 630 & n.36 (citing Stephenson, *supra* note 17, at 114–20 (outlining "disadvantages of private enforcement")); *see also* Burbank, Farhang & Kritzer, *supra* note 37, at 667 (summarizing the skeptics' views).

61 *See supra* note 58; *see also* Biber & Brosi, *supra* note 48, at 345.

62 In response to the argument that a flood of litigation will arise from citizen suits, David Engstrom considers the value of a gatekeeping role. Engstrom, *supra* note 39, at 630–41. But recent empirical work by David Adelman and Robert Glicksman in the area of environmental citizen suits demonstrates that citizen suits are geographical creatures and that there is no empirical basis that a flood of litigation will arise, and that citizens need not be subject to vigorous gatekeeping. Adelman & Glicksman, *supra* note 11, at 447.

63 Wendy Naysnerski & Tom Tietenberg, *Private Enforcement of Federal Environmental Law*, 68 LAND ECON. 28, 47 (1992); Landes & Posner, *supra* note 41, at 15; Engstrom, *supra* note 39, at 630.

64 Landes & Posner, *supra* note 41, at 15; Engstrom, *supra* note 39, at 630.

about when their expected return will exceed costs[65] and, in the process, may exploit litigation costs, including the threat of burdensome, lengthy, and costly discovery, to extract a private benefit. Some have suggested that a combination of economic incentives like attorney's fees, coupled with self-interest, has led to an "environmentalist enforcement cartel."[66]

Stemming from these concerns, skeptics argue that a central flaw with private enforcement relates to accountability. While administrators theoretically lack personal economic stakes in litigation and are charged with pursuing public goals, private enforcement advances private interests that may conflict with the public interest.[67] This concern arises because private citizens need not analyze the full costs and benefits of their actions or consider the public interest, yet they wield regulatory power similar to that of government agencies.[68] Unlike public officials, however, citizen enforcers are not democratically accountable for the impacts of their actions[69] because those who overstep their bounds "face no significant political repercussions for setting unwise enforcement priorities."[70] Private litigants, skeptics argue, can bring strategic and extortionate suits that "'weaponize' broad legislative mandates to obstruct or delay government actions without the mediating influence of political accountability."[71] Studies suggest that a lack of accountability is "most troublesome when a disparity exists between the private values of the person or organization bringing a citizen suit and the values of the

65 *See* Engstrom, *supra* note 39, at 630–31 (citing Steven Shavell, *The Fundamental Divergence Between the Private and the Social Motive to Use the Legal System*, 26 J. LEGAL STUD. 575, 577–78 (1997)).

66 Greve, *supra* note 35, at 341–42, 386 (observing that litigation patterns did not correlate with environmental concerns). In a 1980 study, Greve found that "five national organizations—the Natural Resources Defense Council, Sierra Club Legal Defense Fund, Atlantic States Legal Foundation, Public Interest Research Group, and Friends of the Earth—were responsible for the majority of [Clean Air Act] suits filed from May 1984 to September 1988." Jonathan H. Adler, *Stand or Deliver: Citizen Suits, Standing, and Environmental Protection*, 12 DUKE ENV'T L. & POL'Y F. 39, 48, 51 (2001) (arguing, based on two studies, that "[t]he only empirical analyses of environmental citizen-suit activity suggest that national advocacy groups file the lion's share of suits, and that most suits are filed against the least significant sources"); Peter H. Lehner, *The Efficiency of Citizens Suits*, 2 ALB. L. ENV'T OUTLOOK 4, 8 (1995) (concluding from the study that the majority of penalties were collected by four groups).

67 Greve, *supra* note 35, at 344–45.

68 Landes & Posner, *supra* note 41, at 15.

69 Engstrom, *supra* note 39, at 630.

70 Adler, *supra* note 66, at 49; *see also* 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").

71 Adelman & Glicksman, *supra* note 11, at 387.

community in which it is filed."[72] When administrative action "departs from these expectations, it can be disciplined and reined in by the democratic process, whereas private litigation, by comparison, is largely unfettered."[73]

B. What Climate Change Reveals About the Private Enforcement Debates

The existing bodies of scholarship across the fields of private enforcement and environmental law have occasionally crossed paths. In the civil procedure literature, there is ample scholarship on private enforcement generally, as described above. And in environmental law, starting with a 1984 Environmental Law Institute study, the body of literature on private environmental enforcement has grown. It tends to be divided between the pollution statutes and the procedural and natural resource statutes, such as NEPA and the Endangered Species Act (ESA), with the bulk of existing studies on environmental citizen suits focused on suits involving violations of the pollution statutes governed by the EPA.[74] There are some significant limitations to these studies. Given the difficulty of collecting environmental litigation data and many gaps and inconsistencies in existing databases, these studies are based on little empirical data.[75] At this point, all are more than a decade old.[76] The line of scholarship and studies of citizen suits involving NEPA is comparatively smaller.[77] Most older studies involving NEPA have tended to focus on either "broad national statistics or litigation involving specific

72 David E. Adelman & Jori Reilly-Diakun, *Environmental Citizen Suits and the Inequities of Races to the Top*, 92 U. COLO. L. REV. 377, 396 (2021); *see also* Stephenson, *supra* note 17, at 115, 117.

73 Burbank, Farhang & Kritzer, *supra* note 37, at 671.

74 *See* studies cited in Adelman & Reilly-Diakun, *supra* note 72, at 384–85 ("Third-party suits are filed predominantly under the pollution statutes . . . .").

75 *Id.* at 399 (discussing the existing body of empirical work on environmental citizen suits and noting that this lack of empirical data is principally because of the difficulty of collecting environmental litigation data and major gaps and inconsistencies in existing databases).

76 *Id.* at 384–85.

77 "NEPA figures most prominently in federal actions that impact natural resources and particularly public lands." *Id.* at 390 n.32. NEPA and the ESA are the most litigated natural resource statutes, accounting for approximately 85% of the natural resource cases filed annually. *Id.* at 390–91. A recent study on NEPA litigation is drawn from data compiled by CEQ between 2001–2013 and assesses NEPA efficiency. Ruple and Race find that "NEPA litigation does not appear to be unreasonably burdensome, and that the rate at which NEPA decisions are challenged has declined steadily over time." John C. Ruple & Kayla M. Race, *Measuring the NEPA Litigation Burden: A Review of 1,499 Federal Court Cases*, 50 ENV'T L. 479, 481 (2020).

agencies."[78] NEPA is regaining the attention of scholars, however, and several recent empirical studies addressing citizen suits under NEPA attempt to shed new light on the scope and nature of NEPA litigation.[79]

A small but growing body of climate law scholarship addresses various types of affirmative substantive statutory and common law claims in the climate context, but very little work focuses on private enforcement.[80] In the small body of climate change scholarship related to procedure, this work has mostly focused on agency compliance with NEPA—specifically, the degree to which agencies have and should consider climate change in NEPA documentation.[81] A burgeoning line of articles has noted the obstacles and opportunities of using environmental law to transition to a clean energy future.[82] This Article occupies a niche in the literature where there is little scholarly critique on the intersection of private enforcement and climate change.[83] It continues to bridge these bodies of scholarship and critiques the role of private enforcement in addressing climate change by examining existing patterns of NEPA challenges to agency compliance.

78 *See* Adelman & Reilly-Diakun, *supra* note 72, at 384.

79 Ruple & Race, *supra* note 77, at 480–81, 486 (empirical study on NEPA litigation trends drawn from data compiled by CEQ between 2001–2013); Adelman & Glicksman, *supra* note 11, at 388 (empirical study of citizen suits under NEPA and ESA evaluating geographic trends, different uses of litigation, and influence of judicial politics in outcomes); Adelman & Reilly-Diakun, *supra* note 72, at 388–406 (empirical study of citizen suits tracking volume and geography over time).

80 *See, e.g.*, Tracy D. Hester, *A New Front Blowing In: State Law and the Future of Climate Change Public Nuisance Litigation*, 31 STAN. ENV'T L.J. 49, 50 (2012); Ben Batros, Climate Liability Suits as a Forward-Looking Strategy for Change (Sept. 2020) (unpublished manuscript), https://ssrn.com/abstract=3702096 [https://perma.cc/LY34-7NSV].

81 *See, e.g.*, Michael B. Gerrard, *Climate Change and the Environmental Impact Review Process*, 22 NAT. RES. & ENV'T 20, 20 (2008) (noting that in one study, only ten EISs mentioned climate change and none provided "especially useful information"); Amy L. Stein, *Climate Change Under NEPA: Avoiding Cursory Consideration of Greenhouse Gases*, 81 U. COLO. L. REV. 473, 477 (2010) (conducting empirical evaluation of Bureau of Land Management (BLM) EISs between 2007–2008 involving oil and gas leasing and finding climate change analysis "sporadic and superficial"); Mark Squillace & Alexander Hood, *NEPA and Climate Change*, *in* THE NEPA LITIGATION GUIDE 261 (Albert M. Ferlo, Karin P. Sheldom & Mark Squillace eds., 2d ed. 2012) (discussing NEPA climate change litigation and suggesting how agencies can effectively address climate change in the NEPA process); David Markell & J.B. Ruhl, *An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?*, 64 FLA. L. REV. 15, 57–59 (2012) (providing typology of climate change litigation); Thien T. Chau, Note, *Implications of the Trump Administration's Withdrawal of the Final CEQ Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, 30 GEO. ENV'T L. REV. 713 (2018) (discussing implications of CEQ withdrawal of guidance to consider climate change in NEPA documents).

82 *See, e.g.*, Rachael E. Salcido, *Rationing Environmental Law in a Time of Climate Change*, 46 LOY. U. CHI. L.J. 617 (2015) (discussing how environmental law has been "rationed" to promote clean energy projects).

83 *See* Irma S. Russell, *Streamlining NEPA to Combat Global Climate Change: Heresy or Necessity?*, 39 ENV'T L. 1049, 1050 (2009) (discussing NEPA streamlining).

This critique of private enforcement in the context of climate change both fits within and breaks from the standard critiques of private enforcement. The case studies described in Section IV.A involve patterns of environmental citizen suits under NEPA whose outcomes have direct and indirect impacts on climate change. Through these cases, many of the critiques of private enforcement in fact do bear out: private enforcers interfere with centralized government priorities; they prioritize a particular private agenda, without any duty to consider costs and benefits to the public and without public accountability; and, when viewed broadly, their actions represent a system that is insufficiently democratic.

Analyzing private enforcement in the context of climate change also raises several distinct concerns for which the traditional rationales and the empirical studies do not account. In the broader private-enforcement literature, gatekeepers have been invoked as a solution to address concerns about overenforcement arising from citizen suit litigation.[84] Several recent empirical studies suggest, however, that NEPA litigation is not "unreasonably burdensome"[85] and that "citizen suits need not be subject to vigorous gatekeeping by . . . federal agencies" because they are geographic creatures that reflect local values.[86] The claims that a flood of litigation will arise is, as Stephen B. Burbank and other commentators put it, largely a myth "based on unfounded fears."[87] My argument that an agency gatekeeper could manage private environmental enforcement is not because of concerns that citizen suits will flood the courts and overwhelm the judiciary. Rather, gatekeepers can play a valuable role in mediating competing interests brought by private enforcers through the lens of the public interest in addressing climate change.

Further, assessing private enforcement through the climate lens reveals another aspect of private-enforcement concern that is not accounted for in the literature. Private enforcement is often presented in monolithic categories, such as suits by major environmental

84 *See, e.g.*, Engstrom, *supra* note 39, at 627 (noting the rise in private enforcement across regulatory areas during the 1960s). Early critics of private enforcement raised concerns that by allowing unknown numbers of private citizens into the enforcement system, a wave of private litigation would overwhelm the courts, effectively displacing the resource constraints from the executive agency level to the judiciary. *See* John A.J. Ward, *Private Prosecution—The Entrenched Anomaly*, 50 N.C. L. REV. 1171, 1173 (1972) (noting that because they act solely for clients, private prosecutors present a conceptual anomaly: they do not have the "impartial[]" and "unprejudiced" motives of a public prosecutor).

85 Ruple & Race, *supra* note 77, at 500.

86 Adelman & Glicksman, *supra* note 11, at 393.

87 Burbank, Farhang & Kritzer, *supra* note 37, at 658 (quoting Robert W. Gordon, *The Citizen Lawyer—A Brief Informal History of a Myth with Some Basis in Reality*, 50 WM. & MARY L. REV. 1169, 1199 (2009)).

organizations.[88] There are, however, numerous distinct types of citizens or organizations who bring citizen suits, each of whom hold disparate levels of political, economic, and social power. A more granular analysis that identifies the multi-dimensional distribution of participation and their various interests is critical for a fuller understanding of the nature of who is bringing NEPA challenges but also, importantly, who is not. It is also important for understanding the range of voices, priorities, and special interests among which judges mediate.

II. PRIVATE ENFORCEMENT IN THE ENVIRONMENTAL LAW FRAMEWORK

The prominent role of private enforcement in the environmental law framework is the result of major debate among legislators about how to address decades of environmental degradation, social unrest and protest, and a loss of confidence in the government that defined the atmosphere of the mid-twentieth century. During testimony regarding the CAA in 1970, Senator Edmund Muskie, a champion of the CAA and Clean Water Act (CWA), acknowledged that this period of converging crises demanded legislative action:

> In the face of citizen concern and corporate resistance, we have learned that the air pollution problem is more severe, more pervasive, and growing faster than we had thought. Unless we recognize the crisis and generate a sense of urgency from that recognition, lead times may melt away without any chance at all for a rational solution to the air pollution problem.[89]

In response, Congress created an ambitious new environmental regime to tackle pollution, prioritize environmental protection, and empower citizens to play a key role in enforcement to protect the public interest.[90] Further assisted by the courts and a growing nonprofit sector dedicated to environmental protection, citizen enforcement of environmental law grew in relation to agency enforcement. Beginning in the late 1960s, "there was a sharp increase in the rate of private enforcement" efforts[91]

88 *See, e.g.*, Greve, *supra* note 35, at 351.

89 116 CONG. REC. 32901 (1970) (statement of Sen. Edmund Muskie).

90 *Id.* at 745 ("[T]he plain and unrestricted wording of section 304 of the Clean Air Act, corroborated by the legislative history of that section, reveals that the primary goal of Congress in drafting section 304 was to protect the public interest by allowing private actions, a policy which it considered a necessary supplement to administrative action.").

91 Stephen B. Burbank, Sean Farhang & Herbert M. Kritzer, *Private Enforcement of Statutory and Administrative Law in the United States (and Other Common Law Countries)*, *in* PROCEDURAL JUSTICE: XIV. IAPL WORLD CONGRESS/XIVÉME CONGRÉS MONDIAL DE I'AIDP HEIDELBERG 197 (Peter Gottwald & Burkhard Hess eds., 2014).

across a range of regulatory areas, including in some areas of environmental law.

This Part briefly describes the origins and evolution of private enforcement in environmental law, its mission, and its growth over time. The purpose is not to offer a comprehensive historical survey but rather to highlight significant elements of the context from which the citizen suit model emerged in environmental enforcement.

A. *The Crises That Shaped Modern Environmental Law*

1. The Industrial Pollution Crisis

In the early- and mid-twentieth century, industrial production and capacity exploded, spurring immense economic growth in part through largely unchecked pollution of the nation's air, rivers, and groundwater.[92] Ohio's Cuyahoga River, like many northern rivers, hosted various major manufacturing companies, in part because it, like many other rivers in industrial cities, supplied easy and cheap waste disposal.[93] Over the decades, the river regularly caught fire due to oil slicks and other pollutants; one such blaze captured national attention in June 1969.[94] The fires on the Cuyahoga symbolized the relationship between pollution and economic progress. In Cleveland, "[e]veryone knew the river was polluted, but nobody much cared. If anything, it was a badge of honor."[95]

92 "Congress enacted the first federal water pollution control program in 1948. Although twenty-one states had water pollution control laws by 1946, these laws exempted many industrial practices and, like the earlier smoke abatement laws, lacked any pretense of meaningful enforcement." LAZARUS, *supra* note 18, at 52.

93 With tongue in cheek, the Federal Water Pollution Control Administration told *Time*, "[t]he lower Cuyahoga has no visible [signs of] life, not even low forms such as leeches and sludge worms that usually thrive on wastes." *America's Sewage System and the Price of Optimism*, TIME, Aug. 1, 1969, at 41.

94 Lorraine Boissoneault, *The Cuyahoga River Caught Fire at Least a Dozen Times, but No One Cared Until 1969*, SMITHSONIAN MAG. (June 19, 2019), https://www.smithsonianmag.com/history/cuyahoga-river-caught-fire-least-dozen-times-no-one-cared-until-1969-180972444 [https://perma.cc/QGS9-N5RF].

95 *Id.* ("The Civil War turned Cleveland into a manufacturing city almost overnight. The Cuyahoga River, just south of the city's downtown area, snaking for 100 miles across Ohio and emptying into Lake Erie, proved the perfect place for factories to set up camp. American Ship Building, Sherwin-Williams Paint Company, Republic Steel and Standard Oil all rose up from Cleveland, and the river bore the toxic legacy of their success. By the 1870s, the river had served as an open sewer and dump site for long enough that it was already threatening the city's water supply. In 1922, engineers at the Water Department of Cleveland did tests of the city's drinking water to respond to claims that the water tasted medicinal or like carbolic acid. . . . [The tests revealed that] '[t]he polluted water of the Cuyahoga River reached the water works intakes, and this polluted water

David Newton writes, "[f]undamentally this level of environmental degradation was accepted as a sign of success."[96] Thus, for years, many looked away from this degradation as a systemic problem. Instead, during this era, negative externalities resulting from industrial processing and manufacturing were addressed mostly on a case-by-case basis using nuisance and other common law theories.[97]

However, "statutory and public policy precedents in the areas of public health and worker safety . . . were steadily established throughout the twentieth century."[98] These policies set the stage for the social and environmental movement that began to coalesce mid-century as a countervailing force against industry and manufacturing operations. Of particular influence were Rachel Carson's warnings about the effects of the rampant use of DDT and other toxic chemicals. Carson gave voice to the hazards of industrial society and a shift in public values: "[T]he central problem of our age has . . . become the contamination of man's total environment with . . . substances of incredible potential for harm . . . ."[99]

Concurrent with Carson's calls for environmental reform came a suspicion that the government, which for decades had failed to regulate companies producing toxic chemicals, could not be trusted.[100] Carson's contemporary, Ralph Nader, who focused on consumer protection and regulation of the automobile industry, likewise doubted that the government could create and enforce a regulatory structure that would protect consumers from the products they were buying.[101]

2. The Infrastructure and Urban Development Crisis

The social and environmental ills of the twentieth century were not the sole product of the private sector. During the mid-twentieth century, federal infrastructure development served as a tool that exacerbated inequality and would entrench a system reliant on vehicles, the leading source of greenhouse gas emissions in the United States.[102] In the 1950s,

contained the material which caused the obnoxious taste.'" (quoting J.W. Ellms & W.C. Lawrence, *The Causes of Obnoxious Tastes and Odors Sometimes Occurring in the Cleveland Water Supply*, 9 J. AM. WATER WORKS ASS'N 463, 469 (1922))).

96 DAVID E. NEWTON, CHEMISTRY OF THE ENVIRONMENT 6 (2007).

97 LAZARUS, *supra* note 18, at 50–51, 53.

98 *Id.* at 44.

99 RACHEL CARSON, SILENT SPRING 8 (1962).

100 SABIN, *supra* note 20.

101 *Id.*

102 Alana Semuels, *The Role of Highways in American Poverty*, ATLANTIC (Mar. 18, 2016), https://www.theatlantic.com/business/archive/2016/03/role-of-highways-in-american-poverty/474282 [https://perma.cc/4P26-T8TN].

however, highways were thought to be "the greatest single element in the cure of city ills."[103] From Miami to Milwaukee, cities used federal money available under the Federal Highway Act of 1944 to fund highway systems that would reduce traffic but effectively divided cities in two. On one side were wealthy white suburbs dependent on cars. On the other were poorer inner-city populations that lacked the resources to move or could not legally move because of their race.[104] Proponents boosted highway construction as a means to clear urban areas deemed slums to make way for urban renewal and redevelopment.[105]

These projects were characterized by racism and poor planning. In pushing through the Federal Highway Act of 1956, which increased federal funding for highway construction from 50% to 90% of the total cost of the project,[106] the "Eisenhower Administration officials largely ignored warnings from engineers, planners, and urban advocates of every political persuasion that building freeways through dense cities would require careful, comprehensive planning and regard for the integrity of the existing urban fabric."[107] Absent any other legal mechanism that might force further review of the projects' various impacts, construction proceeded. These highway projects had the effect of destroying formerly vibrant urban, mostly Black communities, perpetuating residential segregation that persists today.[108]

The government's publicly funded project to erect a geographic barrier to integration, with little concern for the enduring racial and socioeconomic impacts these projects were bound to generate, engendered deep disillusionment and distrust of government among social justice and early environmental justice advocates. The environmental and social devastation stemming from these two crises were but two events that would shape the structure of the modern environmental regulatory regime.

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103 Joseph F. C. DiMento, *Stent (or Dagger?) in the Heart of Town: Urban Freeways in Syracuse, 1944–1967*, 8 J. PLAN. HIST. 133, 142 (2009).

104 Semuels, *supra* note 102. The Federal-Aid Highway Act of 1944 was enacted by Congress and signed into law on December 20, 1944. The Act established a 50-50 formula for subsidizing the construction of national highways and secondary roads. Federal-Aid Highway Act of 1944, Pub. L. No. 78-521, ch. 626, § 5(a), 58 Stat. 838, 840.

105 Semuels, *supra* note 102 ("The urban planner Robert Moses was one of the first to propose the idea of using highways to 'redeem' urban areas.").

106 The Federal-Aid Highway Act of 1956, popularly known as the National Interstate and Defense Highways Act, was enacted on June 29, 1956. Federal-Aid Highway Act of 1956, Pub. L. No. 84-627, ch. 462, § 108(e), 70 Stat. 374, 378–80.

107 Richard A. Marcantonio, Aaron Golub, Alex Karner & Louise Nelson Dyble, *Confronting Inequality in Metropolitan Regions: Realizing the Promise of Civil Rights and Environmental Justice in Metropolitan Transportation Planning*, 44 FORDHAM URB. L.J. 1017, 1026 (2017).

108 *Id.* at 1026–27.

B. *Environmental Activism Propels Statutory Reform*

By the 1960s, environmental destruction had become so obvious and harmful that protests pushed politicians to make a concerted effort to address environmental protection.[109] Presidents Kennedy and Johnson passed some of the nation's first environmental protection acts, including the Wilderness Act[110] and the Federal Water Pollution Control Act,[111] precursors to the CAA and CWA.[112] Several years later, spurred in part by a battle for public opinion, President Nixon acknowledged that "[o]ur national government today is not structured to make a coordinated attack on the pollutants which debase the air we breathe, the water we drink, and the land that grows our food."[113] To signify that the 1970s would be an environmental decade,[114] on January 1, 1970, President Nixon set in motion much of the legal infrastructure that frames the parameters of environmental protection today. This new framework of environmental

109 LAZARUS, *supra* note 18.

110 Wilderness Act, Pub. L. No. 88-577, 78 Stat. 890 (1964). Other resource preservation statutes passed during the 1960s include the Refuge Recreation Act, Pub. L. No. 87-714, 76 Stat. 653 (1962); Land and Water Conservation Fund Act of 1965, Pub. L. No. 88-578, 78 Stat. 897 (1964); National Wildlife Refuge System Administration Act of 1966, Pub. L. No. 89-669, 80 Stat. 927; National Historic Preservation Act, Pub. L. No. 89-665, 80 Stat. 915 (1966); and Wild and Scenic Rivers Act, Pub. L. No. 90-542, 82 Stat. 906 (1968).

111 In addition to the natural resource preservation laws, Congress passed a series of air and water pollution control statutes during that decade. *See*, *e.g.*, Water Pollution Control Act Amendment of 1956, Pub. L. No. 84-660, 70 Stat. 498; Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903; Clean Water Restoration Act of 1966, Pub. L. No. 89-753, 80 Stat. 1246; Air Pollution Control Act, Pub. L. No. 84-159, 69 Stat. 322 (1955); Clean Air Act, Pub. L. No. 88-206, 77 Stat. 392 (1963); and Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485.

112 "By the time President Lyndon Johnson signed into law the first Clean Air Act in December 1963—it was later amended in 1966, 1970, 1977, and 1990—America's air had been under siege for decades." Salvatore Cardoni, *Top 5 Pieces of Environmental Legislation*, ABC NEWS (July 1, 2010, 5:38 PM), https://abcnews.go.com/Technology/top-pieces-environmentallegislation/story?id=11067662 [https://perma.cc/PS4V-9QSZ].

113 Special Message to the Congress About Reorganization Plans to Establish the Environmental Protection Agency and the National Oceanic and Atmospheric Administration, 1 PUB. PAPERS 578 (July 9, 1970); *see* Robinson Meyer, *How the U.S. Protects the Environment, from Nixon to Trump*, ATLANTIC (Mar. 29, 2017), https://www.theatlantic.com/science/archive/2017/03/how-the-epa-and-us-environmental-law-works-a-civics-guide-pruitt-trump/521001 [https://perma.cc/CN65-29JJ].

114 Meyer, *supra* note 113.

laws—notably the NEPA, CAA,[115] CWA,[116] and ESA, among others[117]—sought primarily to control pollution and protect public health. The laws would be administered through the newly created federal EPA as well as the National Oceanic and Atmospheric Administration (NOAA), which regulates marine resources and pollution, and the Council on Environmental Quality (CEQ), which administers NEPA.[118] Since the original 1970s laws that make up the bulk of the environmental regime were passed, there have been only two major new laws and amendments.[119]

To enforce the updated environmental laws, legislators devised a hybrid system that relied on both public and private enforcement to shape statutory compliance.[120] Mixed enforcement models were not new. For example, both the Civil Rights Act of 1964 and the Voting Rights Act of 1965 relied on a hybrid enforcement structure—combining agency oversight, reporting, and enforcement with private suits. With only two exceptions, each of the major environmental statutes included a citizen suit provision.[121] Such a provision empowers citizens to use litigation as

115 *See* Thompson, *supra* note 23; *see also* 116 CONG. REC. 32927 (1970) (statement of Sen. Edmund Muskie); ENV'T POL'Y DIV., CONG. RSCH. SERV., 93D CONG., A LEGISLATIVE HISTORY OF THE CLEAN AIR AMENDMENTS OF 1970, at 127 (COMM. PRINT 1974).

116 The Act was originally titled the Federal Water Pollution Control Act. In the 1987 Amendments, Pub. L. No. 100-4, § 1(a), 101 Stat. 7, it was renamed as the Water Quality Act. I will refer to it by the original title.

117 The major environmental statutes are the Clean Air Act § 304, 42 U.S.C. § 7604(a); Toxic Substances Control Act § 20, 15 U.S.C. § 2619(a); Endangered Species Act § 11(g), 16 U.S.C. § 1540(g)(1); Surface Mining Control and Reclamation Act of 1977 § 520, 30 U.S.C. § 1270(a); Marine Protection, Research, and Sanctuaries Act § 105(g), 33 U.S.C. § 1415(g)(1); Deepwater Port Act § 16, 33 U.S.C. § 1515(a); Safe Drinking Water Act § 1449, 42 U.S.C. § 300j-8(a); Noise Control Act § 12, 42 U.S.C. § 4911(a); Resource Conservation and Recovery Act § 7002, 42 U.S.C. § 6972(a); Superfund Amendment and Reauthorization Act of 1986, 42 U.S.C. § 9659(a); Outer Continental Shelf Lands Act § 23, 43 U.S.C. § 1349(a); and Clean Water Act § 505, 33 U.S.C. § 1365. *See also* James R. May, *Now More Than Ever: Trends in Environmental Citizen Suits at 30*, 10 WIDENER L. REV. 1, 2 n.3 (2003).

118 "As the agency responsible for implementing NEPA, CEQ also works to ensure that environmental reviews for infrastructure projects and federal actions are thorough, efficient, and reflect the input of the public and local communities." *Council on Environmental Quality*, WHITE HOUSE, https://www.whitehouse.gov/ceq [https://perma.cc/Z89V-KHEU].

119 Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675; Clean Air Act Amendments of 1990, Pub. L. No. 101-549, §§ 101–111, 104 Stat. 2399.

120 While devising the 1970s-era environmental statutes, the Democratic Congress was wary of an agency's willingness to forcefully enforce the new environmental laws where the agency was run by an executive of the opposing party and so included private enforcement clauses within them. Research by Farhang and Burbank shows that private litigation does in fact tick up when the executive and legislature are governed by opposite parties. *See* Sean Farhang, *Legislative-Executive Conflict and Private Statutory Litigation in the United States: Evidence from Labor, Civil Rights, and Environmental Law*, 37 LAW & SOC. INQUIRY 657, 673–85 (2012).

121 *See* Thompson, *supra* note 23, at 192; *see also* Stephenson, *supra* note 17, at 99 n.16.

a regulatory tool in two ways: by "spurring" agencies to act where they have a nondiscretionary duty to do so and where they have failed for political reasons, and by "supplementing" agency enforcement, using private resources to pursue statutory compliance against violators as so-called "private attorneys general."[122]

The environmental regime includes both substantive statutes, such as the CAA and CWA, as well as procedural statutes, such as NEPA. Citizens are heavily involved in enforcement across the entire regime. Of these laws, however, NEPA has emerged as a major vehicle for citizen action and served as "the medium for the earliest of statute-based climate change litigation."[123] As a procedural statute,[124] NEPA is designed as a "tool for thoughtful process and democratic accountability, not a substantive requirement for environmentally-correct decisions."[125] NEPA requires agencies to assess the environmental impacts of their actions, incorporate newly gathered information into their decision-making process, and consider alternatives before commencing

122 Stephenson, *supra* note 17, at 99; *see also* Jeannette L. Austin, Comment, *The Rise of Citizen-Suit Enforcement in Environmental Law: Reconciling Private and Public Attorneys General*, 81 NW. U. L. REV. 220, 222 (1987). The notion of authorizing private attorneys general has been a topic of judicial analysis far before the environmental statutes. In a 1943 case, the Second Circuit found that:

> Congress can constitutionally enact a statute conferring on any non-official person, or on a designated group of non-official persons, authority to bring a suit to prevent action by an officer in violation of his statutory powers; for then, in like manner, there is an actual controversy, and there is nothing constitutionally prohibiting Congress from empowering any person, official or not, to institute a proceeding involving such a controversy, even if the sole purpose is to vindicate the public interest. Such persons, so authorized, are, so to speak, private Attorney Generals.

Associated Indus. of N.Y. State, Inc. v. Ickes, 134 F.2d 694, 704 (2d Cir. 1943), *cited with approval in* Sierra Club v. Morton, 405 U.S. 727, 732 n.3 (1972).

123 Markell & Ruhl, *supra* note 81, at 58 (citing City of Los Angeles v. Nat'l Highway Traffic Safety Admin., 912 F.2d 478, 481 (D.C. Cir. 1990) (finding that the city had standing to challenge the agency's EIS for inadequate discussion of climate change, but ruling against the city on the merits)).

124 Through a series of Supreme Court decisions, NEPA has been rendered purely procedural. *See* Stein, *supra* note 81, at 495–97. Courts have affirmed NEPA's status and impact as a procedural one. *See, e.g.*, Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc., 435 U.S. 519, 525 (1978); *see also* Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227 (1980) (per curiam) (reinforcing the holding in *Vermont Yankee Nuclear Power Corp.* by rejecting the argument that HUD needed to accord environmental factors determinative weight when making decisions to construct low-income housing). "[O]nce an agency has made a decision subject to NEPA's procedural requirements, the only role for a court is to insure that the agency has considered the environmental consequences . . . ." *Id.*

125 Statement of Philip K. Howard, Chair, Common Good, to Chairman Bishop, Ranking Member Grijalva, and Members of the U.S. House of Reps. Comm. on Nat. Res., Modernizing NEPA for the 21st Century 2 (Nov. 29, 2017) [hereinafter Statement of Philip K. Howard], https://republicans-naturalresources.house.gov/uploadedfiles/testimony_howard.pdf [https://perma.cc/3DEP-WX2D].

construction. The goal is to "achieve a balance between population and resource use."[126] Once an assessment is made public, citizens can challenge compliance with the procedural requirements.[127] Because NEPA requires only procedural compliance, the statute has no teeth to prevent projects that are shown to harm the environment. Nor does it impose mitigation requirements so long as the government has fully complied with the impact assessment process.[128] As a form of government self-regulation that could be double-checked by the public, however, NEPA responds to activists' concerns that the government could not be trusted to effectively enforce the law.

C. *Rationales for Private Enforcement in Environmental Law*

The decision to include private enforcement as a component of the federal environmental regime was born of political and logistical necessity. Before the 1970s, enforcing statutory environmental law was the exclusive domain of the government and was a cumbersome process. "[R]ecalcitrant polluters were seldom pursued to court."[129] Echoing Carson's, Nader's, and other activists' calls that enforcement was ineffective, Senator Muskie noted that "[s]tate and local governments have not responded adequately to th[e] challenge[of enforcement]. It is

126 National Environmental Policy Act of 1969, 42 U.S.C. § 4331(b)(5).

127 Unlike the other major statutes, NEPA does not include an explicit private right of action, but courts have inferred a private right of action through the citizen suit procedure of the APA. *See generally* 5 U.S.C. § 702. NEPA challenges are thus brought under the APA alleging that the agency acted in a manner that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Id.* § 706; *see, e.g.*, Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 375 (1989); Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 414 (1971); Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1193 (9th Cir. 2008); *see also* Stephenson, *supra* note 17, at 99 n.16 (citing Pub. Citizen v. Off. of the U.S. Trade Representatives, 970 F.2d 916, 918 (D.C. Cir. 1992); and then citing Karkkainen, *supra* note 18, at 556 n.9).

128 "NEPA is concerned with process alone and 'merely prohibits uninformed—rather than unwise—agency action.'" Turtle Island Restoration Network v. U.S. Dep't of Com., 878 F.3d 725, 730 (9th Cir. 2017) (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989)); *see also* Stein, *supra* note 81, at 475; *Robertson*, 490 U.S. at 352–53 (reversing the Ninth Circuit and holding that despite the finding that the proposed project would exceed air pollution requirements, it would be "inconsistent with NEPA's reliance on procedural mechanisms . . . to demand the presence of a fully developed plan that will mitigate environmental harm before an agency can act").

129 Jeffrey G. Miller, *Private Enforcement of Federal Pollution Control Laws: Part I*, 13 ENV'T L. REP. 10309, 10310 n.3 (1983) (describing the enforcement process under the Federal Water Pollution Control Act); *see also* H. Edward Dunkelberger Jr., *The Federal Government's Role in Regulating Water Pollution Under the Federal Water Quality Act of 1965*, 3 NAT. RES. LAW. 3, 4 (1970); Henry L. Pitts, *The Interaction of the Federal and State Systems: The Experience in the Central U.S.*, 3 NAT. RES. LAW. 26, 29–30 (1970); Murray Stein, *The Actual Operation of the Federal Water Pollution Control Administration*, 3 NAT. RES. LAW. 41, 42 (1970).

clear that enforcement must be toughened if we are to meet the national deadlines. More tools are needed, and the Federal presence and backup authority must be increased."[130] The sheer number of regulated facilities counts in the tens of thousands nationwide.[131] Given this, "[i]t is not feasible to assume that the government is going to engage in the inspections and the enforcement necessary to ensure compliance with the standards."[132] Empowering citizens to assist in enforcement could serve as that "backup authority."

In the early part of the century, it was Republican lawmakers who favored private over government enforcement while Democrats were skeptical of its benefits.[133] During negotiations leading to the 1970 CAA, a majority of congressional Democrats agreed to private enforcement in part to gain the support of Republican lawmakers who sought to minimize government involvement in regulation.[134] Perhaps reflecting his party's preference for decentralization, in a special address to Congress in 1970, shortly after the first set of laws took effect, President Nixon cast individual citizens as essential to the task of enforcement:

> The environmental problems we face are deep-rooted and widespread. They can be solved only by a full national effort embracing not only sound, coordinated planning, but also an effective follow-through that reaches into every community in the land. Improving our surroundings is necessarily the business of us all.
>
> . . . .
>
> Through the Council on Environmental Quality, through the Citizens' Advisory Committee on Environmental Quality, and working with Governors and Mayors and county officials and with concerned private groups, we shall be reaching out in an effort to enlist millions of helping hands, millions of willing spirits—millions of volunteer citizens who will put to themselves the simple question: "What can *I* do?"

130 ENV'T POL'Y DIV., CONG. RSCH. SERV., 93D CONG., A LEGISLATIVE HISTORY OF THE CLEAN AIR AMENDMENTS OF 1970, at 226 (Comm. Print 1974).

131 Adler, *supra* note 66, at 43.

132 Richard Lazarus, *Panel II: Public Versus Private Environmental Regulation, Symposium: The Environment and the Law* (1994), *in* 21 ECOLOGY L.Q., 1994, at 431, 472.

133 Brian T. Fitzpatrick, *Deregulation and Private Enforcement*, 24 LEWIS & CLARK L. REV. 685, 690 (2020). Early debates by conservative economists as to whether private or public enforcers were preferred are found in Landes & Posner, *supra* note 41, and Gary S. Becker & George J. Stigler, *Law Enforcement, Malfeasance, and Compensation of Enforcers*, 3 J. LEGAL STUD. 1, 16–17 (1974).

134 Lazarus, *supra* note 132.

> It is in this way—with vigorous Federal leadership, with active enlistment of governments at every level, with the aid of industry and private groups, and above all with the determined participation by individual citizens in every state and every community, that we at last will succeed in restoring the kind of environment we want for ourselves, and the kind the generations that come after deserve to inherit.[135]

Another reason that Democrats favored environmental regulation as a participatory effort grew from distrust of the executive. A key insight of Sean Farhang's study of private enforcement is that private enforcement regimes arise out of the separation of powers and a divided executive and legislature.[136] In effect, a divided government incentivizes Congress "to rely upon private lawsuits, as an alternative to administrative power, to achieve its regulatory goals."[137] The divided 1970s government embodied this distrust: the majority congressional Democrats included private enforcement provisions, in part because some members of Congress harbored grave doubts about the Republican Nixon administration's commitment to the environmental agenda, particularly against powerful industries and their lobbies.[138] This concern would ultimately bear out later during his presidency and in future administrations.[139] Thus, Congress sought to "spur and supplement"[140] regulatory enforcement not just by allowing, but incentivizing, citizens to deter violators.[141]

D. The Role of Judicial and Statutory Incentives in Expanding Private Enforcement

While Congress gave citizens the power to use the enforcement process to hold the government to task, the courts helped shape that

135 Special Message to the Congress on Environmental Quality, 1 PUB. PAPERS 96, 107, 109 (Feb. 10, 1970).

136 Farhang, *supra* note 120, at 659–60.

137 *Id.* at 657.

138 *Id.* at 674–75.

139 LAZARUS, *supra* note 18.

140 Comm. on Env't & Pub. Works, Clean Water Act Amendments of 1985, S. Rep. No. 99-50, at 28 (1985).

141 For instance, citizen suit provisions permit courts to award declaratory and injunctive relief as well as impose civil penalties on the violating party. The provisions also incentivize citizen action by allowing for attorney's fees and costs and fee shifting. *See* Stephen M. Johnson, *Private Plaintiffs, Public Rights: Article II and Environmental Citizen Suits*, 49 U. KAN. L. REV. 383, 408 n.135 (2001); *see also* Burbank, Farhang & Kritzer, *supra* note 91 (describing financial incentives for would-be private enforcers).

power.[142] Recognizing Congress's intent that citizens not be "treated as nuisances or troublemakers but rather as welcomed participants in the vindication of environmental interests,"[143] courts assisted the legislature by devising broad standing to effectuate this vision.[144] These expansive privileges granted environmental citizen plaintiffs standing more closely approximate to the government "than that of other private-interest plaintiffs."[145] They also derived in part from "beliefs about the ability of both the EPA and the citizen plaintiff to be fair and effective enforcers of the environmental statutes."[146] Over time, lawmakers and the courts have calibrated incentives to encourage[147] and restrain private enforcement.[148] While recent decisions have challenged the Court's willingness to expand the parameters of standing, the broader, more lenient standard of the earlier era has remained more or less intact.[149]

142 LAZARUS, *supra* note 18, at 50–51.

143 Friends of the Earth v. Carey, 535 F.2d 165, 172 (2d Cir. 1976).

144 *See* Sierra Club v. Morton, 405 U.S. 727, 734 (1972); United States v. Students Challenging Regul. Agency Procs., 412 U.S. 669, 686–88 (1973).

145 Citizen plaintiffs have been granted expansive standing privileges which, as Austin writes, "more closely approximate the standing of the government than that of other private-interest plaintiffs." Austin, *supra* note 122, at 252.

146 *Id.* at 256.

147 As an example, the CAA citizen suit provision, § 304, initially did not include penalties. But, Congress authorized § 304 suits to bolster CAA enforcement. Interestingly, while a similar provision in the CWA catalyzed private enforcement, a similar change under the CAA did not have a similar effect. Matthew Burrows, *The Clean Air Act: Citizen Suits, Attorneys' Fees, and the Separate Public Interest Requirement*, 36 B.C. ENV'T AFFS. L. REV. 103, 125 (2009).

148 *See, e.g.*, Spokeo, Inc. v. Robins, 578 U.S. 330 (2016).

149 Broader conceptions of standing have made it easier for plaintiffs to demonstrate an injury. To enforce federal law, a plaintiff must suffer a "concrete and particularized injury." *See, e.g.*, Lujan v. Defs. of Wildlife, 504 U.S. 555, 573 (1992); *Morton*, 405 U.S. at 734; Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc., 528 U.S. 167 (2000); FEC v. Akins, 524 U.S. 11, 24 (1998). This injury may, however, be generalized or widely shared with the general public and may be based on a harm that is conditional. *Morton*, 405 U.S. at 734 ("[T]he fact that particular environmental interests are shared by the many rather than the few does not make them less deserving of legal protection through the judicial process."). This broader, more lenient standard for standing has largely remained intact. Scholar Stephen Johnson writes that "it would be difficult [for citizen plaintiffs] not to satisfy . . . [the more] lenient standard" set out in earlier decisions like *Morton* and *Laidlaw*. Johnson, *supra* note 141, at 417 (quoting *Laidlaw*, 528 U.S. at 201 (Scalia, J., dissenting)). Recent Supreme Court decisions have affirmed the need for a personal stake in the case, limiting standing to those who have been "concretely harmed by a defendant's statutory violation may sue that private defendant over that violation in federal court." TransUnion v. Ramirez, 141 S. Ct. 2190, 2205 (2021); *see also Spokeo*, 578 U.S. at 334.

E. *The Success of Private Environmental Enforcement*

Encouraged by statutory financial incentives and relaxed standing requirements,[150] private enforcement actions have been shown to significantly enhance environmental compliance.[151] Private citizens have brought cases resulting in less polluted waterways,[152] reduced groundwater pollution,[153] more controlled use and spread of toxic substances,[154] improved air quality,[155] increased technological innovation and cleaner technology,[156] and protected swaths of forest and the habitats of endangered species.[157] While relatively few citizen suits were brought in the first decade of the new environmental regime, the numbers mounted in the early 1980s.[158] An Environmental Law Institute study counted 125 suits filed between 1978 and 1982 and 224 suits between

150 Private enforcement was incentivized by provisions for "administratively assessed penalties; easy access to courts for injunctive relief, civil penalties, and criminal sanctions; and a variety of self-help measures for the enforcement agencies such as stop sale orders, seizures, and funds to clean up pollution with recoupment against the responsible party." Miller, *supra* note 129, at 10310 n.4; *see, e.g.*, *Defs. of Wildlife*, 504 U.S. at 572; *Morton*, 405 U.S. at 734; *Laidlaw*, 528 U.S. at 167; *Akins*, 524 U.S. at 24.

151 Christian Langpap & Jay P. Shimshack, *Private Citizen Suits and Public Enforcement: Substitutes or Complements?*, 59 J. ENV'T ECON. & MGMT. 235, 236 (2010).

152 *See, e.g.*, Nat. Res. Def. Council v. EPA, 542 F.3d 1235 (9th Cir. 2008) (hearing case wherein citizens used the CWA citizen suit provision to compel the EPA to promulgate storm pollution standards). "On some levels, the Clean Water Act has been a success. Gone are the days of river fires, and the legislation has stopped countless millions of pounds of pollution from entering our waterways." Cardoni, *supra* note 112.

153 County of Maui v. Haw. Wildlife Fund, 140 S. Ct. 1462 (2020).

154 For instance, one of the major provisions of the 1970 amendment was the phase-out of lead-based gasoline. By 1995, the percentage of U.S. children with elevated levels of lead in their blood had dropped from 88% to 4%, according to data compiled by the Centers for Disease Control and Prevention. Cardoni, *supra* note 112; *see, e.g.*, Env't Def. Fund, Inc. v. EPA, 636 F.2d 1267 (D.C. Cir. 1980) (finding for the citizen group and holding that the EPA's exemption of polychlorinated biphenyl from regulation violated the Toxic Substances Control Act).

155 *See, e.g.*, Sierra Club v. EPA, 294 F.3d 155 (D.C. Cir. 2002) (holding that the EPA's decision to allow the extension of Washington, D.C.'s deadline to implement air quality standards was arbitrary and capricious).

156 "In terms of smog-pollutants, 2010's cars are 98 percent cleaner than the gas-guzzlers on the road in 1970 when the EPA was born." Cardoni, *supra* note 112.

157 *See, e.g.*, Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978); N. Spotted Owl (Strix Occidentalis Caurina) v. Hodel, 716 F. Supp. 479 (W.D. Wash. 1988); N. Spotted Owl v. Lujan, 758 F. Supp. 621 (W.D. Wash. 1991); *see also* Portland Audubon Soc'y v. Babbitt, 998 F.2d 705 (9th Cir. 1993); Or. Nat'l Res. Council v. Allen, 476 F.3d 1031 (9th Cir. 2007). "Galvin says that the greatest success of the ESA—signed into law by President Richard Nixon on December 28, 1973—is that 'no species has gone extinct after being listed.'" Cardoni, *supra* note 112.

158 Austin, *supra* note 122, at 232.

1983 and April 1984.[159] By the 1990s, "citizens had filed almost as many lawsuits to enforce the Clean Water Act as the federal government and all of the state governments combined."[160] Today, private enforcement, including private environmental enforcement, has grown to constitute a significant portion of enforcement action.[161] This participatory mechanism has spawned a body of scientific and legal expertise dedicated to enforcing environmental statutes, raising public awareness, and building momentum around national and international environmental movements.[162]

This success has been met with some critique. When courts relaxed standing requirements, for instance, skeptics of private enforcement raised concerns of a "litigation explosion" due to increasing private actions. These have been shown to be largely myths based on unfounded fears.[163] Other critics have argued that environmental citizen suits amount to "easy"[164] payouts targeted to sustain environmental nonprofits. These, too, have been shown to lack evidence and merit. Regarding the concern that advocacy groups like environmental organizations are unaccountable, several scholars have pointed out that these groups are accountable to their members and must also contend with public opinion.[165]

Overall, many of the critiques of private enforcement of environmental law under the pollution statutes have been disputed as isolated, unrepresentative, based on insufficient empirical evidence, or grounded in fears that broader trends contradict. For instance, a 1984 study, one of the first studies on EPA-related citizen suits, found instead 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 appropriate subjects of enforcement

159 *Id.* (citing ENV'T L. INST., CITIZEN SUITS: AN ANALYSIS OF CITIZEN ENFORCEMENT ACTIONS UNDER EPA-ADMINISTERED STATUTES III-10 (1984)).

160 Johnson, *supra* note 141, at 385.

161 *See* Burbank, Farhang & Kritzer, *supra* note 37, at 713; Johnson, *supra* note 141, at 384–85.

162 The coordinated, multi-year litigation effort led by a citizen-funded nonprofit to enforce the ESA to protect habitat for the spotted owl was also a way to protect swaths of forest. This has been considered a major success both in enforcing environmental laws and in catalyzing a virtuous cycle of public attention and concern, further academic research, and additional policies to protect endangered species. *See, e.g.*, cases cited *supra* note 157.

163 *See supra* note 87 and accompanying discussion.

164 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).

165 Adelman & Reilly-Diakun, *supra* note 72, at 398; *see also* Austin, *supra* note 122, at 257 (noting that environmental groups and public enforcers are both influenced by political pressure and political victory).

action."[166] In essence, private enforcers are doing the job Congress intended them to do.

III. PRIVATE ENFORCEMENT IN THE CLIMATE ERA

While private enforcers achieved success in spurring and supplementing agency action against the environmental problems that gave rise to the 1970s regime, climate change presents a new challenge today. The core of 1970s environmental law, with its focus on pollution control and improved public health and its reliance on private enforcement, has remained almost unchanged for the last fifty years.[167] Citizen suits are now "deeply rooted in this nation's environmental law principles"[168] and have proved instrumental in shaping the body of environmental law.[169] Most scholars seem to agree that private enforcement of environmental law, while not without its flaws, generally works.[170] While taking stock of the many successes in the realm of pollution control, this Part moves these debates about private enforcement into the climate era.

A. *The Climate Problem*

The 1970s environmental regime has been generally responsive to the challenges that spurred its formation. But, as new, unanticipated

166 ENV'T L. INST., *supra* note 159, at V-7.

167 In 1976, Congress authorized the EPA to regulate toxic chemicals. In 1977, President Jimmy Carter and a Democratic Congress amended the Clean Air Act . . . . In 1980, Carter and Congress passed the bill which created a federal "Superfund" for toxic-waste cleanups.

> In 1990, under President George H. W. Bush, Congress again amended the Clean Air Act to address new pollutants and the risks of acid rain. . . . [Recently], Congress updated the toxic-chemicals law.

Meyer, *supra* note 113.

168 William Droze & Viktoriia De Las Casas, *Amicus Briefing Suggests Citizen Suits Are Unconstitutional*, ENV'T L. & POL'Y MONITOR (Aug. 17, 2020), https://www.environmentallawandpolicy.com/2020/08/amicus-briefing-suggests-citizen-suits-are-unconstitutional [https://perma.cc/T8JZ-9C8A] (citing Brief of Richard Epstein and Jeremy Rabkin as Amici Curiae in Support of Plaintiff United States of America, United States v. DTE Energy Co., No. 10-cv-13101 (E.D. Mich. July 30, 2020)).

169 Citizens have also played a major role in shaping environmental law by applying environmental law to raise awareness about as-yet unaddressed aspects of environmental issues like environmental justice, environmental racism, and climate change. Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1193 (9th Cir. 2008).

170 *See supra* notes 69–73; *see also* Adelman & Reilly-Diakun, *supra* note 72, at 380–81, 380 n.2.

environmental problems have emerged, the legislative response has been mixed. Congress has acted quickly for certain problems, such as in response to hazardous waste pollution by passing the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, which established the Superfund program to investigate and remediate sites contaminated by hazardous substances.[171] To the problem of climate change, however, neither the statutory goals of the environmental regime, which did not include climate change until a decade ago, nor the enforcement system have met the challenge.

Climate change is the environmental challenge of the modern era.[172] The IPCC, the United Nations body for assessing the science related to climate change, recently released a report detailing how "[m]any of the changes observed in the climate are unprecedented in thousands, if not hundreds of thousands of years, and some of the changes already set in motion—such as continued sea level rise—are irreversible over hundreds to thousands of years."[173] The IPCC report is a "code red for humanity."[174] The catastrophic impacts of climate change affecting every region on Earth, "from extreme heat to wildfires to intense rainfall and flooding, will only continue to intensify unless we choose another course for ourselves and generations to come."[175] According to the IPCC, "[s]tabilizing the climate will require strong, rapid, and sustained reductions in greenhouse gas emissions, and reaching net zero [carbon dioxide] CO_2 emissions."[176]

171 Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601.

172 This Article is premised on the fact that mitigating climate change is in the national public interest. Every administration since the Carter administration has wrestled with climate change as a pressing national problem. Carter's top environmental aid, Gus Speth, authored a CEQ report urging "immediate action" and warning of "widespread and pervasive changes in global climatic, economic, social, and agricultural patterns." Jonathan Alter, *Climate Change Was on the Ballot with Jimmy Carter in 1980—Though No One Knew It at the Time*, TIME (Sept. 29, 2020, 1:30 PM), https://time.com/5894179/jimmy-carter-climate-change [https://perma.cc/U492-MMPF]. George H.W. Bush recognized climate change as a pressing national problem. Amaury Laporte, *Remembering George H.W. Bush, the "Environmental President*," ENV'T & ENERGY STUDY INST. (Dec. 5, 2018), https://www.eesi.org/articles/view/remembering-george-h.w.-bush-the-environmental-president [https://perma.cc/H4B6-LP68].

173 IPCC Press Release, *supra* note 9, at 1.

174 Matt McGrath, *Climate Change: IPCC Report Is 'Code Red for Humanity,'* BBC NEWS (Aug. 9, 2021) (quoting United Nations Secretary General António Guterres), https://www.bbc.com/news/science-environment-58130705 [https://perma.cc/P2WW-9DDU].

175 Sara Schonhardt, *IPCC: Window Closing to Stop Worst Effects of Climate Change*, E&E NEWS: CLIMATEWIRE (Aug. 9, 2021, 6:52 AM), https://www.eenews.net/articles/ipcc-window-closing-to-stop-worst-effects-of-climate-change [https://perma.cc/Z3VZ-FA8T].

176 IPCC Press Release, *supra* note 9, at 2 (quoting IPCC Working Group I Co-Chair Panmao Zhai).

Distinct from other environmental pollution challenges that are local or regional in scope, climate change is an inherently global problem. The types of pollution that concerned Carson and other activists, while severe, had largely local or regional roots. The pollution's source, such as an industrial factory or a system of lead pipes, was close to where the harms were felt. Species or habitat losses or fragmentation stemming from logging, expanding agriculture, and human populations or illegal wildlife trafficking, for instance, also had primarily local and regional consequences.[177] Private parties' motives in suing to remediate certain forms of pollution likely stemmed from their private interests in drinking cleaner water, breathing nonpolluted air, and reducing toxic chemicals in their neighborhoods. And the remediation they sought would benefit not only the plaintiffs but also their neighbors and larger community.[178]

Climate change breaks from this pattern in nearly every regard. While at least some sources of climate change are localized—say, emissions from an oilfield in Texas or a coal-burning power plant in Pennsylvania—others, such as vehicles, may not be.[179] And because climate change is the result of accumulated greenhouse gases in the atmosphere, the harm is global and indirect. Nor is the source of CO_2 tied to where its effects are felt, be it severe flooding, catastrophic wildfire, or

177 The impacts of the loss of a species or habitat, while perhaps local or regional in many cases, also have broader effects on the ecosystem and reduce biodiversity in the aggregate. S. DÍAZ ET AL., IPBES, THE GLOBAL ASSESSMENT REPORT ON BIODIVERSITY AND ECOSYSTEM SERVICES: SUMMARY FOR POLICYMAKERS 10 (2019), https://doi.org/10.5281/zenodo.3553579 [https://perma.cc/6PJE-SMJL].

178 *See, e.g.*, Cmtys. for a Better Env't v. S. Coast Air Quality Mgmt. Dist., 226 P.3d 985 (Cal. 2010) (requiring a full environmental impact report under the California Environmental Quality Act (CEQA) that discloses and mitigates the pollution impacts of producing ultra low-sulfur diesel fuel in a facility near the Port of Los Angeles and nearby town of Wilmington); *In re* La. Energy Servs., 45 N.R.C. 367 (1997) (opposing siting of hazardous radioactive waste facility in minority community), *aff'd in part, rev'd in part*, 47 N.R.C. 77 (1998); Holt v. City of Dickson, No. 07-cv-0727, 2011 WL 3850479 (M.D. Tenn. Aug. 30, 2011) (alleging harms due to drinking from contaminated groundwater well); Consent Order, Nat. Res. Def. Council, Inc. v. County of Dickson, No. 08-cv-00229 (M.D. Tenn. Dec. 9, 2011) (establishing fund and requiring remediation of contaminated ground and well water after manufacturing companies dumped TCE into landfill).

179 See the Tenth Circuit's discussion regarding the nature of mobile source carbon emissions compared with other types of environmental harms in *Utah Physicians for a Healthy Env't v. Diesel Power Gear, LLC*, 21 F.4th 1229, 1244–46 (10th Cir. 2021). In its discussion, the court emphasizes that plaintiffs must show that their injury is "fairly traceable" to the defendants' harmful emissions, which they limit by the geographic vicinity of the emissions. The Court upheld standing to challenge mobile emissions in the geographic vicinity of the Salt Lake City's nonattainment area, but refused to extend it to distant mobile emissions outside of the city's CAA nonattainment area. *Id.* at 1247–49.

sea level rise.[180] Our traditional tools to address environmental problems are ill-suited and insufficient to address climate change.

Attempts to sue for climate change damages under common law theories stand on unsteady and unreliable ground, leaving the environmental statutory framework as the primary vehicle to address climate change.[181]

Below, I focus on the primary role of environmental statutory law to address climate change and how statutory responses are exacerbating a problem they were not designed to solve at their inception and have not adapted to solve.

B. *Legal Responses to Climate Change*

1. The Legislative Response

At the federal level, despite some efforts, comprehensive climate legislation remains elusive.[182] Instead, climate change has been collapsed into the environmental regime. Over the past fifteen years or so, the major environmental laws have been interpreted to include climate change within their purview, and these efforts have been sharply contested.[183] The CAA, the primary statute regulating air pollution, has become the de facto source of climate change regulation following *Massachusetts v. EPA*,

180 Only recently has the science of attribution made it possible for plaintiffs to claim the latter example as "climate change damage" related to the production and burning of fossil fuels. *See, e.g.*, RICHARD HEEDE, CLIMATE ACCOUNTABILITY INST., CARBON PRODUCERS' TAR PIT: DINOSAURS BEWARE (2017), https://climateaccountability.org/wp-content/uploads/2020/12/Heede-PathToAccountability-18Oct17.pdf [https://perma.cc/ASL8-VRBL].

181 *See, e.g.*, Native Village of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012) (affirming dismissal by the district court). In the 2007 *Massachusetts v. EPA* decision, the Court recognized that climate change was causing sea level rise and coastal erosion. 549 U.S. 497 (2007). Whether other non-state plaintiffs will succeed in proving standing remains to be seen. For instance, the Second Circuit recently affirmed a preemption ruling against the City of New York in a suit for climate change damages related to sea level rise. City of New York v. Chevron Corp., 993 F.3d 81 (2d Cir. 2021); *see also* P. Leigh Bausinger, Note, *Welcome to the (Impenetrable) Jungle:* Massachusetts v. EPA*, the Clean Air Act and the Common Law of Public Nuisance*, 53 VILL. L. REV. 527, 531 (2008).

182 For instance, the American Clean Energy and Security Act of 2009, known as the Waxman-Markey Bill, would have created an emissions trading scheme. This law was the "first time either house of Congress had approved a bill meant to curb the heat-trapping gases scientists have linked to climate change." John M. Broder, *House Passes Bill to Address Threat of Climate Change*, N.Y. TIMES (June 26, 2009), https://www.nytimes.com/2009/06/27/us/politics/27climate.html (last visited Mar. 3, 2023).

183 For instance, the Supreme Court's recent decision in *West Virginia v. EPA* limits the EPA's authority to regulate carbon emissions that cause climate change. West Virginia v. EPA, 142 S.Ct. 2587, 2616 (2022).

and its progeny preempted the use of federal nuisance common law.[184] Through the CAA citizen suit provision, private citizens' enforcement powers extend to carbon emissions as well.[185]

2. The Statutory Response: NEPA as a Backdoor to Tackling Climate Change?

A less overt but influential avenue to address climate change is through NEPA. NEPA has been the procedural workhorse of environmental litigation for decades, and many creative lawyers have used the statute to try to address climate change.[186] A 2010 study of climate change under NEPA found that NEPA does not "explicitly require consideration of climate change," yet a "small but ever-growing body of NEPA case law is making it increasingly difficult for federal agencies to undertake a major [greenhouse gas]-related action without discussing the projected impacts of the emissions under NEPA."[187] For instance, private enforcers use NEPA to sue the Bureau of Land Management (BLM) when it issues oil and gas leases, projects that will directly contribute to climate change, arguing that their environmental impact statements (EISs) are insufficient for failure to consider climate change.

Many scholars have identified the limitations of relying on NEPA as a tool to address climate change. First, until recently, a court's decision to assess whether an agency considered climate impacts in its environmental review has been discretionary because NEPA's text does not explicitly

184 Until the EPA was forced to consider in 2007 whether greenhouse gases endangered human health following the decision in *Massachusetts v. EPA*, it did not consider CO_2 an "air pollutant" that fell under its purview. 549 U.S. at 528–32. *Massachusetts v. EPA* required the agency to conduct an endangerment finding, which was completed in 2009. *See* Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66496 (Dec. 15, 2009).

185 *See Massachusetts*, 549 U.S. at 528–32; Clean Air Act § 304, 42 U.S.C. § 7604 (citizen suit provision). A recent set of decisions largely out of the Tenth Circuit are expanding the power of citizens' reach in addressing carbon emissions from mobile sources, not just stationary sources. *See* Sierra Club v. EPA, 964 F.3d 882, 887–89 (10th Cir. 2020) (affirming Sierra Club's standing to sue the EPA to compel it to object to a CAA permit issued for a Utah-based industrial plant merely because the plant's emissions contributed to air pollution and that "the existence of other contributors wouldn't affect the Sierra Club's standing"); Utah Physicians for a Healthy Env't v. Diesel Power Gear, LLC, 21 F.4th 1229, 1246, 1250 (10th Cir. 2021) (adopting a broad reading of "emission standard or limitation" under the CAA for purposes of statutory standing and holding that plaintiffs had standing to challenge defendants' emissions from mobile sources that contributed to the unhealthy air in the Salt Lake City area).

186 Stein, *supra* note 81, at 474–75.

187 *Id.* at 475 (citing Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1215 (9th Cir. 2008)).

require consideration of climate change. Given this, considerations of climate change under NEPA have been "haphazard."[188] But government agencies are increasingly required to consider climate change when assessing the impact of their actions.[189] The CEQ, which governs NEPA, issued draft guidance in 2010 stating that climate change should be considered as part of proper compliance with NEPA documents, such as an EIS or environment assessment.[190] In 2016, the CEQ finalized this guidance, officially requiring the federal government to consider climate change when assessing the environmental impacts of federal agency projects.[191] Due to administrative turnover, the final guidance was revoked and replaced by the Trump administration with new, narrower guidance; in 2021, upon entering office, the Biden administration repealed the Trump-era guidance and sought to reinstate the original 2016 guidance.[192] Studies by the Sabin Center for Climate Change Law at Columbia Law School measured changes between 2009–2016 in how often agencies included climate change in their analyses since the 2010 draft guidance. Their results suggest that draft guidance documents have prompted a more thorough consideration of climate change impacts in

188 *Id.* at 518.

189 Despite new guidance requiring that an agency consider climate change, Amy Stein argues that the very structure of NEPA makes enforcement ineffective in dealing with climate change. NEPA is a purely procedural statute that does not require the government to take certain action or change course, even if the EIS reveals that significant environmental harms will occur. All a developer needs to do to comply is complete an EIS. NEPA is enforced exclusively by private citizens who can bring suit at a number of different stages to challenge compliance with NEPA's procedural requirements. Thus, an agency or developer can be sued at almost any stage, which can lead to protracted litigation, as discussed below. Nonetheless, even if the judge finds the project to have major environmental impacts, it could still proceed, provided there is full technical compliance with NEPA reporting. NEPA does not ban action; it requires only that the government do the work to discover potential environmental impacts and communicate those to the public. *See id.* at 474–77.

190 This guidance recommended that agencies assess the climate change impacts of their projects on the environment and that they use a 25,000 metric tons of CO_2 equivalent threshold to measure a project's direct GHG emissions. *See* National Environmental Policy Act (NEPA) Draft Guidance, "Consideration of the Effects of Climate Change and Greenhouse Gas Emissions," 75 Fed. Reg. 8046-01 (Feb. 18, 2010); *see also* Squillace & Hood, *supra* note 81 (explaining how agencies should determine if emissions are meaningful and require quantification and noting limitations of the draft guidance). A second draft guidance was issued in 2014, which recommended that agencies also consider the impact of climate change on their proposed project. Revised Draft Guidance for Federal Departments and Agencies on Consideration on Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 79 Fed. Reg. 77802-01 (Dec. 24, 2014).

191 Press Release, White House, Biden-Harris Administration Releases New Guidance to Disclose Climate Impacts in Environmental Reviews (Jan. 6, 2023), https://www.whitehouse.gov/ceq/news-updates/2023/01/06/biden-harris-administration-releases-new-guidance-to-disclose-climate-impacts-in-environmental-reviews [https://perma.cc/EM3K-CDJB].

192 *Id.*

their NEPA reviews despite the fact that they are nonbinding.[193] It remains to be seen whether the new 2021 guidance, which includes clearer guidance on how to assess climate change, will impact both NEPA compliance and enforcement actions.

A second obstacle is NEPA's status as a procedural statute. NEPA only mandates that agencies consider the environmental effects of their actions, not that they take different action. Finally, agencies are accorded significant deference by the courts.[194] Thus, agencies who intend to carry out major projects often do so regardless of private enforcement intervention. In this sense, private enforcement serves to ensure there is comprehensive environmental review and will only block a project from going forth until that review is complete. But private enforcement also sometimes serves to sideline projects that are politically sensitive or can cause the government to abandon projects altogether.

Where private enforcers are seeking to block projects that will directly emit greenhouse gases, they can play a role in mitigating climate change under NEPA. These are actions that have successfully deterred or prevented additional environmental degradation. Yet, using the same tools, private enforcers are also playing a significant role in contributing to climate change by using NEPA enforcement to block projects that make up the infrastructure for a clean energy future.

We sit in a liminal space in which the gravity and the dangers of inaction on climate change are becoming ever clearer and more present; yet politically, the known dangers of climate change for many decades have been met with stagnation.[195] Given the urgent nature of climate change, as the IPCC and others urge, the federal government and many states have enacted a variety of policies and laws to address climate

193 JESSICA WENTZ, GRANT GLOVIN & ADRIAN ANG, SABIN CTR. FOR CLIMATE CHANGE L., SURVEY OF CLIMATE CHANGE CONSIDERATIONS IN FEDERAL ENVIRONMENTAL IMPACT STATEMENTS, 2012–2014 (2016), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1014&context=sabin_climate_change [https://perma.cc/VW5K-WHKG].

194 Stein, *supra* note 81, at 498 ("The Supreme Court has held that judicial review of an agency's decision under NEPA is governed by the APA's 'arbitrary and capricious' standard." (quoting Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 375 (1989)). The APA states that "agency action must be set aside if [it is] 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'" Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 414 (1971) (quoting 5 U.S.C. § 706(2)(A)); Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1193 (9th Cir. 2008). The scope of review is narrow, but the agency must articulate a satisfactory explanation and reasoned basis for its action. Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins., 463 U.S. 29, 43 (1983). The Supreme Court has held that agencies are required to take a "hard look" at the environmental effects of their proposed action. Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976).

195 *Greenhouse Effect and Global Climate Change, Hearing Before the Comm. on Energy & Nat. Res.: Part 2*, 100th Cong. 39–41 (1988) (statement of James Hansen, NASA Goddard Inst. for Space Stud.) (warning of the danger of climate change).

change.[196] These efforts focus largely on building out needed climate-mitigating infrastructure in public transportation, housing, clean energy infrastructure development, and climate-oriented land use management as quickly and efficiently as possible.[197] To modernize the United States to deal with the climate challenge, the Senate recently passed a multi-billion dollar infrastructure bill to revamp the nation's deteriorating roads and bridges and fund climate mitigation and resiliency projects.[198] The Bipartisan Infrastructure Framework promises to fund the largest investment in "clean transportation infrastructure, clean water infrastructure, universal broadband infrastructure, clean power infrastructure, remediation of legacy pollution, and resilience to the changing climate."[199]

Given that any federal action on climate change must pass through the environmental regulatory regime, private enforcers are crucial players in the implementation of climate mitigation projects. If the proponents of private enforcement are right, we would expect citizens to bring actions that spur the government to act on climate change where they are lax and in alignment with federal climate change policy. The reality is far more mixed, with private enforcement of NEPA emerging as a significant barrier to the national and international goals of addressing climate change.

196 At the state level, thirty-three states have passed climate laws or released a climate action plan or are in the process of revising or developing one. *U.S. State Climate Action Plans*, CTR. FOR CLIMATE & ENERGY SOLS. (Dec. 2022), https://www.c2es.org/document/climate-action-plans [https://perma.cc/VD2B-VLMW]. As an example, the California Global Warming Solutions Act of 2006 is among the most ambitious legislative efforts to address climate change in the country. *See* CAL. HEALTH & SAFETY CODE div. 25.5; Josh Richman, *Governor Signs Historic Bill to Reduce Greenhouse Gases*, E. BAY TIMES (Aug. 17, 2016, 6:54 AM), https://www.eastbaytimes.com/2006/09/28/governor-signs-historic-bill-to-reduce-greenhouse-gases [https://perma.cc/VGK2-H327].

197 Paul Shigley, *2008 Could Be the Year Everything Changes: State Efforts to Reduce Greenhouse Gas Emissions Target Land-Use Policy*, CAL. PLAN. & DEV. REP., Dec. 29, 2007, https://cp-dr.com/articles/node-1889 [https://perma.cc/L825-NMGH].

198 Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021); Cochrane, *supra* note 30.

199 Press Release, White House, Fact Sheet: President Biden Announces Support for the Bipartisan Infrastructure Framework (June 24, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/24/fact-sheet-president-biden-announces-support-for-the-bipartisan-infrastructure-framework [https://perma.cc/A2T3-P89J].

IV. THE FAILURE OF PRIVATE ENFORCEMENT TO ADDRESS CLIMATE CHANGE

Despite the promises of private enforcement and its various successes in addressing traditional environmental harm, private enforcement fails in relation to climate change in three key ways. First, the opportunity for private enforcers to engage in the NEPA compliance process significantly increases the cost-and-delay burdens to implement climate mitigation projects. Second, the private enforcement system has promoted a new kind of capture whereby private enforcers who claim the responsibility of enforcing the public interest have instead employed the system for their own ends or for competing environmental goals, both of which conflict with the public interest in acting on climate change. Third, the goal of private enforcement to give voice to those affected by government action fails because those likely to be most affected by major construction projects are also those least likely or able to engage in "participatory democracy."[200]

Scholar Jedediah Purdy writes that "[e]nvironmental lawmaking literally shapes the land in keeping with an idea."[201] I argue that it is not just lawmaking but also the nature of enforcement—when, where, why, by whom, and with what remedies—that shapes the land. While accounts of private enforcement typically focus on the relationship to agency enforcement and the impact or burden that citizen suits impose on agency resources and priorities, few also consider the broader social and political implications of how citizen enforcement shapes the law and its effects on the public. I further argue, in revisiting both our lawmaking and enforcement regimes to meet the demands of the climate era, that we reflect on the lands we imagine we are protecting. The two case studies draw this into relief. Some of the standard critiques of citizen suits we saw in Part I resurface alongside concerns distinctive to the problem of mitigating climate change.

A. *Case Studies*

Through two case studies, I examine how private enforcement fails to fulfill the promises of its proponents where the issue at stake is one involving global collective action. They are representative examples of the

200 The Ezra Klein Show, *How Blue Cities Became So Outrageously Unaffordable*, N.Y. TIMES (July 23, 2021), transcript available at https://www.nytimes.com/2021/07/23/podcasts/transcript-ezra-klein-interviews-jerusalem-demsas.html [https://perma.cc/6JZN-RUZG].

201 Purdy, *supra* note 36, at 226.

two key ways in which private enforcement under NEPA exacerbates climate change.

1. Wildfires in the Western United States

More than a century of fire suppression practices, historic drought, and climate change are fueling wildfires in California and the Western United States that are increasingly frequent and severe, with devastating consequences for forests, wildlife, human life, and property.[202] These conditions are also fueling catastrophic fires that themselves are fueling climate change as they transform forests from carbon sink to carbon source.[203] This further complicates government efforts to adapt to and mitigate climate change.[204] As U.S. Forest Service (USFS) practices turn to address the challenges of restoring healthy forest conditions and mitigating catastrophic wildfires, citizen suits are a well-documented obstacle to efficient project implementation.[205]

Northern California's Shasta-Trinity National Forest is home to old-growth forests and species that thrive in the mosaic landscape that old growth offers, such as the protected northern spotted owl.[206] In 1997, a USFS assessment found that "decades of fire suppression and logging 'shifted the fire regime within the area'" and called for forest thinning to reduce the risk of more severe "'complete stand-replacing' fires within

202 *See Wildfires and Climate Change*, CTR. FOR CLIMATE & ENERGY SOLS., https://www.c2es.org/content/wildfires-and-climate-change [https://perma.cc/Q2S5-5DKZ]; *Billion-Dollar Weather and Climate Disasters: Events*, NAT'L CTRS. FOR ENV'T INFO., NAT'L OCEANIC & ATMOSPHERIC ADMIN., https://www.ncei.noaa.gov/access/billions/events/US/2000-2017 (last visited Mar. 27, 2023).

203 Scientists found that rising temperatures and uncertain precipitation will cause a decrease in California's natural carbon storage capacity by as much as 16% under an extreme climate projection and by nearly 9% under a more moderate scenario. Shane R. Coffield, Kyle S. Hemes, Charles D. Koven, Michael L. Goulden & James T. Randerson, *Climate-Driven Limits to Future Carbon Storage in California's Wildland Ecosystems*, AGU ADVANCES, July 22, 2021, at 7; *see also* Nancy Harris, Thailynn Munroe & Kelly Levin, *6 Graphics Explain the Climate Feedback Loop Fueling US Fires*, WORLD RES. INST. (Sept. 16, 2020), https://www.wri.org/insights/6-graphics-explain-climate-feedback-loop-fueling-us-fires [https://perma.cc/BMX2-HXYG].

204 Ben Brazil, *UCI: Decline in Carbon-Eating Vegetation Will Make It Even Harder for California to Combat Climate Change*, L.A. TIMES: DAILY PILOT (July 13, 2021, 6:34 PM), https://www.latimes.com/socal/daily-pilot/entertainment/story/2021-07-13/as-vegetation-continues-to-die-off-california-is-losing [https://perma.cc/AT4S-PWM2].

205 Amanda M.A. Miner, Robert W. Malmsheimer & Denise M. Keele, *Twenty Years of Forest Service Land Management Litigation*, 112 J. FORESTRY 32 (2014).

206 Conservation Cong. v. U.S. Forest Serv., No. 13-cv-00934, 2021 WL 1966302, at *3 (E.D. Cal. May 17, 2021).

[that area's] mature conifer and [old-growth] stands."[207] Based on this finding, USFS planned a combination of tree thinning and prescribed burns to reduce the risk of catastrophic wildfire and, in 2008, commenced an EIS of a fuel-reduction project dubbed the Pettijohn Project.[208]

In 2012, USFS published its final EIS as NEPA requires. The EIS found that the project would "promote old-growth conditions and reduce the risk of stand-replacing wildfire"[209] and would "not jeopardize the existence of the spotted owl or adversely modify its critical habitat."[210] A biological analysis of the spotted owl also found that the project would benefit the spotted owl in the long-term by reducing the "hazard of catastrophic loss of suitable habitat to late-season wildfire."[211]

Shortly following publication of the EIS, two nonprofit organizations sued, alleging that USFS violated several environmental statutes, including NEPA and ESA. The nonprofits argued that the project would destroy old-growth forests and, correspondingly, the habitat of a protected species, the northern spotted owl, in violation of ESA.[212] Based on this suit, USFS conducted a supplemental information report. Six years later, USFS again concluded that the fuel reduction project "would not jeopardize the existence of the spotted owl or adversely modify its critical habitat."[213] Plaintiffs again sued, raising new allegations that USFS failed to assess the projected greenhouse gas emissions of the project.[214] After more than ten years of litigation over the

207 *Id.* at 3. A "stand replacing fire" is a "fire which kills all or most of the living overstory trees in a forest and initiates forest succession or regrowth." *See Stand Replacing Fire*, NAT'L WILDFIRE COORDINATING GRP., https://www.nwcg.gov/term/glossary/stand-replacing-fire [https://perma.cc/F3UX-7F2K].

208 *Conservation Cong.*, 2021 WL 1966302, at *3.

209 *Id.* at *13.

210 *Id.* at *4. The final EIS "analyzed the potential environmental effects of the proposed action, including potential effects on fire and fuels, wildlife, silviculture, air quality, and climate change." *Id.* at *3.

211 *Id.* at *4.

212 *Id.* at *14. It is interesting to note that the nonprofits based their analysis on outdated research on the northern spotted owl's habitat. Current science shows that the species prefers a patchwork or mosaic landscape characterized by different types of heights and density of trees. While old growth forest has these characteristics, it is not the only habitat in which the spotted owl can thrive. *See* FOREST SERV., U.S. DEP'T OF AGRIC., CONSERVATION STRATEGY FOR THE CALIFORNIA SPOTTED OWL IN THE SIERRA NEVADA: VERSION 1.0, at 12 (2019), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd624135.pdf [https://perma.cc/8YRS-VFDK]. Moreover, there is some evidence that prescribed burns and thinning create habitats in which the northern spotted owl can thrive, which the Forest Service and Fish and Wildlife Service pointed out in the Biological Analysis and EIS documents submitted to the court. *See Conservation Cong.*, 2021 WL 1966302, at *3–4.

213 *Conservation Cong.*, 2021 WL 1966302, at *4.

214 *Id.* at *8. Plaintiffs raised similar concerns as their first complaint and further alleged that USFS had failed to consider greenhouse gas emissions in assessing whether to prepare a supplemental EIS pursuant to NEPA. *Id.* at *12.

impact of the Pettijohn Project, on May 7, 2021, a federal judge finally rejected the plaintiffs' challenges and dismissed the case. In his opinion, he stated: "Plaintiffs go to great lengths to challenge different aspects of the Forest Service's analyses of wildfires and tree removal and their effects on spotted owl habitat and greenhouse gas emission, but in doing so, they miss the forest for the trees."[215]

Less than three months later, before any prescriptions could be implemented, two wildfires, the McFarland and Monument Fires, broke out in the Shasta-Trinity Forest in the vicinity of the project and the nearby town of Weaverville. After burning for three months, the McFarland Fire was contained, but not before burning 122,653 acres.[216] The Monument Fire burned for three months also, burning 223,124 acres.[217]

In the case of the Pettijohn Project, the enforcement action delayed USFS action by more than ten years and required multiple sets of analyses at government expense. NEPA analysis and compliance is estimated to take two to three years on average and cost USFS $365 million annually.[218] In this case, the judge was not only asked to decide whether the government had fully complied with NEPA in conducting its environmental impact review, but, in a broader sense, he was also effectively asked to consider which vision of environmentalism under the law should be enforced where they may be at odds with one another. For instance, in the Pettijohn Project, the judge had to reconcile the USFS's argument that improved forest restoration and wildfire mitigation requires burning and thinning the forest and in the long-term ameliorates the habitat of a variety of species, with the plaintiff's competing and opposite view that protection of endangered or protected species habitat requires no intervention.[219]

In addition to causing a drag on government efficiency, delays in the ability to carry out wildfire mitigation projects can make the difference in a town being devastated with tragic loss of life or not. In the last several years, massive wildfires in California alone destroyed forest habitats;

215 *Id.* at *11.

216 *McFarland Fire*, S.F. CHRON. (Oct. 5, 2021, 10:42 PM), https://www.sfchronicle.com/projects/california-fire-map/mcfarland-fire-2021 [https://perma.cc/62QH-CZFE].

217 *Monument Fire*, S.F. CHRON. (Oct. 26, 2021, 3:52 PM), https://www.sfchronicle.com/projects/california-fire-map/monument-fire-2021 [https://perma.cc/PV9T-8CGX].

218 Nick Smith, *How Environmental Analysis Inadvertently Drains the Forest Service Budget*, HILL (June 22, 2019, 3:00 PM), https://thehill.com/opinion/energy-environment/449857-how-environmental-analysis-inadvertently-drains-the-forest-service [https://perma.cc/EKF5-3R6W]; Miner, Malmsheimer & Keele, *supra* note 205.

219 *Conservation Cong.*, 2021 WL 1966302, at *8–18.

released almost 120 million metric tons of CO_2 emissions in 2020 alone;[220] impacted human health, particularly through toxic air pollution that includes lead; caused millions of dollars in property damage; and led to hundreds of lives lost.[221] The total wildfire emissions in 2018 almost equaled the total emissions of California's entire electricity sector.[222]

Further, massive wildfires put existing climate plans at risk because catastrophic wildfires both destroy a source of carbon storage (a carbon sink) and lead to massive amounts of greenhouse gas emissions.[223] When making climate plan calculations, states depend on calculations of existing and future natural carbon storage. Businesses depend on them as well: Microsoft and other businesses that buy carbon offsets in certain forests rely on these calculations.[224] In California, for instance, wildfires and other natural disasters put natural carbon storage and the offsets market at risk. A recent study on how wildfire impacts climate mitigation efforts noted, "We need our forests and other plant-covered areas to provide a 'natural climate solution' of removing carbon dioxide from the air, but heat and drought caused by the very problem we're trying to solve could make it more difficult to achieve our objectives."[225]

220 By contrast, total emissions from 2000–2019 were only between 14 and 20 million metric tons. CAL. AIR RES. BD., PUBLIC COMMENT DRAFT: GREENHOUSE GAS EMISSIONS OF CONTEMPORARY WILDFIRE, PRESCRIBED FIRE, AND FOREST MANAGEMENT ACTIVITIES, at i (2020), https://ww3.arb.ca.gov/cc/inventory/pubs/ca_ghg_wildfire_forestmanagement.pdf [https://perma.cc/BDY7-973N].

221 *2020 in Review: The Day the Sky Turned Blood Orange; Historic Wildfires Ravage Northern California*, CBS NEWS: BAY AREA (Jan. 1, 2021, 5:00 AM), https://sanfrancisco.cbslocal.com/2021/01/01/2020-historic-wildfires-wine-country-shaver-lake-rescue-orange-sky-san-francisco-deaths [https://perma.cc/M25B-2R6X]; NEXT 10, CALIFORNIA GREEN INNOVATION INDEX 17–23 (11th ed. 2019), https://www.next10.org/sites/default/files/2019-10/2019-california-green-innovation-index-final.pdf [https://perma.cc/F7UA-KHSA]; FOREST MGMT. TASK FORCE, CALIFORNIA'S WILDFIRE AND FOREST RESILIENCE ACTION PLAN: A COMPREHENSIVE STRATEGY OF THE GOVERNOR'S FOREST MANAGEMENT TASK FORCE 3–4 (2021), https://wildfiretaskforce.org/wp-content/uploads/2022/04/californiawildfireandforestresilienceactionplan.pdf [https://perma.cc/E3YS-LF54].

222 NEXT 10, *supra* note 221.

223 Brian Bell, *California's Carbon Mitigation Efforts May Be Thwarted by Climate Change Itself*, UCI NEWS (July 22, 2021), https://news.uci.edu/2021/07/22/californias-carbon-mitigation-efforts-may-be-thwarted-by-climate-change-itself [https://perma.cc/V2T2-R2VD]; NEXT 10, *supra* note 221, at 20.

224 CAL. AIR RES. BD., *supra* note 220; MICROSOFT, MICROSOFT CARBON REMOVAL: LESSONS FROM AN EARLY CORPORATE PURCHASE 14 (2021), https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE4MDlc [https://perma.cc/GZS5-UES5] ("While forests are essential to carbon removal, it is a scientific reality that these projects are inherently dynamic and impermanent. We assume that carbon removed via these projects today will need to be removed at some point again in the future, such as when trees are lost to wildfires or when harvested wood products decay.").

225 Bell, *supra* note 223 (quoting Shane Coffield, Earth System Science Ph.D. candidate, University of California Irvine).

Although it is difficult to say if the Pettijohn Project would have reduced the range and severity of the Monument or McFarland Fires, California wildfires from June to August 2021 produced more CO_2 emissions than in any other year in nearly two decades.[226] These numbers almost certainly exceed any emissions the Pettijohn Project would have produced.[227]

Wildfire management has been a contentious issue for many decades,[228] with private citizens distrustful of decades of forest management practices that they view as having benefitted a private timber industry at the expense of wildlife and other environmental goals.[229] In Arizona, a destructive wildfire, the Rodeo-Chediski Fire, burned through the Apache-Sitgreaves National Forests outside Tucson, where a prescribed burn and forest thinning project had been held up by litigation for multiple years during which time, one plaintiff, the Center for Biological Diversity, had the power to control what happened on the land.[230] The conditions imposed by the center in the course of litigation were unrealistic and, as a result, meaningful thinning, which might have lessened the destructiveness of the Rodeo-Chediski Fire, could not be done. Kate Klein, the supervisor of the Black Mesa Ranger District, who was involved in the project, noted the impact of the power private citizens wield when suing the government:

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226 Adam Voiland, *California Burning*, NASA: EARTH OBSERVATORY (Aug. 19, 2021), https://earthobservatory.nasa.gov/images/148731/california-burning [https://perma.cc/V5AK-EN5G].

227 The Monument Fire and McFarland Fires produced approximately 4.7 and 3.6 million metric tons of CO_2, and burned an estimated 220,888 and 120,140 acres, respectively. *Wildfire Emission Estimates for 2021*, CAL. AIR RES. BD. 3, https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/Wildfire%20Emission%20Estimates%202000-2021.pdf [https://perma.cc/9QQ5-XTEV]. The Pettijohn Project was expected to encompass 13,162 acres of National Forest land and 8,409 acres of private land. *See* Complaint for Declaratory and Injunctive Relief ¶ 87, Conservation Cong. v. U.S. Forest Serv., 2013 WL 1951651 (E.D. Cal. May 12, 2013) (13-cv-00934).

228 Miner, Malmsheimer & Keele, *supra* note 205, at 32, 39–40.

229 Conflicts between conservationists and the logging industry between the 1980s and early 2000s became known as the "Timber Wars." In 1994, the Northwest Forest Plan was adopted to address the dual concerns of the economy and protections for threatened wildlife. *See* Jack Ward Thomas, Jerry F. Franklin, John Gordon & K. Norman Johnson, *The Northwest Forest Plan: Origins, Components, Implementation Experience, and Suggestions for Change*, 20 CONSERVATION BIOLOGY 277 (2006); Susan Jane Brown, *The Return of the Spotted Owl Wars?*, SEATTLE TIMES (Jan. 22, 2021, 12:28 PM), https://www.seattletimes.com/opinion/the-return-of-the-spotted-owl-wars [https://perma.cc/TD54-PCSC]. The relationship between public wildfire management and the private logging industry remains a topic of ongoing debate. *See, e.g.*, Tony Schick & Jes Burns, *Despite What the Logging Industry Says, Cutting Down Trees Isn't Stopping Catastrophic Wildfires*, OPB (Nov. 2, 2020, 12:42 PM), https://www.opb.org/article/2020/10/31/logging-wildfire-forest-management [https://perma.cc/4TYH-5FHP].

230 *See* Mark Flatten, *Lawsuits Stall Forest Thinning*, E. VALLEY TRIB. (Oct. 6, 2011), https://www.eastvalleytribune.com/news/lawsuits-stall-forest-thinning/article_9e900755-2c18-5a50-900b-94e32d20df51.html [https://perma.cc/EFM4-X9A2].

> They definitely had veto power on what we proposed . . . . I guess it's frustrating because we manage for all the people. We don't just manage the forests for the Center for Biological Diversity. We have a mailing list that has hundreds of people in communities all across this country. I believe we have as much obligation to them as we do to a group that has a lot of power and money, and can file lawsuits.[231]

2. Public Transportation in the D.C. Metro Area

More than a century of infrastructure and industry designed around oil extraction, reliance on personal automobiles, and underinvestment in public transportation and non-fossil-fuel alternatives have made the transportation sector the largest contributor to U.S. greenhouse gas emissions.[232] Cars and trucks alone account for one-fifth of all U.S. emissions.[233] Climate experts identify modernizing and updating the transportation sector as critical for climate change mitigation.[234] Modernizing the nation's public transit infrastructure is one of the key priorities of the Biden administration's new bipartisan infrastructure bill, recently passed by the Senate. Reducing emissions through the transition to clean energy vehicles is one key avenue; the other is to improve public transportation alternatives to reduce dependence on cars and provide better alternatives to those who depend solely on mass public transport.[235]

For example, the Washington, D.C., metropolitan area is the sixth largest in the nation.[236] Buses are currently the only public transport

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231 Mark Flatten, *Lawsuits Stall Forest Thinning*, E. VALLEY TRIB. (Oct. 6, 2011), https://www.eastvalleytribune.com/news/lawsuits-stall-forest-thinning/article_9e900755-2c18-5a50-900b-94e32d20df51.html [https://perma.cc/EFM4-X9A2].

232 For a detailed account of how the oil industry transformed the modern economy, see generally TIMOTHY MITCHELL, CARBON DEMOCRACY: POLITICAL POWER IN THE AGE OF OIL (2011). The transportation sector accounts for 27% of greenhouse gas emissions in the United States. This includes cars, trucks, aircraft, rail, and boats. Of these, cars and trucks make up 82% of emissions. *Fast Facts on Transportation Greenhouse Gas Emissions*, EPA, https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions [https://perma.cc/C7AH-47FC].

233 *Car Emissions and Global Warming*, UNION OF CONCERNED SCIENTISTS (July 18, 2014), https://www.ucsusa.org/resources/car-emissions-global-warming [https://perma.cc/5QRU-92L5].

234 *See, e.g.*, JEN MCGRAW, PETER HAAS, REID EWING & SADEGH SABOURI, TRANSIT COOP. RSCH. PROGRAM, AN UPDATE ON PUBLIC TRANSPORTATION'S IMPACTS ON GREENHOUSE GAS EMISSIONS (2021).

235 JOE BIDEN, BUILDING A BETTER AMERICA: GUIDEBOOK 63 (2022), https://www.whitehouse.gov/wp-content/uploads/2022/05/BUILDING-A-BETTER-AMERICA-V2.pdf [https://perma.cc/5PAH-3UBQ].

236 Press Release, U.S. Census Bureau, Four Texas Metro Areas Collectively Add More Than 400,000 People in the Last Year, Census Bureau Reports (Mar. 24, 2016), https://www.census.gov/newsroom/press-releases/2016/cb16-43.html [https://perma.cc/VJ6C-MFLK].

option for east-west travel outside Washington, D.C. Thus, in 1989, after identifying a particular deficiency in east-west public transit options, Maryland set out to expand its transit system to create a direct east-west light rail line (Purple Line) for residents of Montgomery County and Prince George's County to commute around Washington, D.C.[237] The 16.2-mile Purple Line would improve the work commute for thousands by replacing lengthy bus commutes with "faster, more direct, and more reliable" service.[238] The light rail would also reduce traffic on the congested highway beltline.[239] Initial estimates projected the light rail to cost $1.93 billion and take nine years to complete.[240] The project's EIS revealed that environmental impacts would be minimal, air quality would improve, and greenhouse gas emissions would be reduced due to less congestion.[241]

After six years of NEPA compliance, during which there was sustained public opposition to aspects of the environmental review,[242] the Federal Transit Administration approved the Purple Line project in 2014. That same year, before the project commenced, a local nonprofit, a country club, and residents of the town of Chevy Chase, Maryland—a wealthy D.C. suburb through which the project would pass—sued, arguing that the project would destroy the habitat of an endangered transparent invertebrate known as an amphipod.[243] Additional claims were that the government's ridership analysis was flawed and that the project failed to assess the impact on historic buildings under the National Historic Preservation Act.[244] Upon filing this suit, the judge denied the project's Record of Decision (ROD), effectively vacating authorization for the project and stopping it dead while the risk to the

237 ROSS, *supra* note 1, at 165–66. In preparation for an additional metro line, in 1988, Montgomery County bought 6.4 miles of track and right-of-way between the D.C. line and Silver Spring for $10.5 million. "The portion east of Bethesda was placed under the jurisdiction of the county's Department of Transportation." Proctor, *supra* note 3; 1 FED. TRANSIT ADMIN. & MD. TRANSIT ADMIN., *supra* note 2, at ES-1 to ES-17.

238 1 FED. TRANSIT ADMIN. & MD. TRANSIT ADMIN., *supra* note 2, at ES-1.

239 *Id.* at ES-4 to ES-5.

240 Proctor, *supra* note 3.

241 1 FED. TRANSIT ADMIN. & MD. TRANSIT ADMIN., *supra* note 2, at ES-4 to ES-6, ES-13. The Purple Line would use existing transportation corridors, and the impact to land and water resources would be minimal. The final EIS noted that there would be moderate noise and some vibration to a few properties. *Id.* at ES-9, ES-14.

242 *See supra* note 4.

243 Complaint for Injunctive and Declaratory Relief at 2, Friends of the Cap. Crescent Trail v. Fed. Transit Admin., 877 F.3d 1051 (D.C. Cir. 2017) (No. 17-5132); Demsas, *supra* note 5; Proctor, *supra* note 3.

244 Friends of the Cap. Crescent Trail v. Fed. Transit Admin., No. 17-1811, 2019 WL 1046889, at *8 (D.D.C. Mar. 5, 2019).

amphipod and other allegations could be evaluated.[245] After almost four years, subsequent studies revealed that no such amphipod existed along the Purple Line route.[246] An appellate court reinstated the ROD, which reinstated the project, and dismissed the case.[247] In September 2017, the groups sued again, seeking a preliminary injunction of the renewed authorization on construction that had, by that point, just begun. The group alleged that approval of the project's federal grant funding violated the APA. A judge denied the injunction and ultimately rejected the suit.[248] The group sued yet again in April 2020, this time against the U.S. Army Corps of Engineers, claiming the Corps' analysis of the project's impact on wetlands was incomplete.[249]

The Purple Line is still under construction, having suffered more than a decade of delays and cost $5.8 billion, nearly $4 billion over the projected budget.[250] Opposition to the Purple Line from private citizen groups at every stage of the process—from public comment during the environmental review to formal lawsuits, all of which were rejected—drove and compounded costs to the government. The suits resulted in delays in implementing public transit infrastructure that has been badly needed for more than thirty years and that would have likely mitigated lengthy, unreliable commutes—including, for many residents solely dependent on public transport, highway congestion—and, consequently, emissions years earlier.[251] Moreover, it would have significantly improved the daily lives of individuals living in suburban Prince George's County and Montgomery County, who continue to rely on a series of buses to make the lengthy commute to and from work.

245 *Id.*

246 *See* Complaint for Injunctive and Declaratory Relief, *supra* note 243. The complaint was filed in August 2014, and the district court decision was rendered in December 2017.

247 *Friends of the Cap. Crescent Trail*, 877 F.3d at 1066.

248 Friends of the Cap. Crescent Trail v. Fed. Transit Admin., No. 17-1811, 2017 WL 3994881, at *1–2 (D.D.C. Sept. 8, 2017).

249 Friends of the Cap. Crescent Trail v. U.S. Army Corps of Eng'rs, 453 F. Supp. 3d 804, 811–12 (D. Md. 2020).

250 Proctor, *supra* note 3.

251 1 FED. TRANSIT ADMIN. & MD. TRANSIT ADMIN., *supra* note 2, at 1-1, 1-3, 1-8 to 1-9, 1-15 to 1-16; *see also* ECON. DEV. RSCH. GRP., ECONOMIC IMPACT OF PUBLIC TRANSPORTATION INVESTMENT: 2020 UPDATE 5, 7 (2020), https://www.apta.com/wp-content/uploads/APTA-Economic-Impact-Public-Transit-2020.pdf [https://perma.cc/3BE7-SZAW] (noting the role of reducing traffic congestion in improved productivity and the social and environmental impacts, such as "personal time savings, emissions impacts, and public transit's role in providing mobility for those without cars, along with backup mobility for those who do have personal vehicles").

B. *Critiques of Private Enforcement*

The promise of private enforcement involves three key aspects: first, citizens could supplement agency enforcement with the skill, knowledge, and resources of the private sector, thus freeing up government resources to be used elsewhere; second, citizens could spur agencies to enforce the law where politics or the power of special interests incentivized an agency to do the opposite; and third, proponents of private enforcement sought to draw upon the innovation and spirit of participatory democracy and create opportunities for those concerned or affected by the impacts of a project to voice opposition and take action.

The case studies,[252] representative of larger trends in ex ante private enforcement, challenge the ability of private enforcement to consistently deliver on these promises. They exemplify a reality of private enforcement under NEPA, which allows citizens to proactively block projects, sometimes indefinitely. In so doing, private enforcement drives up costs to the government and delays projects that would have significant climate change benefits. Moreover, these studies show how private enforcers like environmental nonprofits or town associations engage in a form of capture by bringing enforcement actions that prioritize a particular interest or vision of environmental protections without consideration of the broader public interest. Finally, they suggest that private enforcement is not democratically representative but largely a project of the powerful and well-resourced.

1. Private Enforcement Burdens Government Resources

As we saw in the survey of the literature on citizen suits in Part I, the first promise of private enforcement is the argument that private enforcers improve the efficient use of government resources. As the case studies show, this argument fails. Instead, private enforcement drives up costs to the government and delays projects and the climate mitigation benefits they are intended to bring.[253]

All federally funded projects, like the Purple Line or a forest thinning, also referred to as a forest fuels reduction project, must comply with NEPA and assess their expected environmental impacts. NEPA does not ban action; it requires only that the government do the work to discover potential environmental impacts and communicate those to the public. "NEPA can [thus] serve an important informational role by

252 *See supra* Section IV.A.

253 *See generally* Brooks & Liscow, *supra* note 15.

influencing decision makers and informing the public about the choices agencies make."[254] Many have noted, however, that the informational benefit to the public is often outweighed by the burden to the government. For instance, completing an EIS or other environmental assessment has grown from an approximately ten-page analysis to "today . . . averag[ing] more than 600 pages, plus appendices that typically exceed 1,000 pages."[255] Preparing an EIS has become an "onerous" process that is extremely costly both financially and timewise: "the average EIS now takes 4.5 years to complete" and often involves significant delays.[256]

There are several reasons for the increase in costs and delay. First, the NEPA process invites citizen participation even if it was not intended as an "exercise in public participation."[257] At nearly every phase of environmental review, there are touchpoints for citizens to engage and raise objections. This process extends from early-stage public engagement during the public comments phases up through lawsuits that can be filed after the final EIS is issued.[258] At any time, the threat of future litigation or opposition to a project can result in delays as an agency may spend additional time assessing the litigation risk and ensuring full compliance. Where an agency learns of or anticipates litigation, even during early stages of review, the project applicants may also rely on outside counsel to assess the litigation risk and advise on other risk factors associated with the NEPA analysis, which causes additional costs and delays. Although agencies are accorded significant deference in their decision-making[259] and may ultimately prevail, a project may nonetheless undergo significant cost and delay in the process due to litigation risk.

For example, in a study of highway construction costs from the 1960s, before the environmental regime, to the 1980s, after the regime came into effect, scholars Leah Brooks and Zachary Liscow found that the average infrastructure project costs significantly more and takes longer to

254 Stein, *supra* note 81, at 475.

255 BRINK LINDSEY & SAMUEL HAMMOND, NISKANEN CTR., FASTER GROWTH, FAIRER GROWTH: POLICIES FOR A HIGH ROAD, HIGH PERFORMANCE ECONOMY 108–09 (2020), http://www.niskanencenter.org/wp-content/uploads/2020/10/FGFG-full-report_final.pdf [https://perma.cc/98XZ-SA7W].

256 *Id.* at 109 ("[B]etween 2010 and 2017, four such [EISs] were completed after delays of 17 years or more.").

257 William K. Reilly, *The National Environmental Policy Act and the Federal Highway Program: Merging Administrative Traffic*, 20 CATH. U. L. REV. 21, 32 (1970).

258 *See* 40 C.F.R. § 6.203 (2023).

259 *See supra* note 194 and accompanying text. The rationale behind this deference stems from the belief that where analysis "'requires a high level of technical expertise,' [a court] must defer to 'the informed discretion of the responsible federal agencies.'" Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 377 (1989) (quoting Kleppe v. Sierra Club, 427 U.S. 390, 412 (1976)).

conclude today then before the rise of the citizen suit.[260] A study by the Eno Center for Transportation similarly found that "U.S. projects cost 50 percent more and take [up to] 18 months longer to conclude than similar projects abroad" due, in part, to the extensive environmental review process.[261] Brooks and Liscow found that "spending per mile on Interstate construction increased more than three-fold . . . from the [early] 1960s to the 1980s. . . . [, which] coincides with the rise of 'citizen voice' in government decision-making in the early 1970s."[262] As they put it: "[C]itizen voice leads to more expensive routes and structures to respond to local concerns."[263]

Second, where there is opposition, it tends to be a "kitchen sink" approach of identifying any and all possible reasons to block the project. This is typical of public transportation and infrastructure projects. In the case of the Purple Line, there was strong opposition to the process from an early stage in the public comment process, and the first lawsuit filed involved the kitchen sink approach of suing on a range of different grounds—from the seemingly spurious claim of a nearly invisible endangered species to historic preservation to questioning data on ridership.[264]

Overall, NEPA compliance and its attendant enforcement have become notorious for transforming a project into a multi-decade, onerous, and over-budget effort. This has been true for decades. Writing about NEPA challenges to nuclear power and genetic engineering in 1990, Denis Binder observed: "[T]he NIMBY phenomenon has

260 Brooks & Liscow, *supra* note 253, at 21.

261 Henry Grabar, *The Perverse Reason It's Easier to Build New Highways Than New Subways: The Environment?!*, SLATE (Aug. 19, 2021, 1:00 PM) (citing ROMIC AEVAZ, BRIANNE EBY, PAUL LEWIS & ROBERT PUENTES, ENO CTR. FOR TRANSP., SAVING TIME AND MAKING CENTS: A BLUEPRINT FOR BUILDING TRANSIT BETTER (2021), https://projectdelivery.enotrans.org/wp-content/uploads/2021/07/Saving-Time-and-Making-Cents-A-Blueprint-for-Building-Transit-Better.pdf [https://perma.cc/395Z-RE8L]), https://slate.com/business/2021/08/congestion-pricing-nyc-bart-tunnel-san-francisco-bay-environmental-reviews.html [https://perma.cc/4XQD-R5HM].

262 Brooks & Liscow, *supra* note 13, at 1. Brooks and Liscow "use the term 'citizen voice' to describe the set of movements that arose in the late 1960s—such as the environmental movement and the rise of homeowners as organized lobbyists—that empowered citizens with institutional tools to translate preferences into government outcomes." *Id.* at 4 (citations omitted) (first citing WILLIAM A. FISCHEL, THE HOMEVOTER HYPOTHESIS: HOW HOME VALUES INFLUENCE LOCAL GOVERNMENT TAXATION, SCHOOL FINANCE, AND LAND-USE POLICIES (2001); and then citing Altshuler & Luberoff, *supra* note 12).

263 *Id.* at 21.

264 *See supra* Section IV.A.2.

advantaged itself through NEPA in delaying and halting new developments."[265] "NEPA is the ideal legal tool of delay."[266]

This may have been a net win for environmental values when conservation was the central concern. But under conditions in which speedy action on infrastructure is essential, the climate change impacts of delaying climate mitigation projects due to ex ante enforcement are significant. In the case of both the wildfire mitigation project and the Purple Line, private enforcers brought suits that worsened the effects of climate change by delaying climate mitigation efforts. In the western United States, this type of challenge has increased the likelihood of more catastrophic fires and massive greenhouse gas and other toxic emissions that far exceed those that would result from the project itself; in the D.C. area, delays mean increased congestion and continued use of fossil-fuel–powered vehicles. In both cases, the lawsuits resulted in significant diversions of government resources.

NEPA review is, at present, caught in an administrative tug of war. In 2010 and 2016, the Obama-era CEQ expanded NEPA review to assess projects through the lens of climate change. Ironically, now that it has done so, the process may become even more complex and protracted.[267] Research by the Sabin Center suggests that agencies have been increasingly complying with the draft guidance to consider climate change impacts in their NEPA reviews.[268] Further, NEPA challenges have been increasing. A survey of 324 cases involving NEPA challenges between 2001 and 2020 showed that the number of challenges doubled every five or so years. Beginning around 2011, the challenges involving clean energy projects and forest management are outpacing those involving fossil fuel leasing.[269] As climate change analysis in NEPA review became standard through the draft and then final guidance, NEPA litigation also increased. This trend continued despite the revocation of the final guidance by the Trump administration in 2017. To the extent

265 Denis Binder, *NEPA, NIMBYs and New Technology*, 25 LAND & WATER L. REV. 11, 41 (1990).

266 *Id.* at 40.

267 *See generally* Memorandum from Christina Goldfuss, Council on Env't Quality, to Heads of Fed. Dep'ts & Agencies, on Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (Aug. 1, 2016).

268 WENTZ, GLOVIN & ANG, *supra* note 193, at 76.

269 Using data from the Sabin Center for Climate Change Law, I counted 324 total NEPA challenges from 2001 to 2020. From 2001 to 2009, 41 cases challenging NEPA were filed. The number of cases per year ranged from 1 to 12, with an average of 4.5 cases per year. When the draft guidance went into effect in 2010, cases increased slightly. From 2010 to 2015, 82 cases were filed. These ranged from 7 to 20, with an average of 13.6 cases per year. When the final guidance went into effect in 2016, cases more than doubled. From 2016 to 2020, 170 cases were filed. They ranged from 23 to 49, with an average of 34 cases per year.

these cases follow a similar pattern as that described in the case studies, we may expect delays in an increasing number of potential projects that will mitigate climate change. These estimates provide a general picture of an increase in NEPA litigation challenging projects that would provide a climate benefit.

Upon entering office in 2016, the Trump administration rolled back the CEQ climate guidance and, in 2020, issued its own CEQ guidance that proposed to eliminate consideration of "cumulative impacts."[270] Noting that this change would "gut" NEPA, twenty-three attorneys general sued the government to prevent limited review of certain projects and to prevent further streamlining of the law.[271] The Biden administration has moved to overturn the Trump guidance, but the new infrastructure bill includes the Trump-era streamlining, potentially entrenching them not just in the new set of infrastructure projects but in administrative guidance.

With regard to the argument that private enforcement frees up government resources, challenges under NEPA demonstrate that instead of supplementing government resources, citizen suits impose a greater burden on them. This argument ultimately fails. There is, however, a continuing need to balance citizen oversight of government actions with the urgency of transforming our energy system from fossil fuel to renewable dependent. For private enforcement to serve as an effective tool, there must be a better way to improve the quality of oversight, ensuring the government spends its resources where more environmental review is needed, not where citizens merely want to delay otherwise thoughtful and well-researched projects that are urgently needed for climate change mitigation.

2. Private Enforcement as a Form of Capture

A second promise of private enforcement derives from the era of political and social protest and skepticism about the government's ability to withstand lobbying and other forms of influence by powerful, regulated industries. Proponents of private enforcement believed that

270 *See* Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43304-01 (July 16, 2020) (to be codified at 40 C.F.R. § 1508.1)); Press Release, Council on Env't Quality, Exec. Off. of the President, CEQ Issues Final Rule to Modernize Its NEPA Regulations, https://trumpwhitehouse.archives.gov/wp-content/uploads/2020/01/20200716Final-NEPAPress-Release.pdf [https://perma.cc/R9CR-KNSS].

271 Sharon Zhang, *How Trump Plans to Gut NEPA, a 50-Year-Old Environmental Law*, PAC. STANDARD (Jan. 24, 2019), https://psmag.com/environment/how-trump-plans-to-gut-nepa-environment [https://perma.cc/XKA8-QN4C]; *see* Complaint for Declaratory and Injunctive Relief, California v. Council on Env't Quality, No. 20-cv-06057 (N.D. Cal. Aug. 28, 2020).

citizens could hold the government accountable to uphold the law against attempts by powerful lobbies who might seek to influence agencies to loosen the regulatory controls over them. In both the case of the environmental nonprofits suing to protect a particular landscape from government intervention and the nonprofit made up of Chevy Chase stakeholders suing to protect their town from a government transit project, this argument is far more complex.

Regulatory capture has been described as a scenario in which "[a]gencies tasked with protecting the public interest come to identify with the regulated industry and protect its interests against that of the public. The result: Government fails to protect the public."[272] This is the scenario private enforcers are meant to protect against. But what about a situation in which private individuals or groups enforce the law to hold the government accountable, and yet come to use that law to protect a particular interest that interferes with or contradicts a public interest? The ability of private interest groups to influence the law through enforcement in a way that is contrary to public policy could be seen as a form of capture.

Private enforcers are made up of individuals, for-profit associations, nonprofit groups, industries, and lobbies, who "vary, often substantially, in their motives and means."[273] Private enforcers are themselves representatives of groups who share a common special interest, be that an economic or business interest or common ideological or social views.[274] It is not especially striking that private enforcers will seek to use the law to protect a particular interest. What is striking is that the effect of the lawsuits described in these case studies is to block action on climate change mitigation projects, which necessarily exacerbates, albeit incrementally, the very problem the projects intend to help solve. It is further of note that the mode of objection involves employing substantive environmental law—the CAA, ESA, and CWA—to object to projects that will confer a climate benefit. These suits also use environmental law to advance a particular vision of environmentalism that is at odds with the broader public interest in mitigating climate change.

Again, reform is needed to prevent capture of the enforcement process from those who seek to use procedural tools, not to pursue more thorough government oversight as the law intends, but to pursue other

272 Daniel Carpenter & David A. Moss, *Introduction*, *in* PREVENTING REGULATORY CAPTURE: SPECIAL INTEREST INFLUENCE AND HOW TO LIMIT IT 1 (Daniel Carpenter & David A. Moss eds., 2014). Carpenter and Moss define regulatory capture as "the result or process by which regulation, in law or application, is consistently or repeatedly directed away from the public interest and toward the interests of the regulated industry, by the intent and action of the industry itself." *Id.* at 13.

273 Engstrom, *supra* note 39, at 633.

274 GENE M. GROSSMAN & ELHANAN HELPMAN, SPECIAL INTEREST POLITICS 2–3 (2001).

ends by entirely blocking projects that are deemed in the public interest in climate change mitigation.

3. Private Enforcement Is Not Democratically Representative

A final promise of private enforcement is that it would increase democratic participation in the enforcement process. While the case studies provide only two examples of the types of private plaintiffs who enforce environmental law, they show that private enforcement can also run counter to democracy by empowering singular powerful groups to commandeer the NEPA enforcement process.

NEPA depends almost uniquely on citizen enforcement as a check on agency compliance. While the statute was not designed to be a participatory statute, as were the CAA and the other substantive environmental laws, it quickly evolved into a vehicle for private environmental enforcement.

In 2010, CEQ's first chairman Russell Train reflected:

> NEPA brought the environment front and center to federal agencies, and that this can be deemed a success brought about, in no small part, by the many federal employees and citizens who have applied the law over these decades. It also opened up the federal decision making process. No longer could federal agencies say "we know best" and make decisions without taking environmental consequences into account. Nor could they simply pick one outcome or project and deem all others unworthy of consideration. NEPA democratized decisionmaking. It recognized that citizens, local and state governments, Indian tribes, corporations, and other federal agencies have a stake in government actions . . . .[275]

In theory, NEPA expands decision-making to incorporate multiple voices, but in practice, NEPA litigation is dominated by a comparatively small set of voices. There are several reasons why this may be true.

First, some groups wishing to challenge an agency's environmental review may lack the resources to raise legal objections. The environmental justice literature has been dedicated to showing how communities most at risk of the impacts of government action often have the fewest resources to challenge them. For instance, a 1984 report on pollution facility siting found that "socioeconomic groupings tend to resent the nearby siting of major facilities, but the middle and upper-socioeconomic strata possess better resources to effectuate their

275 ENV'T L. INST., NEPA SUCCESS STORIES: CELEBRATING 40 YEARS OF TRANSPARENCY AND OPEN GOVERNMENT 3 (2010), https://www.eli.org/sites/default/files/eli-pubs/d20-03.pdf [https://perma.cc/7K3M-BEBF].

opposition."[276] A recent study by David Adelman and Jori Reilly-Diakun found that the number of environmental justice[277] citizen suits is "strikingly low—with no jurisdiction standing out—and seemingly at odds with the prominence of environmental justice issues nationally."[278]

NEPA was at least partially created in response to the recognition that the government's actions could have disproportionate impacts on poor and minority communities, such as those that resulted from federally funded urban renewal and redevelopment. In reality, marginalized communities, those likely to be most affected by major construction projects, rarely engage directly in participatory democracy through litigation.[279] Instead, the citizens who most often engage tend to be "individuals who are very wealthy, who are white, who are already privileged in the political system, to stop transportation, and to stop public works projects, or anything that might be broadly beneficial to the community, from being placed in their neighborhoods."[280] As the case studies illustrate, if a private enforcer wants to contest a particular project, NEPA provides a legal avenue to voice a complaint. Whether a potential plaintiff can get access to file a complaint, however, remains a barrier to democratic enforcement.

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276 CERRELL ASSOCS., INC. & J. STEPHEN POWELL, POLITICAL DIFFICULTIES FACING WASTE-TO-ENERGY CONVERSION PLANT SITING 26 (1984), http://www.ejnet.org/ej/cerrell.pdf [https://perma.cc/HR6J-2CMG]; *see also* Melissa A. Hoffer, *Closing the Door on Private Enforcement of Title VI and EPA's Discriminatory Effects Regulations: Strategies for Environmental Justice Stakeholders After* Sandoval *and* Gonzaga, 38 NEW ENG. L. REV. 971, 976–77 (2004) ("[S]iting decisions have not infrequently stemmed from specific efforts to identify and locate projects in communities that are less likely to challenge them. Such communities also tend typically to be poor and/or minority communities.").

277 Adelman and Reilly-Diakun use the following definitions:

> 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).

Adelman & Reilly-Diakun, *supra* note 72, at 412 n.145.

278 *Id.* at 411.

279 Patricia E. Salkin, Commentary, *Intersection Between Environmental Justice and Land Use Planning*, 58 AM. PLAN. ASS'N 3, 3–4 (2006); *see also* Demsas, *supra* note 5.

280 The Ezra Klein Show, *supra* note 200.

Second, litigation may not be democratic due to the distribution of local values. A recent study by David Adelman and Robert Glicksman found that NEPA enforcement is a geographical creature.[281] They observed that "citizen suits mirror local values—they are overwhelmingly filed in jurisdictions where concerns about the environment are the highest and are rare where such concerns are lowest."[282] They concluded that this finding complicates proponents' argument that citizen suits fill a gap in agency implementation in places "where local politics cuts in the other direction."[283] Instead, it amplifies suits where local values support litigation challenges.

Thus, regional differences in values may further drive private enforcement in ways that exacerbate climate change: private enforcers may ignore projects that directly exacerbate climate change if they happen to live in a location that does not value climate action or have necessary resources to challenge proposed action or a tradition of doing so; they also block, sometimes for more than a decade as the case studies show, mass transit, wildfire mitigation, and other climate mitigation projects that would reduce climate change but for the delays.

The critique here is not that marginalized communities entirely lack the power, resources, or access to organizations that can voice opposition; there are numerous examples that they, in fact, do.[284] The critique rather is that they do not have enough power, resources, or access relative to wealthier groups.[285] The right of citizens to privately enforce federal regulation is a tool of power; those who are able to access the system have the opportunity to shape the landscape. If one of the arguments in favor of private enforcement is that a variety of democratic benefits of participation in this process inure therefrom,[286] this Article critiques the validity of this argument. What is the nature of participation in the system of private regulatory enforcement: who is participating, who is "making democracy," and who is not? A clearer picture of both the scope and types of plaintiffs engaging in litigation under NEPA is the subject of ongoing research.

Whether it is due to lack of resources or because local values do not propel certain communities or regions to participate, or yet other reasons, NEPA litigation overall is not democratically representative. Instead, it is skewed towards those with the greatest access and motivations to sue. Philip Howard puts it another way: "[L]awsuits over environmental

281 Adelman & Glicksman, *supra* note 11.

282 *Id.* at 388.

283 *Id.* at 447.

284 *See, e.g.*, Hoffer, *supra* note 276 (describing a variety of environmental justice suits).

285 *Id.*

286 Thompson, *supra* note 23, at 200.

review statements became surrogates for questioning the wisdom and design of projects."[287] Any citizen who meets standing requirements not only has the power to question whether an EIS has assessed the requisite environmental impacts, but also the opportunity to potentially influence the ultimate design and route of a project to their benefit.[288] While NEPA has democratized decision-making through information forcing and in the sense that members of the public can voice their concerns through NEPA suits, these voices are dominated by a nonrepresentative slice of the public. The NEPA process thus transfers power from democratically elected officials to a nonrepresentative set of project opponents.[289]

There are other long-term social, political, and environmental consequences beyond disputes about an immediate project. Citizens opposed to a project have also been successful at lobbying their political representatives to pass more restrictive zoning laws that foreclose certain future types of clean energy projects, such as solar, housing, or other projects. This restricts the places in which building can occur, displacing it to places where there are fewer legal restrictions.

If the public is asked to use its land and its landscapes to mitigate the urgent risks of climate change, those sacrifices or burdens must be equitably distributed and shared. Where more powerful and well-resourced voices are involved in influencing the process, most often, those people will share in the benefits of clean energy and improved infrastructure while imposing the burden on those less well-resourced, as the efforts of the plaintiffs in the Purple Line example show. Future reforms to the tool of private enforcement must account for such inequities while also ensuring that the public interest is maintained.

V. PRESCRIPTIONS

Underpinning each of these concerns is the reality that "private enforcers vary, often substantially, in their motives and means."[290] Private enforcers are complex rational actors who respond to economic and ideological and likely a host of other types of motives. They also wield significant power to enforce public law in ways that align with a particular interest or vision of what environmental law or environmentalism is or should be. Where these interests and visions diverge from a broader

287 Statement of Philip K. Howard, *supra* note 125, at 3.

288 *See* NINA M. HART & LINDA TSANG, CONG. RSCH. SERV., IF11932, NATIONAL ENVIRONMENTAL POLICY ACT: JUDICIAL REVIEW AND REMEDIES (2021) (providing procedure for opposing an EIS under NEPA).

289 *Id.*

290 Engstrom, *supra* note 39, at 633.

public interest can lead to troubling and unfair social and environmental outcomes. As the case studies demonstrate, a subset of private enforcers is using environmental law to resist national efforts to address climate change. The central concern of this Article, and the task of Part V, is to explore the benefits and drawbacks of potential solutions intended to restrain private enforcement that cuts against the public interest in mitigating climate change.

I explore the following proposals as potential options that might rebalance the task of enforcement in a way that facilitates urgent mitigation efforts. First, streamlining and categorical exclusions are used to accelerate certain types of projects by insulating them from excessive delays caused by environmental review and litigation. Could eliminating streamlining efforts for projects based on fossil fuel production and expanding them for certain clean energy and land use management projects that provide the greatest public benefit nevertheless harm the public interest by disempowering disadvantaged communities? Second, unlike the EPA, which can serve as an agency gatekeeper by intervening in private enforcement against third parties under certain statutes such as the CAA, there is no equivalent gatekeeper within CEQ that can effectively filter NEPA cases to distinguish meritorious from frivolous ones in line with broader regulatory goals. Could such a gatekeeper be established? Third, the task of addressing climate change is a global problem that ultimately transcends any one agency's actions. Could more centralized or interagency action on climate change reframe climate change as a public problem, refocus national priorities around addressing climate change, and ultimately build public trust?

A. *Streamlining and "Categorical Exclusions"*

Streamlining allows the government to fast-track certain projects by bypassing aspects of the regulatory process if they meet certain thresholds or objectives. NEPA streamlining and categorical exclusions already exist for areas like fossil fuel development and nuclear regulation deemed in the interest of national security.[291] Streamlining, or excluding certain

291 For example, the Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels Act of 2005 declares that "it is the policy of the United States that . . . shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. § 15927(b)(1). The Nuclear Regulatory Commission (NRC) has created numerous categorical exclusions in its regulations. Licensing nuclear power plants and facilitating the operation of the plants is aided by such exclusions. For example, NRC regulations indicate specifically that "[e]xcept in special circumstances, . . . an environmental assessment or an

projects, is one of the primary tools that has been used to accelerate or pause certain types of actions depending on government priorities.

Streamlining allows the government to exercise a time-limited and more nimble approach to achieve priorities related to government action. Advocates of streamlining NEPA argue that the measures are necessary to accelerate development.[292] For instance, the Trump administration actively promoted streamlining, likely with the goals of accelerating energy projects.[293] To meet the objective of reducing emissions with minimal government burden or delay, many, including the State of California and the Biden administration, have proposed that streamlining be further expanded to certain clean energy or climate-oriented projects.[294] The White House has focused on streamlining as a way to implement the clean energy projects to build the resilient housing, roads, and communities that are intended to flow from multi-billion dollar investments made possible under the Bipartisan Infrastructure Law and IRA.[295]

Yet, streamlining faces opposition from several key angles. For instance, some opponents claim that streamlining impairs the rights of minority and underrepresented groups to raise concerns in major federal projects that could impact the environment.[296] This claim may be exaggerated, however, since these groups do not bring the majority of NEPA claims.[297] Exploring this claim is the topic of future research on

environmental impact statement is not required for any action within a category of actions included in the list of categorical exclusions." 10 C.F.R. § 51.22(b) (2023).

292 Russell, *supra* note 83, at 1059–66 (reviewing NEPA process in the energy area).

293 On July 16, 2020, CEQ authorized an overhaul of streamlining measures, including further categorical exclusions under NEPA. 40 C.F.R. § 1501.4 (2023). The new rules also require procedural changes such as limiting EIS and environmental assessment page limits and the period of review to one and two years, respectively. *Id.* § 1502.7 (page limits); *id.* § 1501.10(b) (time limits). These rules aim to address some of the concerns that NEPA review unnecessarily delays projects and propose to reduce the compliance burden on federal agencies.

294 *See, e.g.*, Nadia Lopez, *Slashing Greenhouse Gases: California Revises Climate Change Strategy*, CALMATTERS (Nov. 16, 2022), https://calmatters.org/environment/2022/11/california-revises-climate-change-plan [https://perma.cc/T3VG-42B6].

295 LYDIA OLANDER, KYSTAL LAYMON & HEATHER TALLIS, EXEC. OFF. OF THE PRESIDENT OF THE U.S., OPPORTUNITIES TO ACCELERATE NATURE-BASED SOLUTIONS: A ROADMAP FOR CLIMATE PROGRESS, THRIVING NATURE, EQUITY, & PROSPERITY: A REPORT TO THE NATIONAL CLIMATE TASK FORCE (2022), https://www.whitehouse.gov/wp-content/uploads/2022/11/Nature-Based-Solutions-Roadmap.pdf [https://perma.cc/L8B3-QUMN].

296 For example, in California, the NEPA corollary is CEQA. There, "most efforts to streamline CEQA in urban areas have run into opposition from environmental justice advocates." William Fulton, *Advocates of Poor, Minorities Seek Equal Footing in Growth Debates*, CAL. PLAN. & DEV. REP., June 6, 2002, https://www.cp-dr.com/articles/node-920 [https://perma.cc/H858-BBVC].

297 President Biden has issued an Executive Order implementing a Justice40 Initiative. It is intended to focus on environmental justice in the roll-out of new federal action on clean energy

private enforcement. Others argue that streamlining reduces the overall importance of NEPA and endangers the important goals of the statute to ensure that agencies evaluate the environmental impacts of their acts.[298] Indeed, many have raised concerns that these new rules as well as new definitions of "cumulative impacts" will destroy meaningful consideration of climate change.[299]

To address the challenge of tackling the climate crisis while still providing safeguards for citizen engagement, I propose that the balance, or ratio, of projects available for streamlining or categorical exclusion[300] heavily favor clean energy projects over those that will directly contribute to greenhouse gas emissions, such as fossil fuel leasing and production. In effect, I propose that the CEQ increase streamlining for certain clean energy and land use management practices while eliminating it for fossil fuel production. Further, I propose that only projects that will provide the greatest public benefit be eligible for fast-track consideration. This balance and corresponding rules can be set by the CEQ but will also play out in Congress. This is likely to be a challenging political task. For instance, streamlining played a role in the negotiations leading to democratic consensus on the IRA, but in a way that favored the fossil fuel industry.[301] An outside agreement between Senator Joe Manchin (D-WV) and the Democrats in the course of negotiations leading to the IRA allows streamlining for certain energy projects, including mining, and sets limits on NEPA review.[302] The tradeoff of streamlining certain energy projects that will contribute to climate change in exchange for a broader clean energy transition is, it is hoped, a net gain that serves the general public

reforms. *See Justice40: A Whole-of-Government Initiative*, WHITE HOUSE, https://www.whitehouse.gov/environmentaljustice/justice40 [https://perma.cc/H7AP-KCKL].

298 In 2020, twenty-three attorneys general sued the government following the Trump administration's updated CEQ guidance that would streamline and limit review of certain projects. *See* Complaint for Declaratory and Injunctive Relief, *supra* note 271.

299 *See id.*; *see also* Press Release, Ctr. for Biological Diversity, Trump Administration Attacks National Environmental Policy Act on Bedrock Law's 50th Anniversary (Jan. 6, 2020), https://biologicaldiversity.org/w/news/press-releases/trump-administration-attacks-national-environmental-policy-act-on-bedrock-laws-50th-anniversary-2020-01-06 [https://perma.cc/UL3B-6MSM].

300 The National Institute of Justice defines a categorical exclusion as "a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a federal agency." *NIJ NEPA Process*, NAT'L INST. OF JUST., https://nij.ojp.gov/media/image/24301 [https://perma.cc/SD4W-EJBP].

301 Emily Cochrane & Lisa Friedman, *Manchin's Gas Pipeline Deal Irks Both Parties, Snarling Spending Bill*, N.Y. TIMES (Sept. 21, 2022), https://www.nytimes.com/2022/09/21/us/politics/manchin-pipeline-spending-bill.html (last visited Feb. 13, 2023).

302 Jeff Stein & Tony Romm, *Democrats' Side Deal with Manchin Would Speed Up Projects, West Virginia Gas*, WASH. POST (Aug. 1, 2022, 5:51 PM), https://www.washingtonpost.com/us-policy/2022/08/01/manchin-pipeline-drilling-permit [https://perma.cc/MC6C-YS4D].

interest.[303] The future abiding concern is that the clean energy projects that will reduce CO_2 in the atmosphere will be held up by private enforcement claims if they too are not accorded the benefits of streamlining. A presumption in favor of streamlining for clean energy projects would be an incremental step forward.

When balanced, streamlining can be an effective tool to accelerate development. Future research on this topic will explore the extent to which it threatens to remove a singular avenue for the public to voice concern where a project will cause irremediable harm. My proposal aims to bring back into the public view projects that require additional scrutiny for climate purposes, while freeing up projects that will offer the greatest climate benefit from burdensome delays.

B. *Agency Gatekeeping*

A second prescription to address situations in which the different, competing interests of private enforcers interfere with broader agency objectives in mitigating climate change is to employ an agency gatekeeper. Particularly where policies and approaches to climate change are new and evolving, private enforcement needs more government oversight to prevent ad hoc, fragmented litigation from ingraining outcomes that make the problem worse. An agency gatekeeper would serve this purpose.

Other scholars have explored the value of this option. Matthew Stephenson, for instance, argues that the executive, the branch in charge of administering statutory regulation, should have more control over the existence and scope of private rights of action.[304] David Freeman Engstrom proposes vesting administrative agencies with litigation "gatekeeper" powers.[305] The substantive environmental laws, such as the CAA, allow the EPA to intervene in a lawsuit within a specific time period and take action to resolve the concern,[306] but there is no such provision under NEPA. One option is to provide the CEQ with a similar right to intervene where it would benefit the public interest in addressing climate change. Alternatively, the CEQ could issue a license or authorization to

303 *Id.*

304 Stephenson, *supra* note 17 (arguing that the executive, the branch in charge of administering statutory regulation, should have more control over the existence and scope of private rights of action).

305 Engstrom, *supra* note 39, at 630–41.

306 42 U.S.C. § 7604(c).

sue following a petition for suit that sets forth the claims.[307] This would require the parties seeking to sue to make a greater showing of the harm before filing suit, which could minimize delays to projects where the suit is intended as a blocking tactic to advance a purely private gain rather than to protect the environment. As another alternative, Burbank, Farhang, and Kritzer suggest that a public option may be necessary.[308] What all these approaches have in common is investing government, and potentially government-supported legal agencies, with the power to aggregate problems rather than solely relying on disparate private actors.

There is a range of private enforcement as it relates to climate. Some private enforcers bring suits directed at preventing projects that are obvious contributors to climate change, like the expansion of new oil fields.[309] Others, by contrast, are bringing suits under NEPA, challenging the government's compliance with law, where the goal is not to secure better environmental compliance, but to block construction altogether, as in the case of the Purple Line.[310] Still, others, as the wildfire mitigation case depicts,[311] involve one form of genuine environmentalism competing with the view that because climate change is an existential threat, all other values need to give way, including other environmental concerns, such as limiting growth and conservationism.

Ultimately what is needed are ways to enable continued private suits that truly serve the public interest while filtering out those that do not. An agency gatekeeper is best suited to this role because they operate from a mandate to act in the public interest and can make decisions that align with broader regulatory objectives.

307 A similar model is employed under United Nations: Rome Statute of the International Criminal Court art. 15, July 17, 1998, 37 I.L.M. 999.

308 Burbank, Farhang & Kritzer *supra* note 37, at 715.

309 For example, a series of regional and national environmental organizations sued the Biden administration for authorizing an oil and gas development in Alaska known as the Willow Project that is expected to add 260 million metric tons of CO_2 to the atmosphere over the next thirty years. *See* Ctr. for Biological Diversity v. Bureau of Land Mgmt., No. 23-cv-00061 (D. Alaska filed Mar. 14, 2023); Press Release, Ctr. for Biological Diversity, Biden Administration Sued Over Willow Oil Project in Alaska's Western Arctic (Mar. 15, 2023), https://biologicaldiversity.org/w/news/press-releases/conservation-groups-sue-biden-administration-to-stop-willow-oil-project-in-alaskas-western-arctic-2023-03-15 [https://perma.cc/H58R-ARH7]. See also *WildEarth Guardians v. Zinke*, in which private enforcers challenged agency action that authorized future resource development, namely, oil and gas lease sales on public land in Wyoming. 368 F. Supp. 3d 41 (D.D.C. 2019). The District Court for the District of Columbia held that in authorizing an oil and gas lease, BLM had failed to sufficiently consider climate change and greenhouse gas emissions linked to the oil and gas that would eventually be produced. While remanding the climate analysis to BLM to address the deficiencies, the court enjoined BLM from issuing any related drilling permits in the interim. *Id.*

310 *See supra* Section IV.A.2.

311 *See supra* Section IV.A.1.

Agency gatekeeping is important for one other reason. CEQ guidance newly mandates that climate change be part of an environmental review.[312] Given the complexity of climate change, we might expect that any entity wishing to challenge a project will now have innumerable potential pathways to craft a challenge. Agencies possess better scientific knowledge to make decisions as to what claims are valid; thus, vesting agencies with the power to assess the claims is a more efficient use of both judicial and executive resources. While environmental impact challenges make up a very small burden of what the judiciary currently manages, we might nevertheless expect it to tick up. Although the gatekeeper can play an important resource management role in the event cases do increase, the reason agency gatekeepers are better suited to manage this task is not because of concerns that private enforcement will overwhelm the judiciary,[313] an argument that Burbank, Farhang, and Kritzer argue is largely myth "based on unfounded fears."[314] Rather, the value of gatekeepers derives from their superior ability to mediate among competing interests through the lens of the agency's climate change objectives.

The Biden administration created two new positions to address climate change: the Special Presidential Envoy for Climate, who will coordinate climate change as an issue of national security among federal offices, and the National Climate Advisor, who oversees domestic climate policy.[315] The National Climate Advisor leads the White House Office of Domestic Climate Policy, which is "focused on mobilizing a whole-of-government approach to tackling the climate crisis, creating good-paying, union jobs, and securing environmental justice."[316] The National Climate Advisor is well positioned to advise on national climate policy priorities and could serve as an independent gatekeeper authorized to either screen cases early on or issue advisory opinions to the courts where climate change-related projects are at issue.

312 National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196-01 (Jan. 9, 2023).

313 *See supra* note 84 and accompanying discussion.

314 *See supra* notes 87, 163 and accompanying discussions.

315 Tackling the Climate Crisis at Home and Abroad, Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

316 *The Path Forward: Renewable Energy with White House National Climate Advisor Gina McCarthy*, WASH. POST (May 19, 2021, 11:30 AM), https://www.washingtonpost.com/washington-post-live/2021/05/19/path-forward-renewable-energy-with-white-house-national-climate-advisor-gina-mccarthy [https://perma.cc/U8V6-67FD].

C. *Reframing Climate Change as a Public Problem Through Interagency Coordination*

The balance of public versus private power is on full display in the debate about environmental private enforcement, but this dynamic is central to the current debate about public participation, power, and how our democracy functions.

Climate change is a global collective action problem that is challenging the capacity of our democratic system of government to respond.[317] The global nature of climate change means that federal agencies are not the superior enforcers of climate change in the traditional sense; rather, coordinated international agreement to mitigate climate change will be the true arbiter of the problem. Climate change is also more than an environmental problem; rather, it is a larger public problem. Yet, its presence sited primarily under the EPA suggests it to have a purely environmental dimension. A coordinated agency dedicated to climate change is a small but important step in signaling the prominence of climate change as a broader public threat that requires coordinated cross-agency action.

The Biden administration has taken a "whole of government" approach to addressing climate change, meaning agencies now need to consider climate change as part of the regular course of planning and implementing agency action.[318] But, a more formal approach that coordinates action across agencies could help the federal system to develop more effective responses to climate change.[319] Housed within this agency should be a public environmental justice office dedicated to ensuring equitable access to, and providing resources in, areas where

317 A cherished foundation of modern democratic thought is that "groups would tend to form and take collective action whenever members jointly benefitted." Elinor Ostrom, *Collective Action and the Evolution of Social Norms*, 14 J. ECON. PERSPS. 137, 137 (2000). In the 1960s, economists including Mancur Olson and Russell Hardin asserted theories challenging this precept. *Id.* Olson argued that rational individuals were not likely to contribute to the public good even if doing so would be in their mutual interest: "[U]nless the number of individuals in a group is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, *rational, self-interested individuals will not act to achieve their common or group interests*." MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 2 (1965).

318 Adam Wernick, *Biden Vows to Take a 'Whole of Government' Approach to Climate Change*, WORLD (Feb. 10, 2021, 2:00 PM), https://theworld.org/stories/2021-02-10/biden-vows-take-whole-government-approach-climate-change [https://perma.cc/79YL-JS4Z]; *see also* Tackling the Climate Crisis at Home and Abroad, Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

319 For instance, the key agencies that will be involved in building out the climate change infrastructure and climate adaptation policies proposed in the new IRA include BLM, DOT, DOI, EPA, USFS, and FEMA, among others.

government projects will have the greatest environmental and social impact.[320]

Building on the role of an agency gatekeeper as a private enforcement mediator, a final prescription is to develop a coordinated interagency climate commission to respond to the climate crisis. In response to other national disasters, emergencies, or emerging national and international challenges where the response traverses agencies' jurisdictions, the government has moved to centralize agency coordination.[321] The same could and should be done to respond to climate change.

Finally, it is essential to consider that these proposals are made from an intensely practical standpoint based on existing technical tools. There is a major limitation to using purely technical approaches to address a problem that is, most fundamentally, based on competing values. For instance, William Boyd approaches this problem in relation to the instrument choice debate as to how to reduce carbon emissions. He focuses on carbon trading schemes, arguing that they "emerged as among the most influential cosmopolitan policy projects operating in the world today, despite the fact that their actual record of success is quite limited and despite a growing recognition that they are not capable of doing the work needed to save the climate."[322] Boyd argues that:

320 This could be the newly created White House Environmental Justice Interagency Council and White House Environmental Justice Advisory Council established under Executive Order 14008. *See Environmental Justice*, WHITE HOUSE, https://www.whitehouse.gov/environmentaljustice [https://perma.cc/GY9Z-QMB8].

321 For instance, the National Security Administration was born of the reality that counterterrorism traversed many different agencies. Similarly, the Department of Homeland Security created a new Cybersecurity and Infrastructure Security Agency following the recognition that cyber threats affect agency work in numerous and varied ways and require central coordination. It serves as a central coordinator of cybersecurity analysis, planning, and responding to attacks on critical infrastructure across levels of government. *See* Catalin Cimpanu, *Trump Signs Bill That Creates the Cybersecurity and Infrastructure Security Agency*, ZDNET (Nov. 16, 2018), https://www.zdnet.com/article/trump-signs-bill-that-creates-the-cybersecurity-and-infrastructure-security-agency [https://perma.cc/UC6G-SXN4].

322 William Boyd, *The Poverty of Theory: Public Problems, Instrument Choice, and the Climate Emergency*, 46 COLUM. J. ENV'T L. 399, 402 (2021).

> [T]he instrument choice debate has impoverished our conception of government and limited our capacity to respond to the climate crisis. It argues that the overly abstract theory of instrument choice that has underwritten widespread enthusiasm for emissions trading and other forms of carbon pricing over the last three decades has worked to diminish our understanding of climate change as a broad public problem and has undermined our ability to mobilize the power of government to respond.[323]

Economist Mariana Mazzucato's work, which challenges the popular notion that government does not work and is thus to be distrusted or defunded, raises a similar concern. Her research shows that government action often achieves collective gains beyond the power of private actors. She details numerous examples displaying the government as highly effective at managing, in particular, projects that require long-term investment, significant risk, and a coordinated approach.[324] To address a problem that is inherently collective, the balance between private and public power in enforcing environmental law needs to be reimagined.

An agency gatekeeper is but one way to begin readjusting the balance to achieve larger government priorities that are urgently needed to effectively tackle climate change. While this option and that of streamlining and exemptions make for enticing practical short-term solutions, focusing solely on this technical response obscures the deeper problem of government distrust and similarly "impoverishes" our capacity to respond to the climate crisis.

CONCLUSION

The benefits and hazards of private enforcement, and the extent of the tool's regulatory powers, have been in high relief in recent years. The arc of this Article suggests that distrust of government has played a part in normalizing the notion that government is ineffective. It has also generally promoted systems that involve the public as a central feature of the regulatory regime. Indeed, private enforcement is understood as a central and necessary feature of the environmental regulatory regime, and under environmental law, citizens are credited for many of the gains in pollution control and public health over the past fifty years. Yet, reliance on private enforcement to tackle large public problems is not a

323 *Id.* at 401 (emphasis omitted).

324 MARIANA MAZZUCATO, THE ENTREPRENEURIAL STATE: DEBUNKING PUBLIC VS. PRIVATE SECTOR MYTHS (2013).

salve, nor should it displace agency involvement.[325] The case studies described in this Article demonstrate the failures of private enforcement where many competing values and visions of environmentalism use environmental law in ways that contradict a larger public interest in climate change. Where long-term, risky, or global collective action problems, such as climate change, are at stake, overdependence on private enforcement is a failing proposition. As climate change takes precedence as an overarching environmental problem, the private enforcement regime is failing to adapt, at times producing outcomes that aggravate environmental degradation and frustrate public action to mitigate climate change.

There are important reasons to include citizens as checks on government action. Distrust of executive power is one of the reasons private enforcement was given a central role in statutory enforcement.[326] But, where private enforcement itself requires a check to bring it in line with agency objectives, other solutions are needed; ultimately, a broader system of public and private accountability to address climate change can also help to build trust in government action.

325 The recent Texas abortion law, S.B. 8, shows the potentially disastrous consequences of a law governed purely by citizen enforcers. Laurence H. Tribe & Stephen I. Vladeck, *Texas Tries to Upend the Legal System with Its Abortion Law*, N.Y. TIMES (July 19, 2021), https://www.nytimes.com/2021/07/19/opinion/texas-abortion-law-reward.html (last visited Mar. 3, 2023) (arguing that citizens are meant to supplement government enforcement).

326 Private enforcement regimes arise out of the separation of powers and a divided executive and legislature. Farhang's research supports the hypothesis that "divergence between legislative and executive preferences—a core and distinctive feature of the American constitutional order—creates an incentive for Congress to rely upon private lawsuits, as an alternative to administrative power, to achieve its regulatory goals." Farhang, *supra* note 120, at 657.