

COMMENT

AIR POLLUTION AS PUBLIC NUISANCE: COMPARING MODERN-DAY GREENHOUSE GAS ABATEMENT WITH NINETEENTH-CENTURY SMOKE ABATEMENT

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Public nuisance allows plaintiffs to sue actors in tort for causing environmental harm that disrupts the public's use and enjoyment of the land. In recent years, state and local governments have filed public nuisance actions against oil companies, hoping to hold them responsible for the harm of climate change. Since no plaintiff has prevailed on the merits so far, whether these lawsuits are worth bringing, given the other legal avenues available, remains an open question. This Comment situates these actions in their appropriate historical context to show that these lawsuits are neither unprecedented nor futile. In particular, it examines the use of nuisance actions in the successful abatement of "the smoke evil" in the nineteenth and early twentieth centuries to illustrate how nuisance law develops over time, interacts with other forms of environmental regulation, and encourages the development of new technology. This Comment concludes that plaintiffs can in fact succeed on the merits, and, regardless of their success, climate nuisance suits can promote stricter federal regulation, serve an expressive function, and incentivize the development of air pollution abatement technology.

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* J.D., May 2021, University of Michigan Law School. Thank you to Professor Bill Novak, Dean Gil Seinfeld, David Fegley, and Brian Remlinger for challenging me to make this piece stronger and clearer. A big thank you to the Volume 119 Notes Office for making me a better writer and a happier law student, and to the women of the Volume 120 Notes Office for providing such thoughtful edits. Finally, thank you to my husband Henry, the best person the world has ever shared with me. Like every good thing I've done since meeting you, I couldn't have done this without you.

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INTRODUCTION

As of September 2021, there were thirteen pending public nuisance lawsuits against major oil companies seeking to abate the harm¹ of climate

1. This Comment uses the term “abate the harm” as a shorthand for the monetary contribution plaintiffs seek from oil companies in climate nuisance suits. Climate nuisance plaintiffs want oil companies to foot the bill for damage caused by climate change. For example, in its complaint, the City of Annapolis describes how the oil companies’ choice to promote fossil fuels has led to “attendant tidal flooding in Annapolis” and “increased frequency and intensity of extreme weather events in and around Annapolis.” Flooding and other extreme weather mean Annapolis will suffer monetary loss from damage to infrastructure and a decline in tourism revenue. It will also need to pay for costly interventions like seawalls. Climate nuisance suits like Annapolis’s ask oil companies to compensate municipalities for this harm. Complaint at 136–37, *City of Annapolis v. BP P.L.C.*, No. C-02-CV-21-000250 (Md. Cir. Ct. Feb. 22, 2021).

change.² These lawsuits, primarily brought by state and local governments,³ seek compensatory and equitable relief for the environmental harm caused by climate change. The current wave of public nuisance lawsuits is the latest step in a string of recent attempts to hold oil companies liable in tort.⁴ Many legal commentators have argued that while these tort lawsuits initially inspire “enormous bombast and press attention,” they all inevitably end up entangled in technicalities of the law and unable to succeed on the merits.⁵

In fact, in May 2021, the Supreme Court published a decision in *BP P.L.C. v. Mayor of Baltimore*, a case that concerned one such technical hurdle.⁶ The city of Baltimore brought the case against twenty-six oil companies to hold them liable for the harm of climate change.⁷ On appeal to the Supreme Court, the question presented concerned a narrow, technical issue of federal appellate jurisdiction—specifically, the scope of appellate review of district court orders to remand cases back to state court.⁸ The issue in the case seemed inconsequential and minor on its face. But in reality, it arose from a coordinated and

2. *Id.*; Complaint, Anne Arundel Cnty. v. BP P.L.C., No. C-02-CV-21-000565 (Md. Cir. Ct. Apr. 26, 2021); Complaint, Cnty. of Maui v. Sunoco LP, No. 2CCV-20-0000283 (Haw. Cir. Ct. Oct. 12, 2020); Complaint, State v. BP Am. Inc., N20C-09-097 (Del. Super. Ct. Sept. 10, 2020); Complaint, City of Charleston v. Brabham Oil Co., No. 2020-CP-1003975 (S.C. Ct. C.P. Sept. 9, 2020); Complaint, City of Hoboken v. Exxon Mobil Corp., No. HUD-L-003179-20 (N.J. Super. Ct. Sept. 2, 2020); Complaint, City of Honolulu v. Sunoco LP, No. 1CCV-20-0000380 (Haw. Cir. Ct. Mar. 9, 2020); Complaint, Pac. Coast Fed’n of Fishermen’s Ass’ns, Inc. v. Chevron Corp., No. CGC-18-571285 (Cal. Super. Ct. Nov. 14, 2018); Complaint, Bd. of Cnty. Comm’rs of Boulder Cnty. v. Suncor Energy (U.S.A.), Inc., No. 2018CV030349 (Colo. Dist. Ct. Apr. 17, 2018); Complaint, Mayor of Baltimore v. BP P.L.C., No. 24-C-18-004219 (Md. Cir. Ct. Jul. 20, 2018); Complaint, State v. Chevron Corp., No. PC-2018-4716 (R.I. Super. Ct. Jul. 2, 2018); Complaint, People v. BP P.L.C., No. RG17875889 (Cal. Super. Ct. Sept. 19, 2017); Complaint, Cnty. of San Mateo v. Chevron Corp., No. 17CIV03222 (Cal. Super. Ct. July 17, 2017).

3. Twelve of the thirteen lawsuits were brought by state and local governments, and one was brought by a Fishermen’s Association. *See supra* note 2.

4. For a brief overview of recent attempts to regulate fossil fuels through tort law, see Randall S. Abate, *Public Nuisance Suits for the Climate Justice Movement: The Right Thing and the Right Time*, 85 WASH. L. REV. 197, 214–23 (2010).

5. Walter Olson, *Municipal Climate Suits and Lawsuit Diplomacy*, CATO INST. (May 31, 2018, 8:32 AM), <https://www.cato.org/blog/municipal-climate-suits-lawsuit-diplomacy> [perma.cc/HW29-YBE2]; *see also* Albert C. Lin, *Dodging Public Nuisance*, 11 U.C. IRVINE L. REV. 489, 502–04 (2020) (discussing the role of standing and the political question doctrine in dismissing climate change public nuisance cases); Laura Flahive Wu & Nicole Antoine, *What Evolution of Public Nuisance Claims Means for Cos.*, LAW360 (Oct. 25, 2021, 5:29 PM), <https://www.law360.com/corporate/articles/1433833> [perma.cc/9FDD-QD9D] (noting that most climate change public nuisance lawsuits “have been unsuccessful”).

6. 141 S. Ct. 1532 (2021).

7. *Mayor of Baltimore v. BP P.L.C.*, 388 F. Supp. 3d 538, 548 (D. Md. 2019), *vacated*, 141 S. Ct. 1532 (2021).

8. *BP*, 141 S. Ct. at 1536. More specifically, *BP P.L.C. v. Mayor of Baltimore* concerned the scope of federal appellate review under 28 U.S.C. § 1447(d). The Court held that when a defendant raises federal officer removal under § 1442 and the district court remands the case back to state court, on appeal to the circuit court, the court may review *all* bases of removal, not just removal under § 1442. *Id.* at 1537–38.

calculated project on the part of major oil companies to avoid liability.⁹ Together, they are defending against climate change litigation with an array of procedural arguments designed to get lawsuits dismissed before a decision on the merits. The Court's decision in *BP P.L.C. v. Mayor of Baltimore* has brought these companies one small step closer to shutting the door on climate tort liability altogether.¹⁰ Indeed, for an entire year, some of these thirteen public nuisance lawsuits had been stayed in anticipation of the Supreme Court's ruling in *BP*, which kept judges from reaching the merits of the underlying tort claims.¹¹ And while the Supreme Court's ultimate decision did not render these lawsuits void, it added one more procedural hurdle for plaintiffs to overcome.

Today, the detrimental impact of CO₂ emissions on the health of our planet is clear.¹² Immediate action is needed to reduce fossil fuel production and to keep the global temperature within a safe level.¹³ During the Trump Administration, the executive branch rolled back environmental regulations, and the president himself failed to accept the link between climate change and natural disasters.¹⁴ While President Biden has committed to cutting carbon

9. See *infra* Section I.D.

10. As this Comment will explain in further detail *infra* in Section I.D, the oil companies will need to make it past several additional procedural hurdles before they are actually insulated from tort liability altogether.

11. *City of Honolulu v. Sunoco LP*, No. 20-cv-00163 (D. Haw. Mar. 5, 2021) (order denying motion to stay execution of remand order and granting temporary stay to seek relief before the Ninth Circuit); *King Cnty. v. BP P.L.C.*, No. 18-cv-00758 (W.D. Wash. Sept. 9, 2020) (order continuing stay); *Pac. Coast Fed'n of Fishermen's Ass'ns, Inc. v. Chevron Corp.*, No. 18-cv-07477 (N.D. Cal. Nov. 25, 2020) (joint request from the parties to stay a case management conference until after a Supreme Court decision). Many other cases also filed petitions for certiorari raising the same arguments as the parties in *Mayor of Baltimore v. BP P.L.C.* These cases were effectively stayed in anticipation of a decision as well. See *Petition for Writ of Certiorari, Suncor Energy (U.S.A.) Inc. v. Bd. of Cnty. Comm'rs of Boulder Cnty.*, 123 S. Ct. 1708 (2020) (No. 20-783); *Petition for Writ of Certiorari, Shell Oil Prods. Co. v. Rhode Island*, 141 S. Ct. 2666, (2020) (No. 20-900); *Petition for Writ of Certiorari, Chevron Corp. v. Cnty. of San Mateo*, 141 S. Ct. 2666 (2020) (No. 20-884); *Petition for Writ of Certiorari, Chevron Corp. v. City of Oakland*, 141 S. Ct. 2776 (2021) (No. 20-1089).

12. See, e.g., Somini Sengupta, 'Bleak' U.N. Report on a Planet in Peril Looms Over New Climate Talks, N.Y. TIMES (Nov. 26, 2019), <https://www.nytimes.com/2019/11/26/climate/greenhouse-gas-emissions-carbon.html> [perma.cc/RB27-E956]; World Meteorological Org. & Glob. Atmosphere Watch, *The State of Greenhouse Gases in the Atmosphere Based on Global Observations Through 2018*, WMO GREENHOUSE GAS BULL. 2-3 (Nov. 25, 2019) (finding global atmospheric CO₂ had increased 147% since the year 1750).

13. Specifically, experts argue that we must keep global temperature increase below 1.5 degrees Celsius in comparison to pre-industrial levels. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SPECIAL REPORT: GLOBAL WARMING OF 1.5 °C (2019), https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf [perma.cc/XN3V-KJUH].

14. See, e.g., Peter Baker, Lisa Friedman & Thomas Kaplan, *As Trump Again Rejects Science, Biden Calls Him a 'Climate Arsonist'*, N.Y. TIMES (Jan. 20, 2021), <https://www.nytimes.com/2020/09/14/us/politics/trump-biden-climate-change-fires.html> [perma.cc/PB8F-JL26] (describing President Trump's refusal to acknowledge that climate change played a part in the unprecedented scale of devastation from the 2020 wildfires on the West Coast).

emissions in half by 2030, getting enough congressional votes to codify the proposal into law will be next to impossible.¹⁵ Ultimately, an aggressive attack on climate change would require radical legislation—such as the proposed Green New Deal—and with the filibuster in place, reaching the required sixty votes in the Senate is unlikely.¹⁶

In the absence of a strong federal response, state and local governments, environmental groups, and concerned citizens have turned to the courts to address the harm of climate change themselves. The past decade has seen an explosion of creative lawsuits using constitutional, statutory, and common law theories to hold our government and the major producers of greenhouse gas emissions accountable.¹⁷ This Comment solely addresses one type of litigation: public nuisance actions against oil companies, shorthanded as “climate nuisance suits.”

Public nuisance is a cause of action notorious for its ambiguity.¹⁸ In 1875, legal scholar Horace Wood described it as the “wilderness of law,” and in the Restatement (Second) of Torts, William Prosser referred to it as a “legal garbage can.”¹⁹ Although each state’s definition of public nuisance varies, at its core is the Latin maxim *sic utere tuo ut alienum non laedas*, or use your own so long as you do not harm another.²⁰ In modern terms, proving a public nuisance claim requires showing that someone has caused harm that interferes

15. Brady Dennis & Juliet Eilperin, *Biden Plans to Cut Emissions at Least in Half by 2030*, WASH. POST (Apr. 20, 2021, 3:19 PM), <https://www.washingtonpost.com/climate-environment/2021/04/20/biden-climate-change> [perma.cc/A4C8-3BFE]; see Lisa Friedman, *It’s Crunch Time and Biden’s Climate Gambit Faces Steep Hurdles*, N.Y. TIMES (May 24, 2021), <https://www.nytimes.com/2021/05/22/climate/clean-electricity-climate.html> [perma.cc/5AUL-AGYL].

16. H.R. Res. 109, 116th Cong. (2019) (proposed Green New Deal legislation); see also Molly E. Reynolds, *What Is the Senate Filibuster, and What Would It Take to Eliminate It?*, BROOKINGS INST.: POLICY 2020 (Jan. 29, 2021), <https://www.brookings.edu/policy2020/votervital/what-is-the-senate-filibuster-and-what-would-it-take-to-eliminate-it> [perma.cc/T58F-X7HS] (describing the Senate filibuster).

17. For an excellent overview of recent climate change litigation, see Sabin Ctr. for Climate Change L. at Columbia L. Sch. & Arnold & Porter, *Climate Change Litigation Databases*, CLIMATE CASE CHART, <http://climatecasechart.com> [perma.cc/AYZ3-GWGZ].

18. While this Comment largely concerns public nuisance suits, many of the climate nuisance suits also raise companion claims of private nuisance. The difference between public and private nuisance is the actor that is harmed. If something interferes with the public’s use and enjoyment of the land, then it is a public nuisance claim. *Nuisance*, LEGAL INFO. INST., <https://www.law.cornell.edu/wex/nuisance> [perma.cc/GG5E-S3JW]. If something interferes with a private actor’s use and enjoyment of the land, then it is a private nuisance claim. In climate nuisance suits, since the plaintiff is a state or local government, the public nuisance claims assert that climate change interferes with the public community’s use and enjoyment of public land. The coordinate private nuisance claims assert that climate change interferes with the *government’s own* use and enjoyment of the land.

19. Richard O. Faulk & John S. Gray, *Public Nuisance at the Crossroads: Policing the Intersection Between Statutory Primacy and Common Law*, 15 CHAP. L. REV. 495, 500 (2012) (quoting Louise A. Halper, *Untangling the Nuisance Knot*, 26 B.C. ENV’T AFFS. L. REV. 89, 90 (1998)).

20. *Id.*

with the public's use and enjoyment of land.²¹ Because of its vague, open-ended definition, public nuisance has become the tort of choice for activists challenging widespread societal harm. Public nuisance was the backbone of the successful tort litigation against the tobacco industry, the ongoing litigation against the lead paint industry, and now, against major producers of fossil fuels.²²

Many critics of current climate nuisance suits accuse plaintiffs of asking courts to use public nuisance in an utterly unprecedented manner, expanding the tort beyond its appropriate, historical bounds to seek redress for a diffuse harm.²³ Without clear precedent, judges presiding over these suits question the ability of the courts to balance the harm of climate change against the economic necessity of producing fossil fuels.²⁴ To other critics, climate nuisance suits could have merit but are a distraction from other more viable forms of regulation. In particular, the suits draw attention away from the proper venue for making lasting change: using the Clean Air Act (CAA) or similar state-level legislation to regulate fossil fuels more aggressively.²⁵ By examining the historical use of nuisance law to address air pollution, this Comment refutes these criticisms and argues that climate nuisance suits play a critical role in the abatement of greenhouse gases from our atmosphere.

Using public nuisance to address air pollution is nothing new. In the late nineteenth century, as the United States industrialized, new factories burned dirty coal that polluted cities with dense, black smoke.²⁶ In response, individ-

21. See, e.g., Complaint at 118–21, *City of Hoboken v. Exxon Mobil Corp.*, No. HUD-L-003179-20 (N.J. Super. Ct. Sept. 2, 2020) (describing New Jersey's common law tort of public nuisance as prohibiting "[d]efendants from causing 'an unreasonable interference with a right common to the general public' " that is "substantial and unreasonable" and causes harm).

22. Faulk & Gray, *supra* note 19, at 497–98.

23. See, e.g., Daniel E. Lungren et al., *Originally Speaking: Climate Change and Common Law Public Nuisance*, FEDERALIST SOCIETY: FEDSOCIETY BLOG (Dec. 7, 2018), <https://fedsoc.org/commentary/fedsoc-blog/originally-speaking-climate-change-and-common-law-public-nuisance-opening-response> [perma.cc/95N2-3CY2] ("[The suits] focus on assertions of liability for climate change impacts and response costs based on common law claims of public nuisance To do so, though, such common law claims would need to be twisted upon themselves to reject traditional limits on liability.").

24. For example, Judge Alsup, a California judge presiding over a climate nuisance suit, recently remarked, "[w]e won the Second World War with fossil fuels. If we didn't have fossil fuels, we would have lost that war and every other war [W]e have gotten a huge benefit from the use of fossil fuels, right?" Editorial, *The Climate-Change Tort Racket*, WALL ST. J. (June 8, 2018, 7:09 PM), <https://www.wsj.com/articles/the-climate-change-tort-racket-1528499384> [perma.cc/CH2E-DRZW].

25. David A. Dana, *The Mismatch Between Public Nuisance Law and Global Warming*, 18 SUP. CT. ECON. REV. 9 (2010); Umair Irfan, *Pay Attention to the Growing Wave of Climate Change Lawsuits*, VOX (June 4, 2019, 11:13 AM), <https://www.vox.com/energy-and-environment/2019/2/22/17140166/climate-change-lawsuit-exxon-juliana-liability-kids> [perma.cc/Q3TC-WWFA].

26. FRANK UEKOETTER, *THE AGE OF SMOKE* 20 (2009).

ual citizens sued factory owners, formed grassroots smoke abatement societies, and lobbied local governments to regulate smoke.²⁷ As this Comment shows, nuisance lawsuits played an integral role in the eventual abatement of the so-called “smoke evil.”²⁸ Although it is true that no plaintiff in a climate nuisance suit has actually won on the merits,²⁹ an examination of the historical role of public nuisance in abating air pollution reveals that plaintiffs in similar suits *have* succeeded on the merits before. Moreover, the historical record shows that public nuisance actions can work symbiotically with other forms of regulation, serving a valuable role in pushing for the adoption of stricter regulation and supporting the development of new abatement technology.

By drawing parallels between smoke nuisance suits and climate nuisance suits, this Comment pushes back against the criticism lodged at climate nuisance suits and highlights three potential benefits of the suits in the fight to abate greenhouse gases: the possibility of success on the merits, the ability to push for stricter federal regulations, and the positive expressive and innovative value of the litigation. Part I discusses the current state of climate nuisance suits percolating through the state and federal courts. Part II looks back at the nineteenth and early twentieth centuries to show the integral role smoke nuisance suits played in the abatement of the smoke evil. Part III compares smoke nuisance suits and climate nuisance suits to highlight the important contributions that climate nuisance suits provide in the movement to abate greenhouse gases.

I. WHERE WE ARE: THE CURRENT STATUS OF CLIMATE NUISANCE SUITS

To date, no court has had the opportunity to consider the merits of a public nuisance claim in any climate nuisance suit. Some suits have been dismissed on procedural grounds, while in others, procedural issues are pending before federal and state courts. Part I details how the interaction between the CAA and common law has tied the climate nuisance suits up in a complex web of procedural defenses, preventing courts from reaching the merits on the question of whether oil companies can and should be held liable for damage caused by climate change. Section I.A provides a brief overview of the regulation of greenhouse gases under the CAA. Section I.B outlines the displacement of federal common law by the CAA, while Section I.C explains the uncertainty around the CAA’s preemption of state common law. Section I.D details how oil companies have used the law around displacement and preemption to avoid liability in the current wave of climate nuisance suits.

27. See *infra* Part II; UEKOETTER, *supra* note 26, at 20–42.

28. See *infra* Section II.A.

29. See *infra* Section III.A; see also Marian Conway, *Climate Nuisance Lawsuits Need a Major Win*, NPQ (July 2, 2018), <https://nonprofitquarterly.org/climate-nuisance-lawsuits-need-a-major-win> [perma.cc/MA25-EN6Z].

A. *The Clean Air Act and Federal Regulation of Fossil Fuels*

The CAA, passed in 1970, seeks to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare.”³⁰ The CAA was the first comprehensive piece of federal legislation to regulate air pollution in the United States.³¹ Before its enactment, the nation had a patchwork of legislation: some individual municipalities had air pollutant ordinances,³² and all fifty states had a state-specific statute restricting air pollution, most of which were passed in the 1960s.³³ In addition, individual plaintiffs seeking to abate air pollution in their communities brought common law public and private nuisance actions.³⁴

Under the CAA, the EPA can regulate “air pollutants,” broadly defined within the statute as any “matter which is emitted into or otherwise enters the ambient air.”³⁵ Despite this broad definition, the EPA’s stance before 2007 was that greenhouse gases were *not* air pollutants as defined by the CAA, and thus it had no obligation to regulate their emission.³⁶ Then, in 2007, the Supreme Court ordered the EPA to start regulating greenhouse gases contributing to climate change in *Massachusetts v. EPA*.³⁷ The plaintiffs brought the suit under the CAA’s citizen suit provision, which allows individuals to petition for review of EPA action in promulgating “any national . . . ambient air quality standard.”³⁸ They alleged that, by refusing to regulate the greenhouse gas emissions from new motor vehicles, the EPA failed to meet its mandate under

30. 42 U.S.C. § 7401(b)(1).

31. Three pieces of federal legislation concerning air pollution preceded the CAA: the Air Pollution Control Act of 1955, the Clean Air Act of 1963, and the Air Quality Act of 1967. These statutes were primarily focused on funding research into the causes of air pollution and techniques to abate pollution. *Evolution of the Clean Air Act*, ENV’T PROT. AGENCY, <https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act> [perma.cc/Y97R-U7F2].

32. *See, e.g.*, *State v. Mundet Cork Corp.*, 86 A.2d 1 (N.J. 1952) (holding that the Mundet Cork Corporation violated the air pollutant ordinance in the Township of Hillside).

33. Arthur C. Stern, *History of Air Pollution Legislation in the United States*, 32 J. AIR POLLUTION CONTROL ASS’N 44, 46 (1982). The vast majority of these state statutes were passed in the 1960s. Before 1960, only seven states had an air pollution statute. *Id.*

34. *See, e.g.*, *Dauberman v. Grant*, 246 P. 319 (Cal. 1926) (considering an appeal from an injunction against a factory under nuisance for emitting smoke).

35. 42 U.S.C. § 7602(g).

36. *See, e.g.*, *EPA Denies Petition to Regulate Greenhouse Gas Emissions from Motor Vehicles*, ENV’T PROT. AGENCY (Aug. 28, 2003), https://archive.epa.gov/epapages/newsroom_archive/newsreleases/694c8f3b7c16ff6085256d900065fdad.html [perma.cc/MB7K-YEQF] (“The Agency is denying the petition to regulate greenhouse gas emissions from motor vehicles [because] Congress has not granted EPA authority under the Clean Air Act to regulate CO₂ and other greenhouse gases for climate change purposes.”).

37. 549 U.S. 497, 534 (2007).

38. 42 U.S.C. § 7607(b)(1).

the CAA to regulate air pollution that “may reasonably be anticipated to endanger public health or welfare.”³⁹ The Court agreed, rejecting the EPA’s argument that Congress never intended greenhouse gases to be regulated because they did not qualify as air pollutants.⁴⁰

In the wake of *Massachusetts v. EPA*, the EPA finally acknowledged the “unambiguous warming trend” that threatens public health and welfare.⁴¹ It began to regulate greenhouse gas emissions from vehicles⁴² and from stationary sources of emissions, such as factories.⁴³ Still, the agency faced criticism that it was not doing nearly enough, leading state and local governments to continue to sue greenhouse gas emitters directly.⁴⁴ One strategy utilized by litigants at the time was bringing public nuisance lawsuits, in which challengers argued that factories emitting greenhouse gases were interfering with the public’s use and enjoyment of the land.⁴⁵ Plaintiffs in this first wave of tort litigation following *Massachusetts v. EPA* primarily relied on federal public nuisance claims, which the Supreme Court later held were invalid.

B. Displacement of Federal Common Law

In 2010, the Supreme Court decided in *American Electric Power Co. v. Connecticut* that the CAA “displaced” federal public nuisance law, rendering federal public nuisance claims void.⁴⁶ The concept of displacement comes from the Court’s foundational decision in *Erie Railroad Co. v. Tompkins*.⁴⁷

39. 42 U.S.C. § 7521(a)(1).

40. *Massachusetts*, 549 U.S. at 511, 528. The CAA defines “air pollutant” as “any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.” 42 U.S.C. § 7602(g).

41. See Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,506 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1); 42 U.S.C. § 7521(a)(1).

42. See Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. 25,324 (May 7, 2010) (to be codified at 40 C.F.R. pts. 85, 86, 600; 49 C.F.R. pts. 531, 533, 536, 537, 538); Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, 75 Fed. Reg. 74,152 (Nov. 30, 2010) (to be codified at 40 C.F.R. pts. 85, 86, 1036, 1037, 1065, 1066, 1068; 49 C.F.R. pts. 523, 534, 535).

43. Specifically, the EPA began requiring stationary sources of greenhouse gas emissions to apply “best available control technology” (BACT) to reduce emissions. 42 U.S.C. § 7475(a)(4); Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514, 31,520–21 (June 3, 2010) (to be codified at 40 C.F.R. pts. 51, 52, 70, 71).

44. See, e.g., Giuliana Viglione, *Climate Lawsuits Are Breaking New Legal Ground to Protect the Planet*, NATURE (Feb. 28, 2020), <https://www.nature.com/articles/d41586-020-00175-5> [perma.cc/VW5J-AN2G]; Editorial, *Abdicating, Again, on Climate*, N.Y. TIMES (June 22, 2019), <https://www.nytimes.com/2019/06/22/opinion/sunday/trump-climate-clean-power-plan.html> [perma.cc/NC5F-QTPW].

45. See, e.g., *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410 (2011).

46. *Id.* at 424.

47. 304 U.S. 64 (1938).

Since *Erie*, federal courts' ability to create common law—like a common law federal public nuisance claim—has been much narrower than that of state courts; they can only create common law in a handful of enumerated areas.⁴⁸ Whenever a federal statute regulates the conduct at issue in a federal common law claim, the common law claim is said to be “displaced,” and the court must dismiss it.⁴⁹ The touchstone for determining whether a statute regulates the underlying conduct of a claim is whether the statute speaks “directly to [the] question at issue.”⁵⁰ Because federal common law is so rare and disfavored after *Erie*, displacement is a relatively easy standard to meet.

During the *Massachusetts v. EPA* litigation, a group of states filed a complaint against a group of electric power companies, bringing claims for federal public nuisance and state public nuisance.⁵¹ In the case *American Electric Power*, the plaintiffs alleged that the power plants were engaging in intentional or negligent conduct by emitting fossil fuels that unreasonably interfered with the public's right to physical comfort and enjoyment of the land.⁵² In 2010, the Supreme Court granted certiorari in *American Electric Power* to decide whether the EPA's recent efforts to regulate greenhouse gas emissions displaced federal common law, foreclosing the plaintiffs' ability to bring a federal public nuisance claim against the power plants.⁵³ By the time *American Electric Power* was before the Supreme Court, the EPA had started to develop its standards for greenhouse gas emissions from both vehicles and stationary sources.⁵⁴ Thus, the Supreme Court held that the CAA displaced any federal common law right to “seek abatement of carbon-dioxide emissions from fos-

48. *Am. Elec. Power Co.*, 564 U.S. at 421; *Erie R.R. Co.*, 304 U.S. at 64. Courts have recognized federal common law in areas of “uniquely federal interests . . . so committed by the Constitution and laws of the United States to federal control.” *Boyle v. United Techs. Corp.*, 487 U.S. 500, 504 (1988) (citation omitted) (internal quotation marks omitted). One such area of uniquely federal interests is where a case implicates the “obligations to and rights of the United States under its contracts.” *Id.* Another is where a case involves “civil liability of federal officials for actions taken in the course of their duty.” *Id.* at 505. In *Boyle*, the Court extended federal common law outside of these two narrow applications, but the broader interpretation has not been embraced by the Court since. *Id.* at 507.

49. *Am. Elec. Power Co.*, 564 U.S. at 424.

50. *Id.* (alteration in original) (citation omitted) (internal quotation marks omitted).

51. Complaint, *Connecticut v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005) (No. 04 Civ. 5669). While the Supreme Court eventually held that the federal common law claim was displaced, it remanded the state common law claim for a decision on the merits. *Am. Elec. Power Co.*, 564 U.S. at 426, 429. Unfortunately, there is no subsequent history on the case available. It is likely that the parties settled out of court on the state law claim.

52. Complaint at 46–50, *Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005) (No. 04 Civ. 5669). The plaintiff's federal common law claim of “interstate nuisance” grew from a series of Supreme Court decisions that allowed states to bring lawsuits to abate in-state pollution generated by out-of-state polluters. *Am. Elec. Power Co.*, 564 U.S. at 418–19; see, e.g., *Illinois v. City of Milwaukee*, 406 U.S. 91 (1972).

53. *Am. Elec. Power Co.*, 564 U.S. at 415.

54. See *supra* notes 41–43 and accompanying text.

sil-fuel fired powerplants” as the statute already spoke to the emissions at issue.⁵⁵ Since *American Electric Power*, federal public nuisance claims against greenhouse gas emitters have been off the table for litigants, but the door remains open for *state* public nuisance claims.⁵⁶

C. *The Clean Air Act and Preemption of State Common Law*

While showing that a federal statute displaces federal common law only requires demonstrating that the statute directly regulates the conduct at issue, the standard for whether a federal statute preempts state common law is harder to meet. To hold that a federal statute has preempted a state common law claim, a court must *specifically* find “evidence of a clear and manifest [congressional] purpose.”⁵⁷ As litigants have continued to bring climate nuisance suits under state nuisance law, division has developed among lower courts as to whether the CAA preempts state common law actions.⁵⁸

The Fourth Circuit held in *North Carolina ex rel. Cooper v. Tennessee Valley Authority* that the CAA preempts all state common law claims seeking redress from air pollution.⁵⁹ In reaching its decision, the court emphasized the comprehensive nature of the CAA and the scientific complexity of air pollution.⁶⁰ It reasoned that if common law suits allowed individual states to impose injunctions against power plants based on standards that differed from those imposed by the CAA, they could undermine the “federal-state framework that Congress through the EPA has refined over many years.”⁶¹ In essence, the court found that Congress had a clear and manifest purpose to preempt state common law claims in enacting the CAA because these suits would undoubtedly undermine that framework.⁶²

In contrast, in *Bell v. Cheswick Generating Station*, the Third Circuit held that the CAA does *not* preempt state common law claims.⁶³ The court drew

55. *Am. Elec. Power Co.*, 564 U.S. at 424.

56. *Id.* at 429.

57. *Id.* at 423 (alteration in original) (quoting *City of Milwaukee v. Illinois*, 451 U.S. 304, 317 (1981)).

58. See, e.g., *North Carolina ex rel. Cooper v. Tenn. Valley Auth.*, 615 F.3d 291 (4th Cir. 2010) (holding that the CAA preempts state tort law); *Bell v. Cheswick Generating Station*, 734 F.3d 188 (3d Cir. 2013) (holding that the CAA does not preempt state tort law).

59. *Cooper*, 615 F.3d at 296–301.

60. *Id.*

61. *Id.* at 298; see also *Freeman v. Grain Processing Corp.*, 848 N.W.2d 58, 74 (Iowa 2014).

62. See *Cooper*, 615 F.3d at 306, 311–12 (“No matter how lofty the goal, we are unwilling to sanction the least predictable and the most problematic method for resolving interstate emissions disputes, a method which would chaotically upend an entire body of clean air law and could all too easily redound to the detriment of the environment itself.”).

63. 734 F.3d 188 (3d Cir. 2013). The Second Circuit has also considered whether the CAA preempts state common law, but in the narrower context of whether the 1990 amendments to the CAA to regulate Methyl Tertiary Butyl Ether (MTBE) preempted a products liability lawsuit against a manufacturer of MTBE. See *In re Methyl Tertiary Butyl Ether (“MTBE”) Prods. Liab. Litig.*, 725 F.3d 65 (2d Cir. 2013).

an analogy between the CAA and the Clean Water Act (CWA), as the two statutes share nearly identical “savings clauses.”⁶⁴ These clauses preserve the ability of “any person” to “seek enforcement” of a right they possess at common law or under another statute.⁶⁵ In an earlier Supreme Court decision, *International Paper Co. v. Ouellette*, the Court had held that the CWA did not preempt all state common law claims because of the savings clause.⁶⁶ The Third Circuit reasoned that the same logic applied to the nearly identical CAA savings clause; the CAA did not preempt the plaintiff’s state common law claims.⁶⁷ Simply put, the savings clause indicated congressional intent to allow for state law claims, and therefore there was no clear and manifest purpose to preempt in the statute.

Overall, the state of preemption remains unsettled, with a slight preference for allowing state tort law claims to continue. Shortly after the Fourth Circuit’s 2010 decision in *Cooper*, two district courts, one inside the Fourth Circuit and one outside, endorsed the Fourth Circuit’s view that the CAA preempts state tort law.⁶⁸ But, since the Third Circuit’s later 2013 decision in *Bell*, the overwhelming majority of federal and state courts that have addressed the issue have allowed state tort law claims concerning air pollution to proceed.⁶⁹ Therefore, bringing a state law public nuisance lawsuit against major polluters remains a viable option in most jurisdictions. Still, defendant

64. *Bell*, 734 F.3d at 195.

65. *Id.* at 191, 194. The CAA’s savings clause states “[n]othing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any emission standard or limitation or to seek any other relief,” while the CWA’s savings clause states “[n]othing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any effluent standard or limitation or to seek any other relief.” 42 U.S.C. § 7604(e); 33 U.S.C. § 1365(e).

66. *Int’l Paper Co. v. Ouellette*, 479 U.S. 481 (1987); *Bell*, 734 F.3d at 198.

67. *Bell*, 734 F.3d at 197–98.

68. See Ben Snowden, *Clean Air Act Preemption of State-Law Tort Claims Since AEP v. Connecticut, ENV’T LITIG. & TOXIC TORTS COMM. NEWSL.* (Am. Bar Ass’n, Chicago, Ill.), July 2015, at 16; *United States v. EME Homer City Generation L.P.*, 823 F. Supp. 2d 274 (W.D. Pa. 2011) (holding that the CAA preempted a state public nuisance claim); *Comer v. Murphy Oil USA, Inc.*, 839 F. Supp. 2d 849 (S.D. Miss. 2012) (holding that the CAA preempted a state public nuisance claim against fossil fuel producers).

69. See Snowden, *supra* note 68, at 18; *Merrick v. Diageo Americas Supply, Inc.*, 805 F.3d 685, 686 (6th Cir. 2015) (holding that the CAA did not preempt a state law nuisance claim against a whiskey distillery producing ethanol emissions); *Little v. Louisville Gas & Elec. Co.*, 33 F. Supp. 3d 791, 817 (W.D. Ky. 2014) (holding the CAA did not preempt a state law nuisance claim against power company producing coal ash); *Brown-Forman Corp. v. Miller*, 528 S.W.3d 886 (Ky. 2017) (holding the CAA did not preempt a state law nuisance claim against a distillery for ethanol emissions); *Sciscoe v. Enbridge Gathering*, 519 S.W.3d 171, 186 (Tex. App. 2015), *rev’d on other grounds*, *Town of Dish v. Atmos Energy Corp.*, 519 S.W.3d 605 (Tex. 2017) (holding the CAA did not preempt a state law nuisance claim against a natural gas facility); *Freeman v. Grain Processing Corp.*, 848 N.W.2d 58, 94 (Iowa 2014) (holding that the CAA did not preempt a state law nuisance claim against a grain processing plant); *Alleyne v. Diageo USVI, Inc.*, No. SX-13-CV-143, 2015 WL 5511688, at *5 (V.I. Super. Ct. Sept. 17, 2015) (holding that the CAA did not preempt a claim of public nuisance under Virgin Islands law).

oil companies have succeeded in tying up climate nuisance suits by removing them to federal courts in the hopes of getting them dismissed outright.

D. *Procedural Gamesmanship in Climate Nuisance Suits*

All thirteen of the climate nuisance suits referenced at the beginning of this Comment have followed a predictable course of events.⁷⁰ First, a city or county files a complaint in state court against an oil company like Exxon or Mobil, asserting state law tort claims of public and private nuisance.⁷¹ Next, the defendant company files a notice of removal, arguing that the case is removable to federal court because while the plaintiff has styled her complaint in state law, the case, in reality, presents a federal question.⁷²

In most cases, the plaintiff is the “master of [their] complaint”; they have complete control to articulate the claims brought, state or federal, and neither the court nor the defendant can alter them.⁷³ Still, defendants across jurisdictions are urging courts to recognize the applicability of narrow procedural reasons why the claims in climate nuisance suits are actually *federal* common law claims.⁷⁴ Conveniently for defendants, the Supreme Court took these same federal common law claims off the table years ago in *American Electric Power*.⁷⁵ Thus, if a court finds for the defendants on the procedural issue of removal, it necessarily decides that the case must be dismissed outright before reaching the merits.

Defendants typically present eight distinct reasons (or a subset of these reasons) for removal to federal court: the claims (1) arise under federal com-

70. See *supra* note 2.

71. Across all the complaints, the public nuisance and private nuisance claims require the same proof. The only difference is the entity that is harmed. For a public nuisance claim, the plaintiff government alleges that climate change will harm the *public*, whereas in the private nuisance claim the government alleges that climate change will harm the *government itself*. See, e.g., Complaint at 120–26, Cnty. of Maui v. Sunoco LP, No. 2CCV-20-0000283 (Haw. Cir. Ct. Oct. 12, 2020). The complaints often bring additional causes of action in tort beyond public and private nuisance. For instance, the city of Charleston brought six state causes of action in its complaint against Brabham Oil: public nuisance, private nuisance, strict liability failure to warn, negligent failure to warn, trespass, and a claim under the South Carolina Unfair Trade Practices Act. Complaint at 120–36, City of Charleston v. Brabham Oil Co., No. 2020-CP-1003975 (S.C. Ct. C.P. Sept. 9, 2020).

72. Under 28 U.S.C. § 1331, federal courts have jurisdiction over civil cases that present federal questions, including “actions arising under the Constitution, laws, or treaties of the United States.” If a case presents a federal question, the defendant can seek removal to federal court under 28 U.S.C. § 1441. See, e.g., Notice of Removal, Pac. Coast Fed’n of Fishermen’s Ass’n, Inc. v. Chevron Corp., No. 18-cv-7477 (N.D. Cal. Dec. 12, 2018).

73. Gil Seinfeld, *Climate Change Litigation in the Federal Courts: Jurisdictional Lessons from California v. BP*, 117 MICH. L. REV. ONLINE 25, 27 (2018).

74. See, e.g., Notice of Removal at 3–14, City of Honolulu v. Sunoco LP, No. 20-cv-00163 (D. Haw. Apr. 15, 2020).

75. See *supra* notes 53–55 and accompanying text.

mon law, (2) raise disputed and substantial issues of federal law, (3) are completely preempted by the CAA,⁷⁶ (4) are based on conduct that occurred on federal enclaves, (5) fall under the federal Outer Continental Shelf Lands Act (OCSLA), (6) fall under federal admiralty jurisdiction, (7) fall under the bankruptcy removal statute, or (8) fall under the federal officer removal statute.⁷⁷ District courts ruling on the merits of these motions have thus far reached a variety of different conclusions.

Most district courts have held that none of the theories of removal are applicable in climate nuisance suits, remanding the cases to state court. In *Mayor of Baltimore v. BP P.L.C.*, the District of Maryland knocked out all eight theories of removal and remanded the case to state court, reasoning that it did not have jurisdiction over a complaint raising state law claims.⁷⁸ The District of Rhode Island ruled similarly in *Rhode Island v. Chevron Corp.*, holding removal was improper because, at its heart, Rhode Island's complaint presented "thoroughly state-law claims" in which the "rights, duties, and rules of decision implicated . . . are all supplied by state law."⁷⁹ In *San Mateo v. Chevron Corp.*, the Northern District of California similarly denounced all theories of removal presented, reasoning that the defendants did not show that the case fit into any one of the "small boxes" of federal jurisdiction.⁸⁰

In contrast, in *City of New York v. BP P.L.C.*, the Southern District of New York embraced BP's argument that the claims brought in the case, while labeled as state law claims in the complaint, were actually federal law claims.⁸¹

76. "Complete preemption" is a distinct concept from preemption of state law, which is much broader. See Seinfeld, *supra* note 73, at 31 ("[Complete preemption] enables defendants to remove to federal court on an 'arising under' theory even when the plaintiff's complaint relies exclusively on state law. The doctrine is rooted in the notion that, in some instances, Congress enacts statutes that 'so completely pre-empt a particular area that any civil complaint raising [a] select group of claims is necessarily federal in character.'" (alteration in original) (quoting *Metro. Life Ins. Co. v. Taylor*, 481 U.S. 58, 63–64 (1987)).

77. *Mayor of Baltimore v. BP P.L.C.*, 952 F.3d 452, 458 (4th Cir. 2020), *vacated*, 141 S. Ct. 1532 (2021).

78. *Mayor of Baltimore v. BP P.L.C.*, 388 F. Supp. 3d 538, 539 (D. Md. 2019), *vacated*, 141 S. Ct. 1532 (2021).

79. *Rhode Island v. Chevron Corp.*, 393 F. Supp. 3d 142, 151 (D.R.I. 2019). Specifically, the court considered, and ultimately rejected, five theories of removal: complete preemption, *Grable* jurisdiction, OCSLA jurisdiction, federal enclave jurisdiction, and the applicability of the federal bankruptcy-removal statute. *Id.* at 147–52.

80. *Cnty. of San Mateo v. Chevron Corp.*, 294 F. Supp. 3d 934, 939 (N.D. Cal. 2018); *see also* *Bd. of Cnty. Comm'rs of Boulder Cnty. v. Suncor Energy (U.S.A.) Inc.*, 405 F. Supp. 3d 947 (D. Colo. 2019).

81. The companies' argument that the complaint presented federal common law claims was part of a motion to dismiss the case outright. Rather than delineating all eight theories for removal, the company merely argued that the case presented federal common law claims. *See City of New York v. BP P.L.C.*, 325 F. Supp. 3d 466 (S.D.N.Y. 2018), *aff'd*, 993 F.3d 81 (2d Cir. 2021).

The court believed federal common law governed because the control of interstate pollution is a “uniquely federal interest[.]”⁸² The court emphasized the breadth of the harm asserted in New York’s case; the city sought compensation for “transboundary” emissions and “worldwide fossil fuel production.”⁸³ By labeling the claims as federal common law, the court’s decision necessarily required the case to be dismissed because those claims were displaced by the CAA under *American Election Power*.⁸⁴ Similarly, in *California v. BP P.L.C.*, the Northern District of California agreed that the climate nuisance suit presented federal common law because “the scope of the worldwide predicament demands the most comprehensive view available.”⁸⁵

As of November 2021, seven climate nuisance suits had reached federal appellate courts for review.⁸⁶ Typically, when a party appeals a case, the appellate court reviews the entire certified record and can address any and all arguments that the lower court relied on to reach a decision. However, the appellate review for remand orders to state court falls under a special statutory limitation, 28 U.S.C. § 1447(d).⁸⁷ Since 1949, circuit courts have generally been unable to review district court orders to remand cases to state court at all.⁸⁸ § 1447(d) carved out two exceptions: one for appellate review of civil rights violations and another for appellate review of federal officer removal claims.⁸⁹ Federal officer removal is one of the eight theories typically raised by defendants in climate nuisance suits.⁹⁰

Before the Supreme Court’s recent ruling in *BP P.L.C. v. Mayor of Baltimore*, it was unclear whether § 1447(d) allowed a circuit court to review a claim for federal officer removal *and* all other bases of removal raised, or just

82. *BP*, 325 F. Supp. 3d at 471 (quoting *Tex. Indus. Inc. v. Radcliff Materials, Inc.*, 451 U.S. 630, 630 (1981)).

83. *Id.* at 471–72.

84. *Id.* at 472–73.

85. No. C 17-06011, 2018 WL 1064293, at *3 (N.D. Cal. Feb. 27, 2018).

86. These cases fall into two categories: (1) defendant challenges to remand orders and (2) plaintiff challenges to dismissals. For defendant challenges to remand orders, see *Mayor of Baltimore v. BP P.L.C.*, 952 F.3d 452 (4th Cir. 2020), *vacated*, 141 S. Ct. 1532 (2021); *City & Cnty. of Honolulu v. Sunoco LP*, No. 21-15313, 2021 WL 1017392 (9th Cir. Mar. 13, 2021); *Bd. of Comm’rs of Boulder Cnty. v. Suncor Energy, Inc.*, 965 F.3d 792 (10th Cir. 2020); *Rhode Island v. Shell Oil Prods. Co.*, 979 F.3d 50 (1st Cir. 2020); *Cnty. of San Mateo v. Chevron Corp.*, 960 F.3d 586 (9th Cir. 2020). For plaintiff challenges to dismissal, see *City of New York v. Chevron Corp.*, 993 F.3d 81 (2d. Cir. 2021); *City of Oakland v. BP PLC*, 960 F.3d 570 (9th Cir. 2020).

87. The section states as follows:

An order remanding a case to the State court from which it was removed is not reviewable on appeal or otherwise, except that an order remanding a case to the State court from which it was removed pursuant to section 1442 or 1443 of this title shall be reviewable by appeal or otherwise.

28 U.S.C. § 1447(d).

88. *BP P.L.C. v. Mayor of Baltimore*, 141 S. Ct. 1532, 1536 (2021).

89. *Id.*; *see also* 28 U.S.C. § 1447(d).

90. *See, e.g., Mayor of Baltimore*, 952 F.3d at 458, *vacated*, 141 S. Ct. 1532 (2021).

federal officer removal.⁹¹ Oil companies argued that circuit courts should be allowed to review any and all bases for removal,⁹² because if a court finds that even one is viable, the case can be “labeled” a federal public nuisance claim and dismissed under *American Electric Power*.⁹³ Writing for the majority, Justice Gorsuch interpreted § 1447(d) to provide circuit courts broad authority to review all bases for removal so long as a defendant raises federal officer removal as one of their theories.⁹⁴

In addition to the appellate review of remand orders available under § 1447(d), two circuit courts have reviewed appeals from a district court’s order granting removal and ultimately dismissal. The Second Circuit affirmed a decision to dismiss in *City of New York v. Chevron Corp.*,⁹⁵ and the Ninth Circuit reversed and remanded an order of dismissal in *City of Oakland v. BP PLC*, sending the case back to state court to proceed if the district court could not find an alternative basis for jurisdiction.⁹⁶ Many climate nuisance suits are now pending before circuit courts—newly freed up to consider all bases for removal on appeal.⁹⁷ Next, these circuit courts will consider the merits of the

91. *Mayor of Baltimore*, 141 S. Ct. at 1537.

92. See Brief for the Petitioners at 11–15, *Mayor of Baltimore*, 141 S. Ct. 1532 (No. 19-1189).

93. See *supra* notes 81–85 and accompanying text.

94. *Mayor of Baltimore*, 141 S. Ct. at 1538, 1543.

95. 993 F.3d 81, 86 (2d. Cir. 2021).

96. 960 F.3d 570, 575, 585 (9th Cir. 2020).

97. The most recent filings in several decisions are briefs concerning the merits of all bases of removal, which federal appellate courts can review under § 1447(d) in the wake of the Supreme Court’s decision in *Baltimore*. See Amended Supplemental Briefing Order, *Mayor of Baltimore v. BP P.L.C.*, No. 19-1644 (4th Cir. July 26, 2021); Appellants’ Opening Brief, *City of Honolulu v. Sunoco LP*, No. 21-15313 (9th Cir. July 19, 2021); Supplemental Brief of Appellants, *Bd. of Cnty. Comm’rs of Boulder Cnty. v. Suncor Energy (U.S.A.) Inc.*, 965 F.3d 792 (10th Cir. 2021) (No. 19-1330); Appellants’ Principal Supplemental Brief, *Rhode Island v. Shell Oil Prods. Co.*, No. 19-1818 (1st Cir. July 28, 2021); Order, *Cnty. of San Mateo v. Chevron Corp.*, No. 18-15499 (9th Cir. July 1, 2021) (denying a motion for supplemental briefing and oral argument); Joint Case Management Statement, *City of Oakland v. BP P.L.C.*, No. 17-cv-06011 (N.D. Cal. July 9, 2021) (stating that a remand to state court will be stayed until the Ninth Circuit issues a decision in the companion case, *San Mateo v. Chevron*). In addition to cases that are being reviewed at the circuit court level, there are a handful of decisions in disagreement as to whether federal district courts should remand these cases back to state court. *E.g.*, Plaintiff’s Notice of Supplemental Authority and Response to Defendants’ Notice, *City of Hoboken v. Exxon Mobil Corp.*, 20-cv-14243 (D.N.J. Apr. 15, 2021). In some, the court has decided to stay the proceedings pending the Fourth Circuit’s decision in *Baltimore* on the merits of all bases of removal. See Motion to Remand to State Court, *Anne Arundel Cnty. v. BP P.L.C.*, No. 21-cv-01323 (D. Md. June 28, 2021); *City of Annapolis v. BP P.L.C.*, No. ELH-21-722, 2021 WL 2000469 (D. Md. May 19, 2021) (granting a stay of proceedings pending the Fourth Circuit decision in the *Baltimore* case); Text Order, *City of Charleston v. Brabham Oil Co.*, No. 20-CV-3579 (D.S.C. May 27, 2021) (granting a stay of proceedings pending the Fourth Circuit decision in the *Baltimore* case); Plaintiff’s Notice of Supplemental Authority, *Delaware v. BP Am. Inc.*, No. 20-cv-01429 (D. Del. June 4, 2021); Order, *Cnty. of Maui v. Chevron USA, Inc.*, No. 21-15318 (9th Cir. May 11, 2021) (granting a joint motion to extend the time to file opening briefs); Order Granting Parties’ Stip-

theories of removal and determine if the cases should be dismissed as displaced federal public nuisance claims or remanded to state court.

The procedural moves made thus far in climate nuisance suits, while doctrinally complex, serve one simple purpose: avoiding tort liability for climate change. Outside of climate nuisance litigation, the same oil companies named as defendants have used their political (and actual) capital to attempt to legislate climate nuisance suits out of existence. In recent years, oil companies have backed the efforts of lobbyists encouraging Congress to pass a simple carbon tax program that would set a flat price per ton of carbon emitted.⁹⁸ Some of these plans come with a major catch: in exchange for participation in a carbon tax, these companies would be insulated from all tort liability for the harm of climate change.⁹⁹ The proposal would phase out “[m]uch of the EPA’s regulatory authority over carbon dioxide emissions” and would bring a definitive “end to federal and state tort liability for emitters.”¹⁰⁰ A flat fee for pollution would replace all the complexities of federal legislation and common law suits. The procedural defenses raised in climate nuisance suits seek the same end: avoidance of a decision on the merits as to whether the sale and production of fossil fuels have interfered with the public’s use and enjoyment of the land.

Bringing public nuisance lawsuits against oil companies has been an arduous, time-consuming, and expensive endeavor. And after years of litigation, no plaintiff has actually *succeeded* on an underlying claim of public nuisance. To be fair, the lack of success is a direct result of the procedural defenses raised. The complexities of these defenses have kept courts from reaching the merits, allowing companies to insulate themselves from tort liability. Still, in the fight to hold polluters accountable, are climate nuisance suits really worth the trouble? To aid in answering this question, Part II presents a historical analysis of the smoke abatement movement to highlight the integral role that nuisance served in abating smoke and provide a window into the independent value public nuisance suits can have in the abatement of environmental harm.

ulated Motion Regarding Deadlines and Page Limits for Briefing of Defendants’ Motions to Dismiss, King Cnty. v. BP P.L.C., No. 18-cv-00758 (W.D. Wash. July 7, 2021) (resuming proceedings in a case that had been stayed until the Supreme Court denied certiorari in the *Baltimore*-adjacent case *City of Oakland v. BP PLC*); Joint Response to Court’s Notice and Request to Vacate Case Management Conference, Pac. Coast Fed’n of Fishermen’s Ass’ns, Inc. v. Chevron Corp., No. 18-cv-07477 (N.D. Cal. Nov. 25, 2020).

98. Lee Wasserman & David Kaiser, Opinion, *Beware of Oil Companies Bearing Gifts*, N.Y. TIMES (July 25, 2018), <https://www.nytimes.com/2018/07/25/opinion/carbon-tax-lott-breaux.html> [perma.cc/8W8E-DLS7]; Trent Lott & John Breaux, Opinion, *Here’s How to Break the Impasse on Climate*, N.Y. TIMES (June 20, 2018), <https://www.nytimes.com/2018/06/20/opinion/climate-change-fee-carbon-dioxide.html> [perma.cc/HYA5-U4JK].

99. Wasserman & Kaiser, *supra* note 98.

100. JAMES A. BAKER, III ET AL., CLIMATE LEADERSHIP COUNCIL, THE CONSERVATIVE CASE FOR CARBON DIVIDENDS (2017), <https://www.clcouncil.org/media/2017/03/The-Conservative-Case-for-Carbon-Dividends.pdf> [perma.cc/XD8D-G6X5].

II. WHERE WE WERE: USING NUISANCE SUITS TO CHALLENGE THE SMOKE EVIL IN THE NINETEENTH CENTURY

During the nineteenth and early twentieth centuries, clouds of dense, black smoke filled the air in industrialized cities across the United States as the rapid and unregulated growth of the Industrial Revolution transformed the environment.¹⁰¹ Coal smoke from factories and power plants blanketed cities; in 1906, the Pittsburgh Press observed that an American flag hanging on a prominent town square had turned completely black.¹⁰² Eventually, however, American cities successfully abated the “smoke evil.”¹⁰³ While a number of factors aided abatement, one such factor was the regulation of polluters through court actions and local administrations.¹⁰⁴ This regulation encouraged industry to move away from bituminous coal to cleaner natural gas, diesel fuel, and electricity, and to embrace inventions that allowed for more efficient combustion.¹⁰⁵

The purpose of this Part is to analyze the integral role smoke nuisance suits played in abating smoke pollution to demonstrate how the climate nuisance suits of today may play a similar role in the future abatement of greenhouse gas emissions.¹⁰⁶ Section II.A traces the development of judicial decisionmaking over the course of sixty years of smoke nuisance suits. Section II.B uses Pittsburgh’s smoke abatement movement to show how common law and legislative regulation can work in tandem to reduce environmental harm. Section II.C highlights how nuisance lawsuits promoted innovation.

A. *The Progression of Judicial Thinking in Nuisance Law, 1840–1906*

The Industrial Revolution brought new forms of industry to nineteenth-century America, such as coal-powered factories and mills, and with the Revolution came new forms of air pollution. To hold factories accountable for pollution, plaintiffs turned to the courts, bringing public and private nuisance suits and arguing that smoke interfered with their use and enjoyment of the land. Originally, these suits failed. But over the course of fifty years, the common law changed rapidly to address this new environmental harm: smoke.

In general, nineteenth-century courts were not unfriendly to nuisance claims. As industrial facilities like slaughterhouses and bone-boiling factories pushed closer to residential neighborhoods in the mid-nineteenth century,

101. See R. Dale Grinder, *The Battle for Clean Air: The Smoke Problem in Post-Civil War America*, in POLLUTION AND REFORM IN AMERICAN CITIES, 1870–1930, at 83, 83 (Martin V. Melosi ed., 1980) [hereinafter *Battle for Clean Air*].

102. *Smoke Has No Respect for American Flag*, PITT. PRESS, June 29, 1906, at 12.

103. See, e.g., *The Smoke Evil*, 205 NEW ENG. J. MED. 1116 (1931).

104. See *supra* Sections II.A, II.B.

105. Carlos Flick, *The Movement for Smoke Abatement in 19th-Century Britain*, 21 TECH & CULTURE 29, 30–46 (1980).

106. See *infra* Part III for a discussion of the implications of the history of smoke nuisance suits in the present day.

judges routinely held that industrial air pollution was a prima facie nuisance.¹⁰⁷ If plaintiffs could show the industry's noxious air pollution and smell interfered with the "use and enjoyment" of public land, judges readily found in their favor.¹⁰⁸ Defendant companies raised several creative defenses against the nuisance suits, but judges ignored them.¹⁰⁹

For instance, in *Commonwealth v. Upton*, the owner of a slaughterhouse argued that he had a proscriptive right to continue his business because it had been in operation for twenty years before new residents complained.¹¹⁰ The court disagreed, finding that because the slaughterhouse was "inconsistent" with the preservation of "the welfare and safety of the community," it must yield.¹¹¹ Public nuisance suits like *Upton* functioned as the common law counterpart to state police power;¹¹² so long as an action served to protect the health and safety of the public, judges upheld the challenges.¹¹³

In old industry pollution suits, judges often rejected defendants' arguments against causation and harm, even if it meant enjoining a long-standing factory from production.¹¹⁴ In *Commonwealth v. Van Sickle*, for instance, the owner of an offensive-smelling "piggery" argued in part that there was no causation because the noxious smell could be coming from other piggeries in the neighborhood. The court found that the piggery was a nuisance, rejecting the argument that plaintiffs must attribute the nuisance to a single, particularized defendant to prevail.¹¹⁵ Finally, in *Howard v. Lee*, when a defendant argued that the plaintiffs had only proven discomfort from the smell of his slaughterhouse, not a threat to public health or welfare, the court still found for the plaintiffs, reasoning that discomfort alone constituted a nuisance.¹¹⁶ In these

107. Christine Rosen, *Differing Perceptions of the Value of Pollution Abatement Across Time and Place: Balancing Doctrine in Pollution Nuisance Law, 1840-1906*, 11 L. & HIST. REV. 303, 312-14 (1993) [hereinafter Rosen, *Differing Perceptions*].

108. See, e.g., *Catlin v. Valentine*, 9 Paige Ch. 575 (N.Y. Ch. 1842); *Commonwealth v. Van Sickle*, 1 Brightly 69 (Pa. 1845); *Commonwealth v. Upton*, 72 Mass. (6 Gray) 473 (1856); *Brady v. Weeks*, 3 Barb. 157 (N.Y. Gen. Term 1848); *Howard v. Lee*, 5 N.Y. Super. Ct. 281 (1849); *Smith v. Cummings*, 2 Pars. Eq. Cas. 92 (Pa. C.P. 1851).

109. Christine Meisner Rosen, *'Knowing' Industrial Pollution: Nuisance Law and the Power of Tradition in a Time of Rapid Economic Change, 1840-1864*, 8 ENV'T. HIST. 565, 585, 596 (2003) [hereinafter Rosen, *'Knowing' Industrial Pollution*].

110. *Upton*, 72 Mass. at 474.

111. *Id.* at 476.

112. See ERNST FREUND, *STANDARDS OF AMERICAN LEGISLATION* 66 (1917) ("Theoretically, it might be said, the law of nuisance is the common law of the police power, striking at all gross violations of health, safety, order, and morals.").

113. WILLIAM J. NOVAK, *THE PEOPLE'S WELFARE* 217-218 (1996).

114. In general, a nuisance claim requires proving interference with one's use and enjoyment of the land, which necessarily requires showing that a particular defendant caused the interference and that the interference was actually harmful. Causation and harm are both elements that a modern-day plaintiff must prove in a climate nuisance suit, too. For more on the requirements of a prima facie climate nuisance suit, see *infra* notes 163-169 and accompanying text.

115. *Commonwealth v. Van Sickle*, 1 Brightly 69, 71, 73-75 (Pa. 1845).

116. *Howard v. Lee*, 5 N.Y. Super. Ct. 281, 282-83 (1849).

old industry cases, judges embraced a capacious understanding of nuisance law, capable of protecting public welfare.

Yet, during the same time period, when plaintiffs brought nuisance suits against “new industry” pollution from mills, mines, and smelters, they did not win so easily.¹¹⁷ Judges embraced similar defenses raised by slaughterhouses (and written off by courts) to dismiss nuisance claims.¹¹⁸ For example, in *Warren v. Hunter*, a plaintiff attempted to sue a paper mill for smoke nuisance. The mill won the suit by claiming a proscriptive right to continue its business, the same defense that failed in *Upton*.¹¹⁹ And in *Tichenor v. Wilson*, a plaintiff claimed that a new chemical works company producing vapors constituted a nuisance. The court required the plaintiff to show irreparable injury, not just discomfort.¹²⁰ But when the slaughterhouse in *Howard* raised the same argument, the court dismissed it.¹²¹

Historian Christine M. Rosen attributes the stark contrast between nuisance suits brought against old industries (slaughterhouses) and new industries (mills and factories) to a lack of judicial understanding about new forms of pollution.¹²² Judges lacked on-point precedent to apply in new industry pollution suits and approached testimony about new forms of pollution with confusion—as scientific understanding about the impact of smoke on health and the environment had only just started to develop.¹²³ In contrast, slaughterhouses “were deeply rooted in American life,” and had been regulated through nuisance law since colonial times.¹²⁴ While the judicial schema for “nuisance” did not immediately catch up to the reality of air pollution from new industries, judicial attitudes changed over the next fifty years, shaping the scope of what constituted a nuisance at common law.

In the latter half of the nineteenth century, judges began to apply a rudimentary balancing doctrine to nuisance suits against new industry, attempting to reconcile harm to the environment with the benefit of an industrialized economy.¹²⁵ In these cases, judges did not reach the most economically efficient allocation each time; in reality, the reasoning often sprung from flawed logic.¹²⁶ Some judges attributed enormous social costs to granting an injunction against a single coal-powered factory, reasoning that it would cause a

117. Rosen, ‘Knowing’ *Industrial Pollution*, *supra* note 109, at 573.

118. *Id.*

119. *Warren v. Hunter*, 10 Phila. 414, 417 (Pa. C.P. 1853); *see supra* notes 110–112 and accompanying text.

120. *Tichenor v. Wilson*, 4 N.J. Eq. 197, 204–05 (N.J. Ch. 1849).

121. *See supra* note 113 and accompanying text.

122. Rosen, ‘Knowing’ *Industrial Pollution*, *supra* note 109, at 587–88.

123. *See id.* at 577, 588.

124. *Id.* at 568–69.

125. Rosen, *Differing Perceptions*, *supra* note 107, at 303–04.

126. *Id.* at 315.

domino effect and terminate all industry across a state.¹²⁷ Other judges underestimated the cost of granting an injunction, failing to consider the social costs of shutting down a factory, like job loss.¹²⁸ Courts also displayed an uneven understanding of an injunction's benefits. Some courts viewed injunctions as highly beneficial because they believed pollution caused serious emotional harm to the community, while others characterized injunctions as unnecessary because pollution only caused minor human discomfort.¹²⁹ When confronted with the question of how best to allocate the costs and benefits of new industry, judges experimented, crafting an imperfect balance between these competing interests.

At the turn of the twentieth century, courts in Pennsylvania and New York, two states particularly affected by the problem of smoke pollution at the time, made an abrupt shift away from balancing cost and benefit to adopting a standard of prima facie nuisance for smoke pollution.¹³⁰ In 1913, for example, the New York Court of Appeals stated that when considering industrial pollution, "a balancing of injuries *cannot* be justified" because of its tendency to cause injustice.¹³¹ The Pennsylvania Supreme Court agreed, holding that no court ought to "refuse to protect a man in the possession and enjoyment of his property" even when it may destroy industry.¹³²

According to Rosen, the shift from dismissing smoke nuisance suits to embracing them resulted from three main factors: the growing costs of pollution, a shift in public opinion, and the development of abatement technology.¹³³ The turn of the century saw a political shift toward progressive reform, with an emphasis on improving cities, that may have influenced the courts.¹³⁴ And, around the same time, technological advances meant factories had devices they could install to abate smoke without having to relocate or shut down operations entirely, minimizing the cost of injunctions.¹³⁵ But these two shifts

127. *Id.* at 318; see e.g., *Robb v. Carnegie Bros.*, 22 A. 649, 651 (Pa. 1891).

128. See, e.g., *Campbell v. Seaman*, 63 N.Y. 568, 577, 586–87 (1876); Rosen, *Differing Perceptions*, *supra* note 107, at 326.

129. More specifically, Professor Rosen draws a comparison between the different states where smoke pollution was a big problem in the nineteenth century. In Pennsylvania, judges tended to overemphasize the costs of an injunction to industry while downplaying the benefit to the community, whereas in New York and New Jersey, judges tended to overemphasize the benefit of an injunction for the community, downplaying the cost to industry. Rosen, *Differing Perceptions*, *supra* note 107, at 327–42.

130. *Id.* at 367.

131. *Whalen v. Union Bag & Paper Co.*, 101 N.E. 805, 805–06 (N.Y. 1913) (emphasis added).

132. *Sullivan v. Jones & Laughlin Steel Co.*, 57 A. 1065, 1071 (Pa. 1904) (quoting *Evans v. Reading Chem. & Fertilizing Co.*, 28 A. 702, 709 (Pa. 1894)). Pennsylvania's adoption of a plaintiff stance is particularly noteworthy, as it was a politically conservative state where coal-powered industry dominated its economy. Rosen, *Differing Perceptions*, *supra* note 107, at 369.

133. Rosen, *Differing Perceptions*, *supra* note 107, at 369.

134. *Id.* at 375.

135. *Id.* at 371–73.

did not happen in a vacuum; the nuisance suits themselves directly motivated an increased emphasis on smoke abatement in politics and spurred the development of smoke abatement technologies.

B. “*Cleaning Up Pittsburgh for All of Us*”: Regulation of Smoke in Pittsburgh, 1804–1913

During the nineteenth and twentieth centuries, residents of industrial cities like Pittsburgh attacked the problem of the smoke evil from multiple angles: bringing nuisance lawsuits, forming organizations, and lobbying for local and state legislation. This Section uses Pittsburgh’s smoke abatement movement as a case study to show how smoke nuisance suits worked in tandem with other forms of regulation to abate environmental harm.¹³⁶

In 1804, the burgess of Pittsburgh, General Presley Neville, wrote a letter to the president of the Pittsburgh city council about the problem of smoke in the city, stating that “not only the comfort [and] health . . . but the peace and harmony of the inhabitants, depend upon the speedy measures being adopted to remedy the nuisance.”¹³⁷ Situated near bituminous coal mines, Pittsburgh was especially prone to smoke problems.¹³⁸ Although city leadership identified the problem early on, over sixty years later, in 1868, Pittsburgh only had one ordinance on the books to regulate coal consumption, and it only applied to trains.¹³⁹ In the time before local legislation restricted smoke, common law suits began to craft a standard for what constituted a nuisance, balancing the interests of the economy and citizens.¹⁴⁰

For example, in 1868, in *Rhodes v. Dunbar*, the Supreme Court of Pennsylvania considered whether a planing mill producing smoke, soot, and flammable wood shavings constituted a nuisance.¹⁴¹ The court ultimately dismissed the complaint, finding no nuisance worthy of an injunction by balancing the benefit and harm of the planing mill.¹⁴² The court reasoned first that the harm was just “[a]nnoyance[] without damage.”¹⁴³ While it noted that planing mills could burn different kinds of fuel and that some dirtier forms of

136. Of course, these tools did not exist in a vacuum. The correlation between nuisance, local legislation, and abatement should not be overstated, as the abatement of smoke happened in a complex economic, political, and cultural context.

137. John O’Connor, Jr., *Some Engineering Phases of Pittsburgh’s Smoke Problem*, SMOKE INVESTIGATION OF THE MELLON INST., BULL. 8, 1914, at 11–12.

138. *Battle for Clean Air*, *supra* note 101, at 84.

139. Cliff I. Davidson, *Air Pollution in Pittsburgh: A Historical Perspective*, 29 J. AIR POLLUTION CONTROL ASS’N 1035, 1037 (1979); O’Connor, Jr., *supra* note 137, at 12 (“No bituminous coal or wood shall be used in the engine [of] any locomotive employed in conducting trains upon any railroad.”).

140. See NOVAK, *supra* note 113, at 221; *see also, e.g.*, *Rhodes v. Dunbar*, 57 Pa. 274 (1868); *Huckenstine’s Appeal*, 70 Pa. 102 (1871).

141. 57 Pa. at 274–75.

142. *Id.* at 287.

143. *Id.* at 286–87.

fuel *might* constitute a nuisance, the court was unwilling to hold all planing mills a nuisance *per se*.¹⁴⁴ Ultimately, it concluded that it would be unfair to deprive the factory owner of “its free and profitable use” just because “the light and air may not be as pure as a neighbor might desire.”¹⁴⁵ In reasoning through the balance of harm and benefit, the court began to define the contours of how much smoke—and what kind of smoke—constituted a nuisance.

Beginning in 1880, Pittsburgh residents began to rally more forcefully around the smoke evil, lobbying for their city council to address the problem.¹⁴⁶ The local Engineers’ Society started circulating papers on the smoke problem, which inspired the city council to pass an ordinance to control smoke in the East End of the city.¹⁴⁷ But the ordinance still left the city’s industrial sector unregulated, reflecting the city council’s ties to special industrial interests.¹⁴⁸ Groups like the Ladies’ Health Association and Civic Club pushed back, asking the city council to pass an ordinance with more teeth.¹⁴⁹ At the same time, citizens continued to bring nuisance lawsuits against smoke emitters in Pennsylvania state courts, pushing both the local government and the courts to define what constituted a tolerable—and legal—level of smoke.¹⁵⁰

As the Pennsylvania courts adopted smoke as a *prima facie* nuisance,¹⁵¹ the local government also became more amenable to protecting the public from air pollution. In 1906, Pittsburgh passed the Weber Bill, which created a Bureau of Smoke Regulation.¹⁵² The Bill also drew on earlier Pennsylvania cases, balancing the harm and benefit of industry to define the level of smoke that constituted a nuisance in the city as the release of “black or dense gray smoke” for more than eight minutes at a time.¹⁵³

144. *Id.* at 286–88.

145. *Id.* at 287–88.

146. Robert Dale Grinder, *From Insurgency to Efficiency: The Smoke Abatement Campaign in Pittsburgh Before World War I*, 61 W. PA. HIST. MAG. 187 (1978) [hereinafter *From Insurgency to Efficiency*]; *Battle for Clean Air*, *supra* note 101.

147. *From Insurgency to Efficiency*, *supra* note 146, at 188–89; O’Connor, Jr., *supra* note 137, at 15 (“[The ordinance] provided that after September 1, 1892, it should be unlawful for any chimney or smoke stack used in connection with a stationary boiler to allow, suffer or permit smoke from bituminous coal to be emitted or escape therefrom, within a certain district.”).

148. *From Insurgency to Efficiency*, *supra* note 146, at 189.

149. *Id.*

150. *See, e.g.*, *Straus v. Barnett*, 21 A. 253 (Pa. 1891); *Robb v. Carnegie Bros.*, 22 A. 649 (Pa. 1891); *Daugherty Typewriter Co. v. Kittanning Iron & Steel Mfg. Co.*, 35 A. 1111 (Pa. 1896); *Sullivan v. Jones & Laughlin Steel Co.*, 57 A. 1065 (Pa. 1904).

151. *See supra* Section II.A.

152. *From Insurgency to Efficiency*, *supra* note 146, at 192, 199.

153. O’Connor, Jr., *supra* note 137, at 17; *From Insurgency to Efficiency*, *supra* note 146, at 192. After the Weber Bill passed, it was challenged in court and initially struck down by the Pennsylvania Supreme Court as overstepping the city’s legal authority. *Commonwealth v. Standard Ice Co.*, 9 Justices’ L. Rep. 270, 270–73 (Pa. 1910). The Pennsylvania State Legislature sprang into action, passing a bill the same year as the ruling to grant cities the affirmative power to regulate the emission of smoke. O’Connor, Jr., *supra* note 137, at 18.

The story of smoke abatement in Pittsburgh shows that common law is not the antithesis of legislation. On the contrary, both nuisance law and local ordinances served as regulatory tools that informed one another in an era of “exponentially problematic” pollution.¹⁵⁴ The nuisance lawsuits served as “precedents and rationales for the more extensive legislative and municipal efforts to regulate industrial trades.”¹⁵⁵ By allowing judges to set acceptable levels in individual cases, nuisance suits became tools to balance competing societal values and served as templates for future legislation.

C. Eventual Innovation

Ultimately, cities like Pittsburgh did not solve the smoke evil by regulating factories out of existence. The culmination of the smoke abatement movement was a series of technological breakthroughs. Industry shifted to using “natural gas, diesel fuel, and electricity,” which cleared the air of black smoke.¹⁵⁶ New inventions allowed factories to burn coal more efficiently, reducing the amount of smoke emitted during combustion.¹⁵⁷ But these innovations did not appear out of thin air; they were the direct result of the pressure placed on polluting industries, including the pressure from nuisance suits and local legislation restricting the ability to pollute with impunity.

Regulatory tools, both common law and legislative, can motivate industry innovation.¹⁵⁸ In his work on technological advancements in the smoke abatement movement, historian Ben Pontin describes the first stage on the path to technological innovation as the generation of a “common law prototype.”¹⁵⁹ In the context of individual cases where the stakes are not yet industry wide, individual actors can work creatively to tackle environmental harms. For instance, in *David v. Vivian*—a British nuisance suit against a polluting smelting

154. NOVAK, *supra* note 113, at 217–18.

155. *Id.* at 221.

156. *Battle for Clean Air*, *supra* note 101, at 100.

157. Flick, *supra* note 105, at 39–46. Smoke was a byproduct of the inefficient burning of coal. To combat the problem, there were three main categories of technological innovations during the nineteenth century. First, there were devices that “introduced air directly into the hot ‘carburetted hydrogen’ gases . . . and ‘smoke’ . . . in the furnace” to burn them off. *Id.* at 39. Early prototype examples included Josiah Parke’s “split bridge” furnace, patented in 1820, and Charles Wye William’s “argand furnace,” patented in 1839. *Id.* at 40. Second, there were inventions that “prevent[ed] smoke” through “a continuous supply of hot coals sufficient to burn the impurities given off by fresh fuel.” *Id.* at 43. An early prototype example of the technology was John Juckes’s longitudinal and circular moving grates, patented in 1841 and 1842. Lastly, improved construction of flues was utilized to “trap or wash out impurities discharged by furnaces.” *Id.* at 43–44. These devices had a rocky start. For example, an early prototype invented by Thomas Hedley in 1842 was only used by a few small businesses. *Id.* at 44, 46.

158. Ben Pontin, *Nuisance Law, Regulation, and the Invention of Prototypical Pollution Abatement Technology: ‘Voluntarism’ in Common Law and Regulation*, in *THE OXFORD HANDBOOK OF LAW, REGULATION, AND TECHNOLOGY* 1253, 1253–54 (Roger Brownsword, Eloise Scotford & Karen Yeung eds., 2017) [hereinafter *Voluntarism*].

159. *Id.*

facility—the jury found for the defendant, John Henry Vivian, but only after he invested tens of thousands of pounds in budding technology from investors Michael Faraday and Richard Phillips to invent better flue-gas treatment for copper-smelting emissions.¹⁶⁰ Of course, not all environmental nuisance suits led to a direct investment in abatement technology. But implicit in all damage awards and injunctions is economic pressure on industry, which can incentivize innovation.

In other areas of nineteenth-century nuisance law, the same pattern of prototyping technology played out in practice. For instance, during Britain's Industrial Revolution, a number of individual plaintiffs brought nuisance actions against sewage companies, whose rudimentary disposal techniques caused terrible noxious smells.¹⁶¹ In a single nuisance action against the Birmingham Corporation in London, an injunction led to the investment of a half a million pounds in clean infrastructure technology.¹⁶² The lawsuit was one of many at the time against sewage companies, leading to other comparable investments in abatement technologies.¹⁶³ Eventually, companies began to adopt cleaner sewage-processing technologies merely from the *threat* of potential nuisance litigation.¹⁶⁴

After common law claims generate an abatement prototype, regulation through legislation can render the prototype into the eventual archetype, replicated on an industry-wide scale.¹⁶⁵ Both common law and legislation therefore serve distinct purposes in the adoption of technological advancements, the former “pushing the frontiers of what was technological[ly] possible, thus giving politicians a clean technology prototype,” and the latter allowing a government to generalize a novel technology.¹⁶⁶ The interplay between nuisance and legislation had a positive impact on pollution abatement a hundred years ago. The purpose of Part III of this Comment is to explore how the success of the past smoke abatement compares to our current efforts at greenhouse gas abatement.

160. Ben Pontin, *The Common Law Clean Up of the 'Workshop of the World': More Realism About Nuisance Law's Historic Environmental Achievements*, 40 J.L. & SOC'Y 173, 191, 192 (2013) [hereinafter *Common Law Clean Up*]; Ronald Rees, *The Great Copper Trials*, HIST. TODAY, Dec. 1993, at 38, 39.

161. *Common Law Clean Up*, *supra* note 160, at 193–94.

162. *Id.* at 194.

163. *Id.* at 194–95.

164. *Id.* at 195 (“South, towards the midlands, the towns of Banbury, Coventry, Leamington Spa, Rugby, and Warwick were all purifying sewage within the framework of the *threat* of actions from owners of neighbouring rural estates.”).

165. *Voluntarism*, *supra* note 158, at 1254.

166. *Common Law Clean Up*, *supra* note 160, at 193.

III. WHERE WE ARE HEADED: THE VALUE OF PUBLIC NUISANCE IN GREENHOUSE GAS ABATEMENT

Currently, the future of climate nuisance suits is unclear. Since the recent decision in *BP P.L.C. v. Mayor of Baltimore*, most of these suits are proceeding through an appellate review of the many bases for removal to federal court.¹⁶⁷ In the wake of these decisions, some will likely head back to state court where a decision on the merits could be imminent.¹⁶⁸

Critics often claim that these lawsuits, bound up in a web of complicated procedural defenses about the jurisdiction of federal courts, and touching on complex climate science, are an “unprecedented” and improper use of public nuisance to solve an environmental problem.¹⁶⁹ This Part uses the history of smoke nuisance suits to demonstrate the potential value of climate nuisance suits in the modern greenhouse gas abatement movement. Section III.A draws a comparison between the earliest smoke nuisance suits and the current climate nuisance suits to show how nuisance law may develop over time to allow plaintiffs to recover on the merits. Section III.B explores the beneficial role climate nuisance suits can play in the modern regulatory state. Section III.C considers the expressive and innovative value of climate nuisance suits.

A. *Early Climate Nuisance Suits, Early Smoke Nuisance Suits, and Reaching a Decision on the Merits*

The main goal in bringing climate nuisance suits is to hold oil companies economically responsible for the damage of climate change. Of course, plaintiffs must actually be able to win the suits to meet this goal. Thus far, the procedural chess match in climate nuisance suits has kept judges from the merits,¹⁷⁰ so any analysis about the viability of a decision on the underlying nuisance claim is necessarily speculative. However, the history of nuisance law’s development over time in the smoke abatement movement provides a window into how plaintiffs may find eventual success.

Despite the complexity of the procedural defenses raised in climate nuisance suits, the underlying claim of public nuisance is quite straightforward: it shifts responsibility for the harm of climate change from a municipality onto the companies that have profited off of fossil fuels. As Chief Judge William E. Smith in the District of Rhode Island put it, “[c]limate change is expensive, and the State wants help paying for it.”¹⁷¹ But in order to win on the merits and receive compensation for the damage done by climate change, a plaintiff

167. See *supra* note 97 and accompanying text.

168. Of course, realistically, it’s likely that climate nuisance defendants will raise a procedural argument that while suits are not federal common law displaced by the CAA, the state common law claims are preempted by the CAA. For more information on preemption, see Section I.C *infra*.

169. See, e.g., *supra* note 23.

170. See *supra* Section I.D.

171. *Rhode Island v. Chevron Corp.*, 393 F. Supp. 3d 142, 146 (D.R.I. 2019).

would need to prove (1) the sale and production of fossil fuels caused (2) unreasonable interference (3) with the public's use and enjoyment of public land.¹⁷²

First, a hypothetical suit would require proof of the harm of climate change in a particular location¹⁷³ and proof that fossil fuels contribute to the warming of our planet, a fact that judges appear amenable to accept as conclusive.¹⁷⁴ Next, a suit would require the court to determine whether the interference is "unreasonable," which necessitates balancing the "social utility against the gravity of the anticipated harm."¹⁷⁵ This is no easy task; as Judge Alsup—a federal judge in California—recently opined, "our industrial revolution and the development of our modern world has literally been fueled by oil and coal."¹⁷⁶ Thus, while the harm of carbon dioxide is clear, fossil fuels have also benefited society. Finally, a suit would require proving causation, a point that defendants frequently press: is it really fair to hold individual companies liable for a diffuse warming caused by every consumer on our planet?¹⁷⁷

While judges have not yet reached the merits of climate nuisance suits, judges did reach the merits of smoke nuisance suits, which required identical proofs. As discussed in Section II.A, the story of smoke nuisance suits fell into three tidy phases: first, judges refused to hold defendant factories liable for smoke nuisance for a range of technical reasons.¹⁷⁸ Next, judges began to apply a rudimentary balancing test, weighing the harm of smoke against the benefit of industry.¹⁷⁹ Finally, judges found smoke to be a *prima facie* nuisance.¹⁸⁰ The entire evolution of doctrine took about sixty years, beginning in the 1840s and ending in the early 1900s.

The recent wave of climate nuisance suits began in earnest in 2004 with *American Electric Power*.¹⁸¹ But because of the emphasis on procedural issues,¹⁸² the development of the substantive tort law—whether the sale and

172. Each state's specific formulation of the elements of public nuisance differs, but these elements are present in all of the complaints. *See, e.g.*, Complaint paras. 154–57, *City of Honolulu v. Sunoco LP*, No. 1CCV-20-0000380 (Haw. Cir. Ct. Mar. 9, 2020).

173. For example, in a recent complaint filed by the city of Hoboken, the plaintiffs focus on the damage Superstorm Sandy caused to the city. Complaint, *City of Hoboken v. Exxon Mobil Corp.*, No. HUD-L-003179-20 (N.J. Super. Ct. Law Div. Sept. 2, 2020).

174. *See, e.g.*, *City of Oakland v. BP P.L.C.*, 325 F. Supp. 3d 1017, 1022 (N.D. Cal. 2018), *vacated* 960 F.3d 570 (9th Cir. 2020) ("The issue is not over science. All parties agree that fossil fuels have led to global warming and ocean rise and will continue to do so . . .").

175. *Id.* at 1023.

176. *Id.*

177. *See, e.g.*, Notice of Removal at 2, *Pac. Coast Fed'n of Fishermen's Ass'ns, Inc. v. Chevron Corp.*, No. 3:18-cv-7477 (N.D. Cal. Dec. 12, 2018).

178. *See supra* notes 117–120 and accompanying text.

179. *See supra* notes 125–129 and accompanying text.

180. *See supra* notes 130–132 and accompanying text.

181. Complaint, *Connecticut v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005) (No. 04 Civ. 5669).

182. *See supra* Section I.D.

production of fossil fuels constitute a public nuisance—is still in its infancy. In the rare instances when judges in these early climate nuisance suits have opined on the merits, their reasoning reveals anxieties reminiscent of the early smoke nuisance opinions.

In 1855, the Pennsylvania Supreme Court ruled against a plaintiff who alleged that the construction of a train platform by the Ohio and Pennsylvania Railroad Company created a public nuisance by emitting black coal smoke into the air.¹⁸³ The court expressed concern that a victory for the plaintiff would set a dangerous precedent for Pennsylvania's growing economy.¹⁸⁴ If the court could enjoin the Ohio and Pennsylvania Railroad Company, then other courts could potentially “stop all machinery of every description, driven or propelled by steam [as well as] stop all public markets which produce noise and disturb the citizens residing adjacent thereto, and restrain the use of coal, as fuel, because of the intolerable annoyance occasioned by its smoke.”¹⁸⁵ The court, and many other courts of the era, could not imagine finding for a smoke-nuisance plaintiff without crippling industry nationwide.

In 2009, the Northern District of California grappled with a similar concern in the climate nuisance suit, *Native Village of Kivalina v. ExxonMobil Corp.*¹⁸⁶ Holding Exxon responsible for the increasing levels of greenhouse gases in our atmosphere could potentially cripple our energy sector. The court worried there was no guidance as to “precisely what judicially discoverable and manageable standards are to be employed” by courts to decide how to hold companies responsible without restricting the entire economy to an unreasonable degree.¹⁸⁷

The cases reveal two similar anxieties: what law to apply and where to draw the line. In the mid-nineteenth century, one reason judges hesitated to find for plaintiffs in smoke nuisance suits was the lack of on-point precedent to apply.¹⁸⁸ The same problem exists today: while climate nuisance suits have been pending before state and federal courts for years, no court has had an opportunity to reach the merits and generate clear precedent. Further, the lack

183. See *Bell v. Ohio & Pa. R.R. Co.*, 25 Pa. 161 (1855).

184. See *id.* at 176.

185. *Id.*

186. 663 F. Supp. 2d 863 (N.D. Cal. 2009). The case was dismissed before the court could reach the merits because the plaintiffs had brought a federal common law public nuisance claim, which the court held was displaced under the recently announced precedent from the Supreme Court in *American Electric Power*. *Id.* at 883; see *supra* Section I.B.

187. *Native Vill. of Kivalina*, 663 F. Supp. 2d at 876.

188. According to Professor Rosen:

The courts had a tradition that dated back to the late Middle Ages in England of treating slaughterhouses, bone-boiling establishments and the like as per se or prima facie presumptive nuisances. They had virtually no experience, however, dealing with the pollution emitted by the large water and steam powered factories, textile mills, and other industries that the industrial revolution brought to the fore. The lack of precedent had a major impact on the way some judges and juries adjudicated such cases.

See Rosen, 'Knowing' Industrial Pollution, *supra* note 109, at 576–77.

of awareness about the consequences of smoke pollution in the nineteenth century mirrors our lack of collective understanding of the consequences of climate change today.¹⁸⁹ Because the problem of smoke outpaced a general awareness of the detrimental impact of pollution, judges did not understand the stakes of smoke nuisance suits and dismissed them outright.¹⁹⁰ Just as nineteenth-century judges downplayed the cost of smoke pollution while readily acknowledging the benefit of industry, judges reaching the merits in climate nuisance suits are likely to follow suit and draw the line between cost and benefit in favor of oil companies.

The strategy of defendants in these early climate nuisance suits also parallels the strategy of defendants in early smoke nuisance suits. By emphasizing and relying on a series of technical, affirmative defenses, defendants—both then and now—try to muddy the waters of the straightforward public nuisance claims to avoid liability. In the 1852 case *Davidson v. Isham*, a group of plaintiffs filed a nuisance action in a court of equity against a smoke-emitting mill.¹⁹¹ The complaint alleged that plaintiffs at the edge of the neighborhood were exposed to smoke, steam, vapors, and smells.¹⁹² The complaint further charged that two of the plaintiffs were exposed to the danger of an explosion and frequent rattling.¹⁹³ The defendants argued in part that the case should be dismissed since it had already been brought before the “proper tribunal,” a court of law, which “found in their favor,” precluding the plaintiffs from bringing suit in a court of equity.¹⁹⁴ In response, the New Jersey Court of Chancery dismissed the suit because of a different procedural defect: the complaint improperly blended common and individual nuisance claims.¹⁹⁵

The ruling grew out of the doctrinal difference between nineteenth-century private nuisance and public nuisance. Individuals could bring *private* nuisance claims; groups suffering a common harm could bring *public* nuisance claims.¹⁹⁶ In *Davidson*, the Court of Chancery noted that some of the harm alleged, like the rattling doors, windows, mantle ornaments, and loose articles of furniture, only affected two of the plaintiffs.¹⁹⁷ But the rest of the harm, like the smoke and smell, affected the entire neighborhood.¹⁹⁸ The court

189. According to the Yale Program on Climate Change Communication, in 2010, only thirty-three percent of Americans believed there was scientific consensus about climate change. As of 2017, the percentage has increased, but only to fifty-three percent. Matthew T. Ballew et al., *Climate Change in the American Mind: Data, Tools, and Trends*, ENV.: SCI. & POL'Y FOR SUSTAINABLE DEV., Apr. 2019, at 7, fig. 2, <https://doi.org/10.1080/00139157.2019.1589300>.

190. Rosen, 'Knowing' Industrial Pollution, *supra* note 109, at 588–89.

191. 9 N.J. Eq. 186, 187–88 (1852).

192. *Davidson*, 9 N.J. Eq. at 186.

193. *Id.* at 190.

194. *Id.* at 188.

195. *Id.* at 189–91.

196. See Paul M. Kurtz, *Nineteenth Century Anti-Entrepreneurial Nuisance Injunctions—Avoiding the Chancellor*, 17 WM. & MARY L. REV. 621, 639–40 (1976).

197. *Davidson*, 9 N.J. Eq. at 190.

198. *Id.*

found that if several plaintiffs wanted to join together, “the injury or grievance complained of must be common to all.”¹⁹⁹ It was improper for a group of plaintiffs to add in more serious allegations to bolster a collective claim of nuisance if those harms weren’t suffered collectively.²⁰⁰ Essentially, the court held that the claim labeled public nuisance was actually a *private* nuisance claim.²⁰¹

Similar to the court’s holding in *Davidson*, defendant companies in climate nuisance suits contend that the state nuisance claims plaintiffs are pleading are actually *federal* nuisance claims.²⁰² Both the current procedural strategy and the public nuisance defense strategy aim to challenge the general rule that the plaintiff is the master of their own complaint. These strategies urge courts to find that a complaint is masquerading as something different. In this way, defendants complicate a simple nuisance claim in an effort to avoid liability. Of course, history also reveals that this strategy did not last long. Over time, plaintiffs in smoke nuisance suits were able to convince judges to steer around these procedural technicalities and get to the merits of the underlying claim.

And yet, despite the history of judges successfully deciding smoke nuisance suits on the merits, during relatively recent climate nuisance suits, judges have suggested that using public nuisance to regulate greenhouse gases is a fool’s errand because the cause of action is inappropriate, and the courts are the wrong venue. For instance, in *North Carolina ex rel. Cooper v. Tennessee Valley Authority*, Judge Wilkinson expressed skepticism toward applying the boundless tort of public nuisance to the specific harm of air pollution, reasoning that “[i]f we are to regulate smokestack emissions by the same principles we use to regulate prostitution, obstacles in highways, and bullfights, we will be hard pressed to derive any manageable criteria.”²⁰³ Chief Justice Roberts took the skepticism a step further in his *Massachusetts v. EPA* dissent, questioning the ability of courts to address climate change at all.²⁰⁴ He reasoned that since “[t]he very concept of global warming seems inconsistent” with an individual, judicially redressable injury, courts could never provide the relief requested.²⁰⁵ The history of smoke nuisance suits shows that this skepticism is misguided—we *have* derived manageable criteria, courts *have* provided meaningful relief to plaintiffs experiencing harm from air pollution, and it can happen again.

199. *Id.* at 190–91.

200. *Id.* at 191 (“The several complainants cannot unite their distinct and individual causes of complaint, and by their combination make a case of nuisance, which separately would not establish the complaint.”).

201. See Rosen, ‘Knowing’ Industrial Pollution, *supra* note 109, at 581–82 for a description of procedural defenses in early smoke nuisance suits.

202. See *supra* Section I.D.

203. *North Carolina ex rel. Cooper v. Tenn. Valley Auth.*, 615 F.3d 291, 302 (4th Cir. 2010) (citation omitted).

204. *Massachusetts v. EPA*, 549 U.S. 497, 541 (2007) (Roberts, C.J., dissenting).

205. *Id.* Chief Justice Roberts’s dissent reasons that global warming is not specific enough to grant the state of Massachusetts standing to sue because it lacked a particularized injury. *Id.*

If climate nuisance suits continue to parallel the development of smoke nuisance suits, the lesson to draw from this historical parallel is tentatively hopeful. Like the plaintiffs in early smoke nuisance suits, the plaintiffs in the first wave of hypothetical merits decisions might not win. But eventually, the suits themselves can help reorient judicial understanding of what constitutes nuisance, and plaintiffs could see longer-term success. The history of smoke nuisance suits reveals that the suits themselves contributed to a shift in collective understanding about what constituted a nuisance under the common law, which helped plaintiffs win nuisance suits. The same could happen with climate nuisance suits. Even the oil companies seem to be worried about this possibility, considering their choice to lobby for complete insulation from tort liability in exchange for participation in a carbon tax program.²⁰⁶ So long as plaintiffs continue to bring climate nuisance suits, the suits themselves will help change judicial minds about the underlying viability of the claim.²⁰⁷

B. *Two Sources of Regulation: Legislation and the Common Law*

Beyond allowing plaintiffs to hold oil companies liable for the harm of climate change, climate nuisance suits could put pressure on the EPA to craft stricter standards for greenhouse gas emissions under the CAA by shifting our collective schema for the appropriate level of pollution. The biggest difference between the smoke abatement movement and the greenhouse gas abatement movement is the extent of federal regulation in place today. In the nineteenth-century smoke abatement movement, regulation moved from common law, to local legislation, to a comprehensive administrative regime.²⁰⁸ In contrast, the present legal system is more of a “tapestry,” with “strands of legislative enactments, administrative regulations, and the common law” woven together.²⁰⁹ Despite these differences, just as nuisance law worked in tandem with legislation then, it can do so again today.

As discussed in Section II.B, the city of Pittsburgh eventually regulated its smoke problem through the Weber Bill, a piece of local legislation that set the precise amount of smoke pollution that constituted a nuisance.²¹⁰ Earlier nuisance suits played the role of prototyping the appropriate level of smoke by balancing between the economic benefit of industry and the environmental

206. Umair Irfan, *Exxon Is Lobbying for a Carbon Tax. There Is, Obviously, a Catch.*, VOX (Oct. 18, 2018, 8:10 AM), <https://www.vox.com/2018/10/18/17983866/climate-change-exxon-carbon-tax-lawsuit> [perma.cc/9HLP-EEKZ].

207. Of course, plaintiffs’ ability to bring climate nuisance suits depends on whether the CAA preempts them. As discussed *supra* in Section I.C, most courts that have ruled on the issue of whether the CAA preempts state tort law have found against preemption. But arguing for preemption is still likely to be the next procedural move made by oil companies, and it is possible that courts hearing the issue for the first time might agree with the Fourth Circuit’s view.

208. See NOVAK, *supra* note 113, at 218–21.

209. Faulk & Gray, *supra* note 19, at 511.

210. See *supra* notes 152–153 and accompanying text.

harm of smoke in the context of individual suits rather than city-wide.²¹¹ Thus, nuisance law served as a critical tool for Pittsburgh residents pushing for more regulation of industry.

On the most basic level, the issue in both a climate nuisance suit and smoke nuisance suit is a tension between two competing entitlements: the entitlement to clean air and the entitlement to pollute.²¹² The existence of a high volume of litigation challenging air pollution suggests that the sources of regulation currently in place, be they common law or legislative, are not striking the balance between these entitlements desired by society. Today, two sources of litigation, climate nuisance suits and CAA citizen suits, suggest that greenhouse gas pollution levels permitted under the CAA are *not* set at the ideal level.

The CAA contains a statutory provision known as the “citizens suit” provision that allows individuals to bring petitions to review EPA actions.²¹³ Since the beginning of 2020 alone, at least ten major actions under this provision have already been brought against the EPA, challenging the standards promulgated for the regulation of greenhouse gases.²¹⁴ While the specific allegations differ, the petitions are unified in alleging that the EPA is failing to meet its statutory obligation to regulate air pollution—similar to the claim in *Massachusetts v. EPA*.²¹⁵ These lawsuits, coupled with the influx of climate nuisance suits, suggest that the current regulation of greenhouse gases has not set the appropriate balance between the competing entitlements to pollute and to enjoy clean air.

Where entitlements are in tension, the most economically efficient course of action is allocating the costs to the actor who can “most cheaply avoid them.”²¹⁶ But the cheapest cost avoider in climate nuisance suits is not readily apparent, as there are complicated societal costs on both sides, environmental and economic, respectively. In the nineteenth century, courts began to work

211. See *supra* notes 140–145 and accompanying text.

212. Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1090 (1972).

213. 42 U.S.C. § 7607(b)(1). The citizens suit provision of the CAA allows for review of EPA actions in “promulgating any national primary or secondary ambient air quality standard, any emission standard . . . , [or] any standard of performance.” *Id.*

214. Petition for Rev., Env’t Def. Fund v. Wheeler, No. 20-1360 (D.C. Cir. Sept. 15, 2020); Petition for Rev., Env’t L. & Pol’y Ctr. v. Wheeler, No. 20-1364 (D.C. Cir. Sept. 15, 2020); Petition for Rev., California v. Wheeler, No. 20-1367 (D.C. Cir. Sept. 15, 2020); Petition for Rev., Ctr. for Bio. Diversity v. EPA, No. 21-1021 (D.C. Cir. Jan. 15, 2021); Petition for Rev., California v. EPA, No. 21-1018 (D.C. Cir. Jan. 15, 2021); Petition for Rev., Cal. Cmty. Against Toxics v. EPA, No. 21-1041 (D.C. Cir. Jan. 25, 2021); Petition for Rev., New York v. EPA, No. 21-1026 (D.C. Cir. Jan. 19, 2021); Petition for Rev., California v. EPA, No. 21-1035 (D.C. Cir. Jan. 19, 2021); Petition for Rev., Am. Pub. Health Ass’n v. EPA, No. 21-1036 (D.C. Cir. Jan. 19, 2021); Petition for Rev., Am. Lung Ass’n v. EPA, No. 21-1063 (D.C. Cir. Feb. 12, 2021); Complaint, WildEarth Guardians v. Colo. Dept. of Pub. Health & Env’t, No. 2021CV030213 (Colo. Dist. Ct. Feb. 16, 2021); Complaint, Env’t Integrity Project v. Wheeler, No. 21-cv-00009 (D.D.C. Jan. 4, 2021).

215. See *supra* notes 37–40 and accompanying text.

216. See Calabresi & Melamed, *supra* note 212, at 1096–97.

through similarly complicated costs through smoke nuisance suits.²¹⁷ Judges had to consider competing costs: on one hand, there was the economic cost of closing a polluting factory, and on the other hand, there was the environmental cost of polluted air.²¹⁸

When no entitlement clearly wins out, there are two possible avenues for judicial resolution. First, a court could look to the relative worthiness of the two entitlements and allocate the cost accordingly.²¹⁹ Second, a court could make a decision consistent with other entitlements in society.²²⁰ Paradoxically, the history of smoke nuisance suits shows that the best way to resolve the question of how to allocate the cost of pollution in a climate nuisance suit is to continue to bring climate nuisance suits, allowing society to try and settle on the appropriate balance between competing costs. And by prototyping the appropriate balance in the context of individual suits, it can provide a framework for more stringent regulation on a national scale, just as nineteenth-century nuisance law provided a blueprint for the Weber Bill in Pittsburgh.²²¹

C. *The Expressive and Innovative Value of Holding Polluters Accountable*

Even if climate nuisance suits are dismissed on procedural technicalities, they still have expressive value by asserting the beliefs of a municipal community in court. Today, many Americans feel that the federal government is doing too little to reduce the effects of climate change.²²² The overwhelming majority of Americans want to see more restrictions in place on power plant emissions, the implementation of a carbon tax program, and stricter fuel-efficiency standards for cars.²²³ In the absence of a strong response from the federal government, nuisance lawsuits allow a municipality to take control and protect the health and welfare of its citizens.

Public nuisance actions are the “common law of the police power,” a manner of protecting the people against violations of their health, welfare, and safety through the courts.²²⁴ Beyond simply shifting the cost of harm from one

217. See *supra* notes 127–128 and accompanying text.

218. See *supra* notes 127–128 and accompanying text.

219. Calabresi & Melamed, *supra* note 212, at 1102.

220. *Id.*

221. See *supra* notes 151–153 and accompanying text.

222. According to the Pew Research Center, in 2020, sixty-five percent of Americans believed the government should be doing more to address climate change, and seventy-nine percent of Americans would like to see the country shift its energy supply to “developing alternative sources of energy, such as wind and solar.” Alec Tyson & Brian Kennedy, *Two-Thirds of Americans Think Government Should Do More on Climate*, PEW RSCH. CTR. (June 23, 2020), <https://www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate> [perma.cc/P75M-NMAF].

223. *Id.*

224. FREUND, *supra* note 112, at 66.

party to another, tort law also has a profound expressive value.²²⁵ The message sent in a tort case is simple but important: “[t]he defendant wronged the plaintiff.”²²⁶ Through these moral messages, tort law ensures that plaintiffs are treated with dignity in society.²²⁷ In this sense, climate nuisance suits are a way of putting force behind the beliefs of a local community, who overwhelmingly wish to see more action taken against oil companies. The value holds regardless of the outcome of the suits.²²⁸

Climate nuisance suits also have an innovative value because they put financial pressure on industry through litigation costs and potential damage awards, making it more costly to pollute. As history demonstrates, the smoke abatement movement found eventual success through the invention and wide dissemination of abatement technologies.²²⁹ In Ben Pontin’s historical analysis of the adoption of clean technology in the nineteenth century, he notes that nuisance law put pressure on corporations to invent clean technology where it did not yet exist.²³⁰ Nuisance law was a critical driver in the creation of a “multi-million-pound market in pollution abatement technology” in nineteenth-century Britain.²³¹ The technologies that grew from the collective investment would have been inconceivable to scientists and corporations alike when the first rounds of nuisance lawsuits were brought, just like the potential innovations in green technology might seem impossible today. Putting pressure on the fossil fuel industry through common law and legislative regulation alike may lead to the kind of innovation that abated the nineteenth-century smoke problem, which at the time seemed just as insurmountable as our climate problems today.

225. See Scott Hershovitz, *Treating Wrongs as Wrongs: An Expressive Argument for Tort Law*, 10 J. TORT L. 405 (2017).

226. *Id.* at 406.

227. *Id.* at 419 (“That is, tort is a way for us to make sure that [the plaintiff] enjoys the dignity to which he is morally entitled.”).

228. The idea that climate nuisance suits have an important, expressive value is not without criticism. For instance, in 2019, at a Rule of Law Defense Fund panel, a critic of climate nuisance suits described the role of the municipalities bringing suit as “weaponizing local public nuisance laws to drive national and international policy.” *Walter Olson and Andrew M. Grossman Participate in the Event, “Climate Change Litigation and Public Nuisance Lawsuits,” hosted by the Rule of Law Defense Fund, CATO INST.*, at 01:31–01:37 (Oct. 17, 2019), <https://www.cato.org/multimedia/media-highlights-tv/walter-olson-andrew-m-grossman-participate-event-climate-change> (remarks of Alan Wilson, Att’y Gen. of South Carolina). Another critic described the lawsuits as a poorly thought out “roll of the dice.” *Id.* at 15:35–15:41 (remarks of Andrew Grossman). These views, commonly shared by conservative legal scholars, discredit the positive expressive role these suits can bring regardless of the outcome.

229. See *supra* Section II.C.

230. See *Common Law Clean Up*, *supra* note 160, at 197.

231. *Id.*

CONCLUSION

On December 20, 2019, the Supreme Court of the Netherlands ordered the country's government to slash greenhouse gas emissions by twenty-five percent by the end of 2020, lauded as "the strongest decision ever" on climate change.²³² Michael Gerrard, a professor at Columbia Law School who studies climate change law, calculated that before the suit, there were 1,442 lawsuits challenging climate change around the world.²³³ What, exactly, was the value of the 1,441 suits filed before the Supreme Court of the Netherlands issued its decision?

As this Comment has shown, these earlier suits, like the climate nuisance suits being brought in the United States today, have an inherent value in shifting our schemas of what is an acceptable level of pollution and what is not. It is my hope that by providing better historical context for the current public nuisance suits, this Comment not only highlights their importance in the story of solving the problems of climate change, but also provides a better understanding of why losing today may lead to lasting change tomorrow.

232. John Schwartz, *In 'Strongest' Climate Ruling Yet, Dutch Court Orders Leaders to Take Action*, N.Y. TIMES (Dec. 20, 2019), <https://www.nytimes.com/2019/12/20/climate/netherlands-climate-lawsuit.html> [perma.cc/MKD2-6AAC].

233. *Id.*