Georgia State University Law Review

Volume 29 Issue 3 *Spring 2013*

Article 5

September 2013

Climate of Confusion: Climate Change Litigation in the wake of American Electric Power v. Connecticut

James Flynn

Follow this and additional works at: https://readingroom.law.gsu.edu/gsulr Part of the <u>Law Commons</u>

Recommended Citation

James Flynn, *Climate of Confusion: Climate Change Litigation in the wake of American Electric Power v. Connecticut*, 29 GA. ST. U. L. REV. (2013). Available at: https://readingroom.law.gsu.edu/gsulr/vol29/iss3/5

This Article is brought to you for free and open access by the Publications at Reading Room. It has been accepted for inclusion in Georgia State University Law Review by an authorized editor of Reading Room. For more information, please contact mbutler@gsu.edu.

CLIMATE OF CONFUSION: CLIMATE CHANGE LITIGATION IN THE WAKE OF AMERICAN ELECTRIC POWER V. CONNECTICUT

James Flynn^{*}

"Global warming is unequivocal and primarily human-induced."¹

INTRODUCTION

The above quote, the first key finding in the executive summary of the U.S. Global Change Research Program's report on climate change impacts in the United States,² reflects the clear consensus view of climate researchers³ about climate change.⁴ The climate is

^{*} J.D. Candidate, 2013, Georgia State University College of Law; Assistant Legislation Editor, Georgia State University Law Review; Visiting Student, Florida State University College of Law. I would like to offer special thanks to Professor Max Rowberry, who provided invaluable insight and time (of which he has little free) to this Comment. Thanks also to all of the Law Review editors for their time and effort, particularly Student Writing Editor Rebecca Shepard, who spent countless hours providing feedback. Finally, thank you to Christina M. Parker, Ph.D., for her never-ending patience and support, without which I would not have finished this Comment, or law school.

^{1.} U.S. GLOBAL CHANGE RESEARCH PROGRAM, GLOBAL CLIMATE CHANGE IMPACTS IN THE UNITED STATES 12 (Thomas R. Karl et al. eds., 2009).

^{2.} *Id*.

^{3.} See Peter T. Doran & Maggie Kendall Zimmerman, Examining the Scientific Consensus on Climate Change, EOS, TRANSACTIONS, AM. GEOPHYSICAL UNION, Jan. 20, 2009, at 22 (noting that over 97% of climate experts surveyed believe that "human activity is a significant contributing factor in changing mean global temperatures"); see also William R. L. Anderegg et al., Expert Credibility in Climate Change, 107 PNAS 12107, 12107 (2010) ("(i) 97-98% of the climate researchers most actively publishing in the field support the tenets of ACC [Anthropogenic Climate Change] outlined by the Intergovernmental Panel on Climate Change, and (ii) the relative climate expertise and scientific prominence of the researchers unconvinced of ACC are substantially below that of the convinced researchers."); Naomi Oreskes, The Scientific Consensus on Climate Change, 306 SCIENCE 1686, 1686 (2004) (finding that of 928 scientific abstracts surveyed that featured the key words "climate change," none disputed the consensus position). Additionally, many major national academies of science support the position, including the National Academy of Science (United States), the Royal Society (United Kingdom), the Royal Society of Canada, Chinese Academy of Sciences, Network of African Science Academies, and the Science Council of Japan. Is There a Scientific Consensus on Global Warming?, SKEPTICAL SCI., http://www.skepticalscience.com/global-warming-scientific-consensus-intermediate .htm (last visited Sept. 8, 2011). Finally, most major American scientific bodies support the position, including the American Association for the Advancement of Science, American Astronomical Society, American Chemical Society, American Geophysical Union, American Institute of Physics, American Meteorological Society, American Physical Society, the National Center for Atmospheric Research, and the National Oceanic and Atmospheric Administration. Id. While some contest a consensus, their views withstand scrutiny. WARMING PETITION rarely Compare GLOBAL PROJECT.

changing, humans are the primary cause, and without significant actions to reduce emissions of greenhouse gases, the world faces potentially catastrophic long-term consequences.⁵ Potential and observed consequences include sea level rise,⁶ increases in both drought and flooding,⁷ the melting of Arctic sea ice,⁸ greater

5. See IAN ALLISON ET AL., UNIV. OF NEW S. WALES CLIMATE CHANGE RESEARCH CTR., THE COPENHAGEN DIAGNOSIS, 2009: UPDATING THE WORLD ON THE LATEST CLIMATE SCIENCE 7 (2009) ("Delay in action risks irreversible damage The turning point must come soon").

6. *Id.* ("By 2100, global sea-level is likely to rise at least twice as much as projected by Working Group 1 of the IPCC AR4"); U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 150 ("[R]ecent estimates of global sea-level rise substantially exceed the IPCC estimates, suggesting sea-level rise between 3 and 4 feet in this century.").

7. ALLISON ET AL., *supra* note 5, at 15 ("Anthropogenic climate change is expected to lead to further increases in precipitation extremes, both increases in heavy precipitation and increases in drought."); U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 33 ("In the future, droughts are likely to become more frequent and severe in some regions."); *id.* at 64 ("Such intense precipitation is likely to increase the frequency and severity of events such as the Great Flood of 1993.").

8. ALLISON ET AL., *supra* note 5, at 7 ("Summer-time melting of Arctic sea-ice has accelerated far beyond the expectations of climate models."); U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 39 ("Arctic sea ice is declining rapidly and this is very likely to continue."). Indeed, in September 2012, summer arctic sea ice set records for lowest recorded minimum extent and volume in the satellite record. *See* Ramez Naam, *Arctic Sea Ice: What, Why and What Next*, SCI. AM. BLOG (Sept. 21, 2012), http://blogs.scientificamerican.com/guest-blog/2012/09/21/arctic-sea-ice-what-why-and-what-next/; *see also Arctic Sea Ice Extent Settles at Record Seasonal Minimum*, NAT'L SNOW & ICE DATA CTR. (Sept.

http://www.petitionproject.org/ (last visited Nov. 5, 2012) (asserting that many scientists dispute the consensus on global warming), with H. Josef Hebert, Jokers Add Fake Names to Warming Petition, SEATTLE TIMES (May 1, 1998, 12:00 AM), http://community.seattletimes.nwsource.com/archive/?date =19980501&slug=2748308 (noting the Oregon Petition at times contained many fake names, including Perry S. Mason and Robert C. Byrd, the fictitious lawyer and real-life Senator, respectively, as well as Dr. Ginger Geri Halliwell, a.k.a. Ginger Spice), and Kevin Grandia, The 30,000 Global Warming Petition Is Easily-Debunked Propaganda, HUFFINGTON POST (July 22, 2009, 4:47 PM), http://www.huffingtonpost.com/kevin-grandia/the-30000-global-warming_b_243092.html (noting that the Oregon Petition contains few practicing climate scientists and many unverifiable credentials). While some fake names have subsequently been removed, both Mason and Byrd, at least, are still listed on the Oregon Petition. See GLOBAL WARMING PETITION PROJECT, supra.

^{4.} In this Comment, I will use the terms climate change, anthropogenic (caused or produced by humans) climate change, and global warming interchangeably, even though climate change and global warming are not inherently synonymous and the climate may change in response to many mechanisms other than human-induced global warming. For the purposes of this Comment, the terms refer to the phenomenon whereby humans add greenhouse gases such as carbon dioxide and methane to the atmosphere, the additional gases prevent more of the sun's energy from reflecting back into space, and the Earth warms and the climate changes in response. *How Do We Know More CO2 is Causing Warming*?, SKEPTICAL SCI., *supra* note 3. For a far more thorough and detailed explanation of the phenomenon and the history of scientific understanding on the topic, see Hervé Le Treut et al., *Historical Overview of Climate Change Science, in* CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS. CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE ch. 1 (Susan Solomon et al. eds., 2007); Spencer Weart & Am. Inst. Physics, *Introduction: A Hyperlinked History of Climate Change Science,* DISCOVERY OF GLOBAL WARMING (May 2010), http://www.aip.org/history/climate/summary.htm.

825

occurrences of extreme weather events,⁹ glacial melting,¹⁰ ocean acidification,¹¹ and the triggering of feedbacks that will dramatically increase warming.¹² The Intergovernmental Panel on Climate Change (IPCC) released its Fourth Assessment Report (IPCC AR4) in 2007, a massive document that synthesized the research on climate change.¹³ Since the release of that report, newer studies indicate that the IPCC AR4 *underestimated* the timing and scale of many of the possible impacts—some consequences are happening sooner than expected and many predictions for future consequences grow direr each year.¹⁴

11. *Id.* at 36 ("The increase in ocean CO_2 has caused a direct decrease in surface ocean pH by an average of 0.1 units since 1750 and an increase in acidity by more than 30%."). Ocean acidification results not from the increase in temperature caused by global warming, but from the increase in carbon dioxide the oceans absorb, and it alone represents a potentially catastrophic consequence. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 151–52 ("In addition to carbon dioxide's heat-trapping effect, the increase in its concentration in the atmosphere is gradually acidifying the ocean... As a result of these and other stresses, the corals that form the reefs in the Florida Keys, Puerto Rico, Hawaii, and the Pacific Islands are projected to be lost if carbon dioxide concentrations continue to rise at their current rate.").

^{19, 2012),} http://nsidc.org/arcticseaicenews/2012/09/arctic-sea-ice-extent-settles-at-record-seasonal-minimum/.

^{9.} U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 105 ("[F]uture increases in [insured] losses will be attributable to climate change as it increases the frequency and intensity of many types of extreme weather, such as severe thunderstorms and heat waves."). These extreme events also include "more frequent hot days, hot nights and heat waves; fewer cold days, cold nights and frosts; more frequent heavy precipitation events; more intense and longer droughts over wider areas; and an increase in intense tropical cyclone activity in the North Atlantic but no trend in total numbers of tropical cyclones." ALLISON ET AL., *supra* note 5, at 15.

^{10.} ALLISON ET AL., *supra* note 5, at 23 ("These new assessments...show glacier and ice cap contributions to sea level rise that are generally slightly higher than those reported in IPCC AR4.").

^{12.} Climate feedbacks are processes that either amplify or lessen the climate's response to stimuli. Sandrine Bony et al., *How Well Do We Understand and Evaluate Climate Change Feedback Processes*?, 19 J. CLIMATE 3445, 3445 (2006). Global warming feedbacks include: the melting of Arctic sea ice, which decreases the Earth's albedo (reflectivity) and causes more energy to be absorbed into the oceans, which in turn contributes to more melting sea ice; increases in water vapor in the atmosphere; and the melting of the arctic permafrost, releasing massive amounts of stored carbon dioxide and potentially methane. JOSEPH ROMM, HELL AND HIGH WATER: GLOBAL WARMING—THE SOLUTION AND THE POLITICS—AND WHAT WE SHOULD DO 17–18 (2007). For further discussion of feedbacks associated with global warming, see ALLISON ET AL., *supra* note 5, at 14, 22–23, 44, 49; Bony et al., *supra* at 3445. For more information on the permafrost feedback, see *Methane Releases from Arctic Shelf May Be Much Larger and Faster than Anticipated*, NAT'L SCI. FOUND. (Mar. 4, 2010), http://www.nsf.gov/news/news_summ.jsp?cntn_id=116532&org=NSF&from=news.

^{13.} The entire report can be downloaded piecemeal at INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml (last visited Nov. 10, 2012).

^{14.} See generally ALLISON ET AL., supra note 5; U.S. GLOBAL CHANGE RESEARCH PROGRAM, supra note 1; see also Julienne Stroeve et al., Arctic Sea Ice Decline: Faster Than Forecast, 34 GEOPHYSICAL

While the scientific understanding of climate change has solidified substantially in the past two decades, national governments have taken little significant action to combat the problem, particularly the United States.¹⁵ The United States did not ratify the Kyoto Protocol¹⁶ and has yet to pass any new legislation that would establish significant reductions in emissions from stationary sources¹⁷ or set a price on carbon, either through a tax or cap-and-trade system.¹⁸

18. For an explanation of cap-and-trade, see Cap and Trade 101: What is Cap and Trade, and How Can We Implement it Successfully?, CENTER FOR AM. PROGRESS (Jan. 16, 2008), http://www.americanprogress.org/issues/2008/01/capandtrade101.html. For an explanation of a carbon tax. see Introduction: What's а Carbon Tax?, CARBON TAX CENTER. http://www.carbontax.org/introduction/ (last updated Dec. 12, 2012). For an economic analysis of passing such measures, see generally Paul Krugman, Building a Green Economy, N.Y. TIMES, Apr. 11, 2010 at MM34, available at http://www.nytimes.com/2010/04/11/magazine/11Economyt.html?pagewanted=all.

RES. LETTERS L09501 (2007); Neven, *Models Are Improving, But Can They Catch Up?*, ARCTIC SEA ICE BLOG (Sept. 17, 2012), http://neven1.typepad.com/blog/2012/09/models-are-improving-but-can-they-catch-up.html (discussing the Stroeve article, *supra*, and updating its graph with data from the past five years).

^{15.} See Ken Alex, A Period of Consequences: Global Warming as Public Nuisance, 43A STAN. J. INT'L L. 77, 82–84 (2007).

^{16.} Elisabeth Rosenthal, *Climate Change Treaty, to Go Beyond the Kyoto Protocol, Is Expected by the Year's End*, N.Y. TIMES, June 13, 2009, at A5, *available at* http://www.nytimes.com/2009/06/13/science/earth/13climate.html.

^{17.} See Alex, supra note 15, at 82-84. The Obama administration did pass new emissions standards for light vehicles and trucks. 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 and 49 C.F.R. pts. 531, 533, 536, 537 & 538). Additionally, the EPA issued a Tailoring Rule that implements a permitting program that subjects the largest stationary emitters of greenhouse gases to permitting requirements under the Prevention of Significant Deterioration (PSD) and Title V sections of the Clean Air Act. Action to Ensure Authority to Implement Title V Permitting Programs Under the Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 82,254 (Dec. 30, 2010) (to be codified at 40 C.F.R. pts. 52 & 70). However, the PSD requirements only apply to new major stationary sources, or stationary sources undergoing modifications leading to significant emissions increases. Prevention of Significant Deterioration of Air Quality, 40 C.F.R. § 52.21(b)(49)(iv)-(v) (2012). Similarly, the new emissions standards promulgated by the EPA only apply to light-duty vehicles such as cars and light trucks, and not to heavy trucks or other large transportation vehicles. See Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. at 25,329-30. While these are laudable achievements, they fall far short of the efforts scientists say are needed to combat climate change. See ALLISON ET AL., supra note 5, at 7 (noting that emissions must peak by 2020 and then rapidly decline in order to limit impacts of global warming). In the Carbon Mitigation Initiative's strategy to combat global warming, for instance, efficiency satisfies only one of the fifteen "wedges" needed to stabilize the atmosphere onto a "safer course," and increasing the fuel efficiency of cars to sixty miles-per-gallon is only one part of total efficiency efforts needed to meet that wedge. Stabilization Wedges Introduction: Building the Stabilization Triangle, CARBON MITIGATION INITIATIVE, PRINCETON U., http://cmi.princeton.edu/wedges/intro.php (last updated July 27, 2011); see also Big Picture Solutions, UNION CONCERNED SCIENTISTS, http://www.ucsusa.org/global_warming/so lutions/big picture solutions/big-picture-solutions.html (last visited Nov. 5, 2012).

Indeed, many politicians and media members resist even admitting that a problem exists.¹⁹ Using tactics taken from the Big Tobacco playbook of decades past, some politicians, fossil fuel trade groups, and think tanks have sought to obfuscate the issue in the hopes of delaying action.²⁰

827

Despite minimal federal action on climate change and denial of the issue by some, the problem persists.²¹ Scientists are already detecting impacts of climate change both globally and specifically in the United States.²² Tired of waiting for federal action, individual states, advocacy groups, and private parties sought new channels to combat anthropogenic climate change.²³ Beginning in the 2000s, advocates

21. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 9 ("Climate-related changes have already been observed globally and in the United States.").

^{19.} Senator James Inhofe of Oklahoma famously called global warming "the greatest hoax ever perpetrated on the American people." 151 CONG. REC. S18 (daily ed. Jan. 4, 2005) (statement of Senator James Inhofe). Former Fox News personality Glenn Beck called it the "discredited global warming scam." *Glenn Beck: Global Warming's Real Inconvenient Truth*, GLENN BECK (Dec. 15, 2009, 2:59 AM), http://www.glennbeck.com/content/articles/article/198/34222/. Governor Rick Perry of Texas, a 2012 presidential candidate, argues that scientists manipulate data for money and claims that scientists are coming forward every day questioning global warming. Glen Kessler, *Rick Perry's Made-Up "Facts" About Global Warming*, WASH. POST, Aug. 19, 2011, at A02.

^{20.} Primarily, the tactics involve overstating scientific uncertainty to create the illusion of a genuine scientific debate. NAOMI ORESKES & ERIK M. CONWAY, MERCHANTS OF DOUBT: HOW A HANDFUL OF SCIENTISTS OBSCURED THE TRUTH ON ISSUES FROM TOBACCO SMOKE TO GLOBAL WARMING 5–9 (2010). For a thorough discussion of the similarity in both the tactics and persons denying the dangers of tobacco and climate change, see *id*. For thorough discussions of how industry groups, think tanks, the media and politicians have obfuscated the issues surrounding climate change, see generally JAMES HOGGAN & RICHARD LITTLEMORE, CLIMATE COVER-UP: THE CRUSADE TO DENY GLOBAL WARMING (2009) and JAMES LAWRENCE POWELL, THE INQUISITION OF CLIMATE SCIENCE (2011).

^{22.} *Id.* (noting climate-related changes have been observed in the United States and globally). Scientists are less certain about how much of any particular weather event is attributable to a warming climate, and some scientists refer to "loaded dice" or "loading the dice" when discussing climate change's impact on individual weather events. *See* Jeff Masters, *Jeff Masters' WunderBlog: At least 611 Dead in Brazilian Floods: Brazil's Deadliest Natural Disaster in History*, WUNDERGROUND.COM (Jan. 14, 2011, 5:05 PM), http://www.wunderground.com/blog/JeffMasters/comment.html?entrynum=1727 (noting that increased ocean temperatures make extreme rainfall events more likely); Andrew C. Revkin, *NASA's Hansen: Humans Still Loading Climate Dice*, N.Y. TIMES BLOGS, DOT EARTH (June 23, 2008, 12:24 AM), http://dotearth.blogs.nytimes.com/2008/06/23/nasas-hansen-humans-still-loading-climate-dice/.

^{23.} See Morgan McCue Sport, Comment, An Inconvenient Suit: California v. General Motors Corporation and a Look at Whether Global Warming Constitutes an Actionable Public Nuisance or a Nonjusticiable Political Question, 38 CUMB. L. REV. 583, 586 (2008) ("As a result of the Bush administration's apparent unwillingness to address global climate change, many are now beginning to utilize the judicial system as a means of solving these environmental problems."). Individuals and advocacy groups were not the only actors in this new movement; states individually began taking action. Alex, supra note 15, at 83–84 (noting that states have begun taking action in the absence of federal

and states turned their focus to the judicial branch and began bringing climate change claims in courts.²⁴ Some of these new lawsuits challenged the EPA to regulate greenhouse gases,²⁵ others sought recovery for existing or future damages from climate change,²⁶ while still others attempted to impose judicially mandated limits on greenhouse gas emissions.²⁷

In 2011, *American Electric Power v. Connecticut*, a global warming public nuisance suit, reached the Supreme Court.²⁸ In a unanimous decision,²⁹ the Court held that the Clean Air Act (CAA) and the EPA action it authorized "displace any federal common law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants."³⁰ The Court's decision left the CAA as the sole means of setting emissions limits for fossil-fuel-fired power plants.³¹

This Comment addresses the state of climate change litigation in the wake of this important case. Part I examines the litigation leading to *American Electric*, beginning with the interstate nuisance cases of the twentieth century that established the federal common law, through the most recent and relevant climate change cases.³² Part II discusses *American Electric* and then analyzes the decision and the Court's reasoning, suggesting that the Court reached the correct

action). For instance, California was the first state to regulate greenhouse gas emissions from cars. *See* Rachel L. Chanin, Note, *California's Authority to Regulate Mobile Source Greenhouse Gas Emissions*, 58 N.Y.U. ANN. SURV. AM. L. 699, 699 (2003). It was also the first state to pass comprehensive greenhouse gas regulations. *See* California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE §§ 38500–38599 (West 2012); Sport, *supra*, at 609 ("[T]he State of California adopted the nation's first global warming regulations requiring major greenhouse gas producers to substantially curb their greenhouse gas emissions.").

^{24.} See generally Jeremy Hessler, Note, A Temporary Solution to Climate Change: The Federal Common Law to the Rescue?, 38 HASTINGS CONST. L.Q. 407 (2011).

^{25.} Massachusetts v. EPA, 549 U.S. 497 (2007), discussed infra Part I.C.2.

^{26.} See, e.g., California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007), discussed *infra* Part.I.C.1.c.

^{27.} Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011).

^{28.} *Id.* In the case, several states, New York City, and private land-trusts sought an injunction against five electric utilities. *Id.* at 2532. The plaintiffs sought a judicially imposed limit on annual greenhouse gas emissions from the utilities. *Id.*

^{29.} Justice Sotomayor took no part in the decision. Id. at 2540.

^{30.} *Id.* at 2537.

^{31.} Id. at 2538.

^{32.} See discussion infra Part I.

answer, but used unnecessary language to do so.³³ Additionally, Part II explores questions left unanswered by the Court.³⁴ Part III examines litigation tactics still available to advocates of reducing greenhouse gas emissions after *American Electric*, and suggests that litigation is still a vital tool in fighting global warming.³⁵

I. FROM GEORGIA TO CONNECTICUT: HOW CLIMATE CHANGE BECAME A NUISANCE

A. Georgia And Illinois Create Federal Common Law

In 1907, the Supreme Court "implicitly created the federal common law of nuisance."³⁶ The Court, in *Georgia v. Tennessee Copper Co.*, held that a state, "in its capacity of quasi-sovereign," may bring an action seeking abatement of or payment for interstate pollution.³⁷ In language since quoted many times, Justice Holmes noted that states have a right to protect their air, lands, and populace:

It is a fair and reasonable demand on the part of a sovereign that the air over its territory should not be polluted on a great scale by sulphurous acid gas, that the forests on its mountains, be they better or worse, and whatever domestic destruction they have suffered, should not be further destroyed or threatened by the act of persons beyond its control, that the crops and orchards on its hills should not be endangered from the same source.³⁸

Justice Holmes was wary, however, that "peculiarities necessarily mark" such suits³⁹: notably, states are likely to seek abatement as

^{33.} See discussion infra Part II.A-B.

^{34.} See discussion infra Part II.B.2.

^{35.} See discussion infra Part III.

^{36.} Hessler, *supra* note 24, at 417.

^{37.} Georgia v. Tenn. Copper Co., 206 U.S. 230, 237 (1907) ("[I]t is plain that some such demands must be recognized, if the grounds alleged are proved . . . [T]he alternative . . . is a suit in this court."); *see also* Hessler, *supra* note 24, at 417 ("The Court held that a state may use federal courts in order to receive injunctive relief against transboundary polluters in other states, and thus created the cause of action.").

^{38.} Tenn. Copper Co., 206 U.S. at 238.

^{39.} Id. at 237.

opposed to money damages, as the intrinsic value of lands, air, and health is difficult to assess.⁴⁰ While the Court in *Erie Railroad Co. v. Tompkins* famously pronounced "[t]here is no federal general common law,"⁴¹ there are exceptions, and *Georgia v. Tennessee Copper Co.* is the foundation of one such exception.⁴²

That exception was expanded post-Erie in the seminal environmental case Illinois v. Milwaukee (Milwaukee I).43 While Georgia concerned interstate air pollution, Milwaukee I dealt with interstate water pollution.⁴⁴ In Milwaukee I, the State of Illinois sought leave to file suit under the Supreme Court's original jurisdiction against four Wisconsin cities and two local sewerage commissions for dumping sewage into Lake Michigan.⁴⁵ The Court noted the similarities in its treatment of interstate air and water pollution,⁴⁶ and Justice Douglas plainly stated, "[w]hen we deal with air and water in their ambient or interstate aspects, there is a federal common law."⁴⁷ In a prescient moment, however, he noted, "[i]t may happen that new federal laws and new federal regulations may in time pre-empt the field of federal common law of nuisance."⁴⁸ The Court then held that interstate water pollution cases arising under federal law may be brought in a federal district court and may be initiated by states.⁴⁹ In so doing, the Court established what has been

^{40.} Id. (noting that states may be more entitled to an injunction than a private party).

^{41.} Erie R.R. Co. v. Tompkins, 304 U.S. 64, 78 (1938).

^{42.} See Alex, supra note 15, at 85 ("The clear implication of the Court's more recent rulings is that *Tennessee Copper* is as valid today as it was in 1907.").

^{43.} Illinois v. City of Milwaukee, Wis. (*Milwaukee I*), 406 U.S. 91 (1972); see Matthew F. Pawa & Benjamin A. Krass, *Global Warming as a Public Nuisance:* Connecticut v. American Electric Power, 16 FORDHAM ENVTL. L. REV. 407, 430 (2005) (noting that *Milwaukee I* is "the leading Supreme Court case on the federal common law of public nuisance").

^{44.} Milwaukee I, 406 U.S. at 93.

^{45.} Id.

^{46.} *Id.* at 105 ("Our decisions concerning interstate waters contain the same theme [as found in *Georgia v. Tennessee Copper Co.*].").

^{47.} Id. at 103.

^{48.} *Id.* at 107.

^{49.} *Id.* at 99 ("The question is whether pollution of interstate or navigable waters creates actions arising under the 'laws' of the United States within the meaning of $[\S]$ 1331(a). We hold that it does; and we also hold that $[\S]$ 1331(a) includes suits brought by a State.").

831

called "the modern framework for the federal common law of public nuisance."⁵⁰

B. Milwaukee II Introduces Displacement

Justice Douglas's observation in *Milwaukee I*, that federal laws might displace some federal common law claims of nuisance, came to fruition nine years later in Milwaukee v. Illinois (Milwaukee II).⁵¹ In the interim between the Milwaukee I and II, Congress enacted legislation that would later become the Clean Water Act (CWA).⁵² In Milwaukee II, Justice Rehnquist first noted that federal common law is displaced when Congress not only speaks directly on the issue,⁵³ but when it "occupie[s] the field."⁵⁴ He further noted that unlike preemption of state law, displacement of federal common law did not require a "clear and manifest purpose" by Congress.⁵⁵ Finally, the Court held that Congress, through its 1972 amendments, had not only spoken directly on the issue,⁵⁶ but had occupied the field with "a comprehensive regulatory program,"57 and thus Illinois no longer had a federal common-law remedy.58 Milwaukee I clarified when interstate pollution qualified as a federal common law nuisance.⁵⁹ while Milwaukee II demonstrated that such federal common law is displaced when federal law occupies that particular field.⁶⁰

^{50.} Pawa & Krass, supra note 43, at 440.

^{51.} City of Milwaukee v. Illinois (Milwaukee II), 451 U.S. 304 (1981).

^{52.} Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2006). Though the foundation for the Clean Water Act was laid with the 1948 Federal Water Pollution Control Act, "sweeping amendments" were made in 1972. *History of the Clean Water Act*, EPA.GOV, http://www.epa.gov/lawsregs/laws/cwahistory.html (last updated Aug. 23, 2012). Further amendments and an official name change to the Clean Water Act came in 1977. *Id*.

^{53.} *Milwaukee II*, 451 U.S. at 314 ("[W]hen Congress addresses a question previously governed by a decision rested on federal common law the need for such an unusual exercise of lawmaking by federal courts disappears.").

^{54.} Id. at 317.

^{55.} *Id.* ("[W]e start with the assumption' that it is for Congress, not federal courts, to articulate the appropriate standards to be applied as a matter of federal law." (quoting Jones v. Rath Packing Co., 430 U.S. 519, 525 (1977))).

^{56.} *Id.* at 325–26 (noting the CWA affords States "ample opportunity" to challenge the permitting decisions of neighboring States).

^{57.} *Id.* at 317.

^{58.} Id. at 332.

^{59.} Milwaukee I, 406 U.S. 91, 103 (1972).

^{60.} Milwaukee II, 451 U.S. at 332.

832 GEORGIA STATE UNIVERSITY LAW REVIEW

[Vol. 29:3

C. The Modern Climate Change Cases

The major modern climate change cases generally fall into two categories. First are the nuisance-based claims that seek either greenhouse-gas limits from various sources, or money damages from major greenhouse-gas emitters.⁶¹ Second are regulatory challenges—to the EPA and other federal agencies—that seek to regulate greenhouse gases, or ensure that federal actions account for climate change.⁶² The cases discussed below were all filed after the initial *American Electric* claims were filed,⁶³ but most were decided before *American Electric* reached the Supreme Court.⁶⁴

1. Nuisance-Based Claims

While *Milwaukee I* and *II* laid the foundations of federal common law nuisance and displacement principles, they were confined to instances of water pollution.⁶⁵ The CWA specifically provides means for states to address interstate water pollution,⁶⁶ and as a

^{61.} See, e.g., Comer v. Murphy Oil USA, 585 F.3d 855 (5th Cir. 2009), *reh'g en banc granted*, 598 F.3d 208 (5th Cir. 2010), *vacated*, 607 F.3d 1049, 1054 (5th Cir. 2010) (en banc); Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863 (N.D. Cal. 2009), *aff'd*, 696 F.3d 849 (9th Cir. 2012); California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007). For a thorough examination and categorization of climate change litigation, see generally David Markell & J.B. Ruhl, *An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business As Usual*?, 64 FLA. L. REV. 15 (2012).

^{62.} See, e.g., Massachusetts v. EPA, 549 U.S. 497 (2007); Korsinsky v. EPA, No. 05 Civ. 859(NRB), 2005 WL 2414744 (S.D.N.Y. Sept. 29, 2005).

^{63.} The original *American Electric* complaints were filed in 2004. Complaint, Connecticut v. Am. Elec. Power Co. (*Connecticut I*), 406 F. Supp. 2d 265 (S.D.N.Y. 2005), *vacated*, 582 F.3d 309 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011) (No. 04 Civ. 5669(LAP)), 2004 WL 5614397; Complaint, *Connecticut I*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005), *vacated*, 582 F.3d 309 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011) (No. 04 Civ. 5670(LAP)), 2004 WL 5614409.

^{64.} The Supreme Court granted certiorari in *American Electric* in December 2010. Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 813 (2010).

^{65.} Both cases focused on the dumping of pollutants into Lake Michigan. *Milwaukee II*, 451 U.S. 304 (1981); *Milwaukee I*, 406 U.S. 91 (1972).

^{66.} For instance, the CWA requires that states that may be affected by pending permits for discharge of water pollutants receive notice and have a right to comment in public hearings and submit written recommendations to the EPA. 33 U.S.C. § 1342(b)(3) (2006). Based on the hearings, written recommendations, and the EPA's discretion, the EPA may veto permits. *See id.* § 1342(d)(2); *see also* Alex, *supra* note 15, at 88 ("[T]he amended Clean Water Act allowed Illinois to participate in the permit issuing process, so it was not left without a federal forum in which to protect its interests in clean water."). Additionally, state governors may initiate citizen suits against other states for violating

comprehensive regulatory regime, it occupies the field of interstate water pollution.⁶⁷ The CAA,⁶⁸ on the other hand, only covers certain discharges to the air from certain sources.⁶⁹ Thus, it was not clear whether the CAA would displace climate change actions based on common law nuisance claims in the same way that the CWA had preempted interstate water pollution claims,⁷⁰ and climate change nuisance claims began appearing in federal courts.

a. The Strange Case of Comer

In *Comer v. Murphy Oil USA*, residents and landowners of the Gulf Coast brought an action in the Southern District of Mississippi against several oil companies in 2007.⁷¹ While the plaintiffs did not raise any federal causes of action, they did bring state claims of public and private nuisance.⁷² Plaintiffs—residents of the Gulf Coast who were reeling from the devastation wrought by Hurricane Katrina—argued that the defendants' emissions of greenhouse gases contributed to global warming, which increased the intensity of the hurricane⁷³ and led to the destruction of their private property and

70. Pawa and Krass boldly stated in 2005, "there is no preemption." Pawa & Krass, *supra* note 43, at 463. This proclamation was made before the Supreme Court ruled that carbon dioxide was a pollutant in *Massachusetts v. EPA*, so Pawa and Krass's analysis may have been correct. Indeed, even after *Massachusetts*, the Second Circuit held in *Connecticut v. American Electric* that such claims were not displaced. Connecticut v. Am. Elec. Power Co. (*Connecticut II*), 582 F.3d 309, 315 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011).

71. Named defendants included ExxonMobil Corp., Shell Oil Co., and Murphy Oil USA, among others. Comer v. Murphy Oil USA, 585 F.3d 855, 858 (5th Cir. 2009), *reh'g en banc granted*, 598 F.3d 208 (5th Cir. 2010), *vacated*, 607 F.3d 1049, 1054 (5th Cir. 2010) (en banc).

72. The plaintiffs also brought claims of "trespass, negligence, unjust enrichment, fraudulent misrepresentation, and civil conspiracy." *Id.* at 859-60.

emissions standards. 33 U.S.C. § 1365. States may also, through citizen suits, sue the EPA administrator for failure to perform any non-discretionary acts under the CWA. *Id.*

^{67.} Milwaukee II, 451 U.S. at 317.

^{68.} Pub. L. No. 88-206, 77 Stat. 392 (codified generally as 42 U.S.C. §§ 7401-7671).

^{69.} *See* Alex, *supra* note 15, at 89 ("[T]he Clean Air Act regulates only a defined body of pollutants emitted from specified sources."). The CAA regulates only those pollutants that the EPA administrator deems a threat to public health and welfare. 42 U.S.C. § 7408(a)(1)(A). The CWA, on the other hand, regulates, with exceptions, the discharge of any pollutant from any point source. 33 U.S.C. § 1311(a).

^{73.} Research on the link between climate change and hurricanes is still inconclusive; however, early results indicate that while the rates of Atlantic hurricanes may or may not decrease due to climate change, the hurricanes that do form have a greater chance of intensifying into more destructive storms due to higher sea levels and greater sea surface temperatures. *See* LENNY BERNSTEIN ET AL., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT 46

"public property useful to them."⁷⁴ They sought both compensatory and punitive damages, but not abatement.⁷⁵ The district court dismissed the claims, holding the plaintiffs did not have standing and the claims represented nonjusticiable political questions.⁷⁶ The Fifth Circuit initially reversed the district court, holding the plaintiffs had standing to bring their nuisance claims and such claims were not barred by the political question doctrine.⁷⁷ On a rehearing en banc, however, the Fifth Circuit lost a justice to recusal and thus its quorum.⁷⁸ Lacking a quorum, it did not have the power to offer an opinion⁷⁹ and dismissed the appeal.⁸⁰ Instead of contributing a circuit opinion on the political question doctrine and standing in state law global warming cases, the Fifth Circuit provided only uncertainty.

b. California Scheming

In the 2006 case, *California v. General Motors*, the state brought an action against the six largest automobile manufacturers in the

- 74. Comer, 585 F.3d at 859.
- 75. See Sport, supra note 23, at 604.
- 76. Comer, 585 F.3d at 860.
- 77. Id.
- 78. Comer v. Murphy Oil USA, 607 F.3d 1049, 1054 (5th Cir. 2010) (en banc).

https://readingroom.law.gsu.edu/gsulr/vol29/iss3/5

⁽Abdelkader Allali et al. eds., 2007) ("Based on a range of models, it is *likely* that future tropical cyclones (typhoons and hurricanes) will become more intense There is less confidence in projections of a global decrease in numbers of tropical cyclones."); James B. Elsner et al., *The Increasing Intensity of the Strongest Tropical Cyclones*, 455 NATURE 92, 92 (2008) ("Atlantic tropical cyclones are getting stronger on average"); Gabriele Villarini et al., *North Atlantic Tropical Storm Frequency Response to Anthropogenic Forcing: Projections and Sources of Uncertainty*, 24 J. CLIMATE 3224, 3235 (2011) ("The disagreement among published results concerning increasing or decreasing North Atlantic tropical storm trends in a warmer climate can be largely explained (close to half of the variance) in terms of the different sea surface temperature projections (Atlantic minus tropical mean) of the different climate model projections used.").

^{79.} *Id.* at 1055. The court noted that the grant of rehearing vacated the previous opinion. *Id.* at 1053. 80. *Id.* at 1056. The court helpfully noted, however, that "[t]he parties, of course, now have the right to petition the Supreme Court of the United States." *Id.* at 1055. The dissenting judge, W. Eugene Davis, found "an inexplicable disconnect between the notion that a majority of the eight unrecused judges has no authority to do anything except literally apply our Local Rule 41.3 strictly as written; yet they do have the authority to dismiss the appeal." *Id.* at 1056 (Davis, J., dissenting). The Supreme Court subsequently denied the plaintiffs' petition for mandamus to reinstate their appeal. *In re* Comer, 131 S. Ct. 902 (2011). The plaintiffs filed suit again in the Southern District of Mississippi in 2011. Comer v. Murphy Oil USA, Inc., 839 F. Supp. 2d 849, 854 (S.D. Miss. 2012). The court there found that plaintiffs' claims were barred by res judicata and collateral estoppel, or in the alternative, that plaintiffs did not have standing to bring their claims and that such claims were barred by the political question

2013]

CLIMATE CHANGE LITIGATION

world, alleging the defendants' products contributed to global warming.⁸¹ The state filed a public nuisance claim under federal common law, and in the alternative, a state-based public nuisance claim.⁸² Plaintiffs argued, among other things, that global warming is contributing to the loss of the Sierra snowpack-which threatens water supplies-while earlier melting of the snowpack in spring contributes to flooding.⁸³ Additionally, they argued that rising sea levels pose a threat of greater erosion to California's 1,075 miles of coastline.⁸⁴ The state sought damages, not abatement,⁸⁵ and also sought a declaratory judgment "for such future monetary expenses and damages as may be incurred by California in connection with the nuisance of global warming."86 California argued that it was not asking the court to solve climate change, but merely seeking damages resulting from the defendants' contributions to global warming.⁸⁷ The court disagreed and reasoned that the case was barred by the political question doctrine.⁸⁸ It noted that a "federal common law global warming nuisance tort would have an inextricable effect on interstate commerce and foreign policy-issues constitutionally committed to the political branches of government,"⁸⁹ and dismissed the case.⁹⁰ The court's holding thwarted California's attempt to circumvent the political question doctrine by seeking only damages.⁹¹ While

89. Id. at *14.

^{81.} California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871, at *1 (N.D. Cal. Sept. 17, 2007). Included were General Motors, Daimler Chrysler, Toyota, Nissan, Ford and Honda. Alex, *supra* note 15, at 78 n.2.

^{82.} Gen. Motors Corp., 2007 WL 2726871, at *2.

^{83.} Sport, supra note 23, at 610.

^{84.} Gen. Motors Corp., 2007 WL 2726871, at *1.

^{85.} See id. at *14.

^{86.} Second Amended Complaint for Damages and Declaratory Judgment at 14, California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007) (No. C06-05755 EMC), 2006 WL 3069165.

^{87.} Randall S. Abate, Automobile Emissions and Climate Change Impacts: Employing Public Nuisance Doctrine as Part of a "Global Warming Solution" in California, 40 CONN. L. REV. 591, 597 (2008).

^{88.} *Gen. Motors Corp.*, 2007 WL 2726871, at *12 ("Plaintiff's current tort claim would require this Court to make the precise initial carbon dioxide policy determinations that should be made by the political branches \dots ").

^{90.} Id. at *17.

^{91.} Abate, supra note 87, at 598.

providing more guidance than *Comer*, *California* still left unanswered how state law claims would fare.⁹²

c. Standing in Kivalina

In 2009, the Village of Kivalina⁹³ brought a federal common law claim of nuisance, as well as state law claims, in the Northern District of California.⁹⁴ The plaintiffs named twenty-two defendants, including major oil and electric utility companies like ExxonMobil and American Electric Power Company.⁹⁵ The complaint alleged that the defendants' "excessive emission[s]" of greenhouse gases contributed to global warming and led to diminished Arctic sea ice—which traditionally protected the village from winter storms—and as a result the village would have to be relocated.⁹⁶ The Village asserted that by seeking damages instead of an injunction, it was not asking the court to decide what emissions limits "*should have* been imposed" on the defendants.⁹⁷ The court did not find the damages-only argument persuasive.⁹⁸ Further, the court found that the Village could not be certain which emissions were directly responsible for

^{92.} After dismissing the federal claim, the court held it did not have supplemental jurisdiction over California's state law claim, nor did it rule on whether the CAA would displace federal claims. *Gen. Motors Corp.*, 2007 WL 2726871 at *16.

^{93.} The Village of Kivalina is a "the governing body of an Inupiat Eskimo village of approximately 400 people who reside in the City of Kivalina" in Alaska. Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 868 (N.D. Cal. 2009), *aff'd*, 696 F.3d 849 (9th Cir. 2012).

^{94.} Id. at 869.

^{95.} *Id.* at 868 n.1 ("Defendants are: (1) ExxonMobil Corporation; (2) BP P.L.C.; (3) BP America, Inc.; (4) BP Products North America, Inc.; (5) Chevron Corporation; (6) Chevron U.S.A., Inc.; (7) ConocoPhilips Company; (8) Royal Dutch Shell P.L.C.; (9) Shell Oil Company; (10) Peabody Energy Corporation; (11) The AES Corporation; (12) American Electric Power Corporation; (13) American Electric Power Services Corporation; (14) DTE Energy Company; (15) Duke Energy Corporation; (16) Dynergy Holdings, Inc.; (17) Edison International; (18) MidAmerican Energy Holdings Company; (19) Mirant Corporation; (20) NRG Energy; (21) Pinnacle West Capital Corporation; (22) Reliant Energy, Inc.; (23) The Southern Company; and (24) Xcel Energy, Inc.").

^{96.} *Id.* at 868. The decline of summer Arctic sea ice has been called a "death spiral" by Mark Serreze, the director of the National Snow and Ice Data Center. *See* Peter Wadhams, *Geoengineering May Be Our Best Chance to Save Sea Ice*, SCI. AM., Dec. 2012, at 12, *available at* http://www.scientificamerican.com/article.cfm?id=geoengineering-last-chance-save-sea-ice. This death spiral was evident in the record-low summer sea ice extent and volume recorded in September 2012. *See* Naam, *supra* note 8.

^{97.} *ExxonMobil Corp.*, 663 F. Supp. 2d at 876. The village estimated the cost of moving at "\$95 to \$400 million." *Id.* at 869.

^{98.} Id. at 876 (noting that the village's argument rested on "faulty logic").

the injury.⁹⁹ The court dismissed the federal claim, asserting that the plaintiffs failed to establish causation necessary for Article III standing and that the claim was barred by the political question doctrine.¹⁰⁰ As in California, the court dismissed the state law claims without prejudice.¹⁰¹

The decisions in the modern nuisance suits demonstrate the uncertainty litigants faced in bringing climate change nuisance suits before *American Electric*. Other litigants, however, were adopting another strategy: using regulatory appeals to spur federal action on climate change.¹⁰²

2. Regulatory Appeals: Massachusetts Challenges the EPA

In 2005, twelve states, four local governments, and several environmental groups¹⁰³ brought suit against the Environmental Protection Agency (EPA) in the D.C. Circuit for its denial of a petition requesting it to regulate greenhouse gases under the CAA.¹⁰⁴ The EPA, along with ten intervening states and several trade organizations,¹⁰⁵ argued that either it did not have the statutory

^{99.} *Id.* at 881 (noting that emissions from various countries, emitted over decades, could be the particular cause of the village's injury).

^{100.} *Id.* at 882. The court held that the plaintiffs did not qualify for relaxed standing requirements based on "special solitude' generally afforded to sovereigns." *Id.* It found that the plaintiffs were "not seeking to enforce any procedural rights concerning an agency's rulemaking authority," nor were they able to rely on the "quasi sovereign interests' referenced by the Supreme Court" in Massachusetts v. EPA, 549 U.S. 497 (2007). *Id.*

^{101.} *Id.* at 882–83. The Ninth Circuit affirmed on appeal in 2012 and relied on the holding of *American Electric*. This affirmation is discussed in more detail in Part II.B.2.a.

^{102.} For a list of the many global warming related statutory and regulatory challenges, see Michael B. Gerrard & J. Cullen Howe, *Climate Change Litigation in the U.S.*, 2–12, ARNOLD & PORTER LLP, http://www.climatecasechart.com (last updated Oct. 2, 2012).

^{103.} The states bringing the suit were California, Connecticut, Illinois, Maine, Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington. Massachusetts v. EPA, 549 U.S. at 505 n.2. The local governments were District of Columbia, American Samoa, New York City, and Baltimore. *Id.* at 505 n.3. The environmental groups were the Center for Biological Diversity, Center for Food Safety, Conservation Law Foundation, Environmental Advocates, Environmental Defense, Friends of the Earth, Greenpeace, International Center for Technology Assessment, National Environmental Trust, Natural Resources Defense Council, Sierra Club, Union of Concerned Scientists, and U.S. Public Interest Research Group. *Id.* at 505 n.4.

^{104.} Massachusetts v. EPA, 415 F.3d 50, 53 (D.C. Cir. 2005), rev'd, 549 U.S. 497 (2007).

^{105.} The intervening states were Alaska, Idaho, Kansas, Michigan, Nebraska, North Dakota, Ohio, South Dakota, Texas, and Utah. Massachusetts v. EPA, 549 U.S. at 505 n.5. The trade groups were the Alliance of Automobile Manufacturers, National Automobile Dealers Association, Engine

authority to regulate the gases under the CAA,¹⁰⁶ or if it did have the authority, it chose not to regulate those gases.¹⁰⁷ The circuit court ruled that the EPA administrator properly exercised his discretion in denying the petition to regulate greenhouse gas emissions.¹⁰⁸ The decision did not contain a definitive ruling on the standing of the plaintiffs.¹⁰⁹

The Supreme Court, noting the "the unusual importance" of global warming, granted certiorari.¹¹⁰ In a five-to-four decision, the Court held that the plaintiffs had standing to bring the claims,¹¹¹ the CAA unambiguously authorized the regulation of greenhouse gases,¹¹² the EPA has the authority to regulate greenhouse gases,¹¹³ and that the EPA acted "arbitrarily" and "capriciously" in refusing to regulate the gases.¹¹⁴ Justice Stevens, in analyzing plaintiffs' standing, held that states are to be afforded a "special solicitude" in protecting their quasi-sovereign interests.¹¹⁵ Nevertheless, Justice Stevens then proceeded to analyze the usual elements of Article III standing, including injury,¹¹⁶ causation,¹¹⁷ and redressability.¹¹⁸ After finding

110. Id. at 506.

113. Id. at 532.

Manufacturers Association, Truck Manufacturers Association, CO₂ Litigation Group, and Utility Air Regulatory Group. *Id.* at 505 n.6.

^{106.} *Id.* at 511–12 ("[The] EPA observed that Congress 'was well aware of the global climate change issue when it last comprehensively amended the [Clean Air Act] in 1990,' yet it declined to adopt a proposed amendment establishing binding emissions limitations.").

^{107.} Massachusetts v. EPA, 415 F.3d at 53.

^{108.} Id. at 58.

^{109.} Massachusetts v. EPA, 549 U.S. at 514 (noting the circuit judge proceeded on the merits because standing and merits were overlapping inquiries).

^{111.} Id. at 501, 526.

^{112.} *Id.* at 529 ("Carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons are without a doubt 'physical [and] chemical . . . substance[s] which [are] emitted into . . . the ambient air.' The statute is unambiguous." (quoting 42 U.S.C. § 7602(g) (2006))).

^{114.} Id. at 534.

^{115.} Massachusetts v. EPA, 549 U.S. at 520. Justice Stevens noted that having ceded certain sovereign prerogatives to the federal government, "Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, [and] it cannot negotiate an emissions treaty with China or India...." *Id.* at 519. The need to protect its quasi-sovereign interests, along with its "concomitant procedural right to challenge" agency action it believed to be arbitrary and capricious, combined to give Massachusetts a "special solicitude" in the standing analysis. *Id.* at 520. For a rebuttal of Justice Stevens' standing reasoning, see Chief Justice Robert's dissent. *Id.* at 536–49 (Roberts, C.J., dissenting). 116. Justice Stevens asserted that the state had suffered a particularized injury as the "rising seas have

already begun to swallow Massachusetts' coastal land." Id. at 522.

^{117.} The Court noted first that the EPA acknowledged the causal connection between greenhouse

standing, the Court determined that the "EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do."¹¹⁹ The Court then remanded the case for further proceedings,¹²⁰ which resulted in a settlement agreement between the EPA and petitioners.¹²¹ *Massachusetts* did not clarify the uncertainties of the nuisance cases, but its effects were decisive in *American Electric*.¹²²

3. Where Are We?

The global warming cases of the past decade demonstrate some of the issues that face courts attempting to wrestle with global warming suits, particularly when such suits are founded in common law nuisance claims. The *Kivalina* court held that the Village, not deserving the "special solicitude" granted to states acting as quasi-sovereigns, lacked standing, and further, that the claim was barred by the political question doctrine.¹²³ The *California* court held the claims barred by the political question doctrine, ¹²⁴ but skirted around the issue of standing.¹²⁵ On the other hand, the Fifth Circuit in *Comer*

gases and global warming, but argued that its failure to regulate such gases was too insignificant a contributor to Massachusetts's injury for causation to be established. *Id.* at 523. Justice Stevens countered that the U.S. transportation sector alone contributes 6% of greenhouse gas emissions, and to regulate those emissions would "hardly [be] a tentative step." *Id.* at 524–25.

^{118.} Here, Justice Stevens stated that the remedy from the Court need only reduce the injury, not eliminate all injury entirely. *Id.* at 525. He further noted that the risk of catastrophic consequences to Massachusetts "would be reduced to some extent if petitioners received the relief they seek." *Id.* at 526.

^{119.} *Id.* at 533.

^{120.} *Id.* at 535.

^{121.} Proposed Settlement Agreement, Clean Air Act Citizen Suit 75 Fed. Reg. 82,392 (Envtl. Prot. Agency Dec. 30, 2010) (notice) [hereinatfter Proposed Settlement Agreement].

^{122.} See Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011).

^{123.} Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 882 (N.D. Cal. 2009), *aff*^{*}d, 696 F.3d 849 (9th Cir. 2012).

^{124.} California v. Gen. Motors Corp., No. C06-05755 MJJ, 2007 WL 2726871, at *12 (N.D. Cal. Sept. 17, 2007) ("Plaintiff"s current tort claim would require this Court to make the precise initial carbon dioxide policy determinations that should be made by the political branches").

^{125.} The court discussed standing in its analysis of the *Massachusetts v. EPA* decision, noting that *Massachusetts* granted a "special solicitude" to States seeking judicial review of federal agency action. *Gen. Motors Corp.*, 2007 WL 2726871, at *10–12. The court clarified that—unlike *Massachusetts*—*California* was not "an administrative challenge to an EPA's decision, but rather as an interstate global

initially found that plaintiffs, a class of private citizens, had standing to bring their claims *and* that the political question doctrine did not bar their claims.¹²⁶ With the strange dismissal after rehearing, however, those initial decisions were tossed aside, leaving the question of standing and political question unanswered in the Fifth Circuit.¹²⁷ None of the cases rendered decisions on the state law claims.¹²⁸ While all of those issues would indeed play a role in *American Electric*, it was *Massachusetts*—the case rooted in a procedural challenge—that would have the greatest impact on the *American Electric* decision.

II. AMERICAN ELECTRIC POWER COMPANY V. CONNECTICUT

A. A [Minor] Nuisance For The Supreme Court

1. Connecticut Starts in New York

In 2004, eight states and New York City¹²⁹ filed a lawsuit in the Southern District of New York against six electric utilities, including the federally owned and operated Tennessee Valley Authority (TVA).¹³⁰ Three non-profit land trusts, including the Audubon Society of New Hampshire, filed a separate but similar suit against the same utilities.¹³¹ The two suits were combined into *Connecticut v*.

warming damages tort claim," without ever deciding whether the State actually had standing to bring such a claim. *Id.* at *12.

^{126.} Comer v. Murphy Oil USA, 585 F.3d 855, 860 (5th Cir. 2009), *reh'g en banc granted*, 598 F.3d 208 (5th Cir. 2010), *vacated*, 607 F.3d 1049, 1054 (5th Cir. 2010) (en banc).

^{127.} Comer v. Murphy Oil USA, 607 F.3d 1049, 1055 (5th Cir. 2010).

^{128.} In *General Motors Corp.* and *Kivalina*, the court held that it could not exercise supplemental jurisdiction over the remaining state law claim after dismissing the federal claims. *ExxonMobil Corp.*, 663 F. Supp. 2d at 882; *Gen. Motors Corp.*, 2007 WL 2726871, at *16.

^{129.} Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2533–34, 2533 n.3 (2011). The states were California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin. *Id.* at 2533 n.3. New Jersey and Wisconsin later dropped out of the litigation. *Id.*

^{130.} The other defendants were American Electric Power Company, Inc., American Electric Power Service Corporation, Southern Company, Xcel Energy, and Cinergy Corporation. *Connecticut II*, 582 F.3d 309, 316 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011). Cinergy later merged into Duke Energy. Brief for the Petitioners at II, Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011) (No. 10-174), 2011 WL 334707.

^{131.} The other land trusts were the Open Space Institute, Inc. and the Open Space Conservancy, Inc. *Am. Elec. Power*, 131 S. Ct. at 2533–34 & n.4; Joy C. Fuhr, Connecticut v. AEP: *The New Normal*?,

*American Electric Power Co.*¹³² The plaintiffs asserted that the utilities were the largest emitters of greenhouse gases in the United States, emitting up to "650 million tons of carbon dioxide each year," contributing up to 10% of the country's annual anthropogenic emissions.¹³³ The complaint argued that the defendants were "substantial contributors to elevated levels of carbon dioxide and global warming."¹³⁴ The complaint further asserted that potential injuries to plaintiffs resulting from the defendants' contributions of greenhouse gases included, *inter alia*, increased heat deaths, increased beach erosion, and accelerated sea level rise.¹³⁵

841

The plaintiffs brought two claims: first, a federal nuisance claim, and in the alternative, a state nuisance claim.¹³⁶ Plaintiffs sought abatement of the public nuisance through an injunctive cap on carbon dioxide emissions levels emitted by the utilities, arguing that "monetary damages are inadequate to remedy the injuries."¹³⁷ In deciding the utilities' motion to dismiss, the district court looked to *Baker v. Carr*¹³⁸—a leading Supreme Court case on the political question doctrine—and its six situations "indicating the existence of

137. Complaint, supra note 134, at 44.

NAT. RESOURCES & ENV'T, Spring 2010, at 58, 58.

^{132.} Connecticut I, 406 F. Supp. 2d 265 (S.D.N.Y. 2005), vacated, 582 F.3d 309 (2d Cir. 2009), cert. granted, 131 S. Ct. 813 (2010), rev'd, 131 S. Ct. 2527 (2011).

^{133.} Brief for Respondents Connecticut, New York, California, Iowa, Rhode Island, Vermont, and the City of New York at 4, Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011) (No. 10-174), 2011 WL 915093, at *4.

^{134.} Complaint at 1, *Connecticut I*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005), *vacated*, 582 F.3d 309 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011) (No. 104CV05669), 2004 WL 5614397.

^{135.} *Id.* at 1–2. The claim also alleged, *inter alia*, "increased ground-level smog...; salinization of water supplies...; reduction of the mountain snow pack in California...; lowered Great Lakes water levels...; more droughts and floods...; and widespread loss of species and biodiversity...." *Id.*

^{136.} *Am. Elec. Power*, 131 S. Ct. at 2534. Under the state law claims, both the states and the land trusts pled special injuries. *Id.* The land trusts noted that they were owners of real properties with "unique ecological values" that were open to the public, and that, unless abated, global warming threatened to "diminish or destroy the essential ecological and aesthetic attributes of their properties." Plaintiffs' Memorandum of Law in Opposition to Defendants' Motion to Dismiss Private Plaintiffs' Complaint for Failure to State a Claim Upon Which Relief Can be Granted at 1, *Connecticut I*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005), *vacated*, 582 F.3d 309 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011) (No. 104CV05670), 2004 WL 5614418. The states pointed to the injuries and risk of injuries described in the text. Complaint, *supra* note 134 at 1–2.

^{138.} Baker v. Carr, 369 U.S. 186 (1962).

a non-justiciable political question.¹³⁹ Focusing on the third *Baker* prong, the court held the case presented questions requiring "an initial policy determination of a kind clearly for non-judicial discretion" and dismissed the case.¹⁴⁰

Before the case reached the Second Circuit on appeal in 2009,¹⁴¹ the Supreme Court ruled on *Massachusetts v. EPA*, holding that the CAA authorized the EPA to regulate greenhouse gas emissions.¹⁴² The Second Circuit in *Connecticut* thus was asked to decide: (1) whether the plaintiffs had standing to bring the claims; (2) whether their claims were barred by the political question doctrine; (3) whether their claims were properly stated and governed by the federal common law of nuisance; and (4) whether the plaintiffs' claims were now preempted by the CAA.¹⁴³ The Second Circuit reversed the district court's decision, holding that the case did not present a nonjusticiable political question¹⁴⁴ and that the states

142. Massachusetts v. EPA, 549 U.S. 497, 532 (2007).

^{139.} Connecticut I, 406 F. Supp. 2d 265, 271–72 (S.D.N.Y. 2005), vacated, 582 F.3d 309 (2d Cir. 2009), cert. granted, 131 S. Ct. 813 (2010), rev'd, 131 S. Ct. 2527 (2011) ("[1] a textually demonstrable constitutional commitment of the issue to a coordinate political department; or [2] a lack of judicially discoverable and manageable standards for resolving it; or [3] the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or [4] the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of the government; or [5] an unusual need for unquestioning adherence to a political decision already made; or [6] the potentiality of embarrassment from multifarious pronouncements by various departments on one question." (quoting Vieth v. Jubelirer, 541 U.S. 267, 277–78 (2004))).

^{140.} Id. at 274.

^{141.} Connecticut II, 582 F.3d 309 (2d Cir. 2009), cert. granted, 131 S. Ct. 813 (2010), rev'd, 131 S. Ct. 2527 (2011).

^{143.} *Connecticut II*, 582 F.3d at 314–15. The court also ruled on TVA's theory "that the complaints should be dismissed against it on the basis of the discretionary function exception." *Id.* at 315.

^{144.} *Id.* at 390. The Second Circuit first noted the Supreme Court's analysis from *Vieth v. Jubelirer*, 541 U.S. 267 (2004), holding that the *Baker* factors "are probably listed in descending order of both importance and certainty." *Id.* at 321. The Court then applied the *Baker* factors individually, paying special attention to the first three. *Id.* at 323–32. The Court found that plaintiffs were not "ask[ing] the court to fashion a comprehensive and far-reaching solution to global climate change, a task that arguably falls within the purview of the political branches," but instead merely "seek[ing] to limit emissions from six domestic coal-fired electricity plants on the ground that such emissions constitute a public nuisance that they allege has caused, is causing, and will continue to cause them injury." *Id.* at 325. Moreover, the Court found there were "judicially discoverable and manageable standards" for deciding the case and that "[f]ederal courts have long been up to the task of assessing complex scientific evidence in cases where the cause of action was based either upon the federal common law or upon a statute." *Id.* at 329. Finally, the Court found that the case presented "ordinary tort" issues, and therefore, there was no need to make initial policy determinations not suited for judicial discretion. *Id.* at 331. For a thorough discussion of the political question doctrine and the Second Circuit's analysis of it in this case, see

satisfied Article III standing by properly pleading *parens patriae* standing.¹⁴⁵ Additionally, the Second Circuit found that New York City and the public trusts also had standing to bring the claims.¹⁴⁶ Finally, the Circuit held that the CAA did not displace the federal common law, as the EPA had not yet issued regulations concerning greenhouse gas emissions from stationary sources.¹⁴⁷ The Second Circuit found that the CAA did not speak directly on the issue, and thus plaintiffs' claims were not displaced.¹⁴⁸ Accordingly, the Circuit vacated the lower court's ruling.¹⁴⁹

2. A Brief Response from the Supreme Court

The utility companies appealed, asserting again that Connecticut and the other respondents lacked standing to bring their claims, that the claims were barred by the political question doctrine, and that the claims were displaced by the CAA.¹⁵⁰ In December 2010, the Supreme Court granted certiorari.¹⁵¹ In the interim between the Second Circuit's decision and the grant of certiorari, the EPA released its Endangerment and Cause or Contribute Findings for greenhouse gases, which found that greenhouse gases were a threat to public health and welfare.¹⁵² As a result, the CAA mandated that the

148. *Id.* at 387–88. The Second Circuit noted that should the EPA regulate greenhouse gas emissions, claims similar to the plaintiffs' may indeed face displacement. *Id.*

149. Id. at 393.

150. Reply Brief for the Petitioners at i, Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011) (No. 10-174), 2011 WL 1393804, at *i.

151. Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 813 (2010).

generally Nathan Howe, *The Political Question Doctrine's Role in Climate Change Nuisance Litigation: Are Power Utilities the First of Many Casualties?*, 40 ENVTL. L. REP. NEWS & ANALYSIS 11229 (2010).

^{145.} Connecticut II, 582 F.3d at 338 (noting that state interest in the physical and economic wellbeing of citizens are "classic examples of a state's quasi-sovereign interest.").

^{146.} *Id.* at 366–69. The court held that New York City, as a subdivision of a state, sufficiently pleaded injuries to general public rights, *id.* at 366, and that the public trusts were private entities functioning as public entities, and as such would suffer harms that were unique from other private landowners. *Id.* at 368–69.

^{147.} *Id.* at 387–88. The Second Circuit reasoned that until the EPA regulated greenhouse gas emissions from stationary sources, the court would be unable to determine whether the regulations spoke directly to the field of greenhouse gas emissions generated by utilities. *Id.* at 380–81.

^{152.} Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (finding that six greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, hexafluoride), when well mixed,

EPA issue regulations of greenhouse gases.¹⁵³ The EPA responded with a Tailoring Rule,¹⁵⁴ greenhouse gas (GHG) emissions standards for light vehicles,¹⁵⁵ and a rule regarding the prevention of serious deterioration (PSD) in air quality of certain areas.¹⁵⁶

American Electric was decided June 20, 2011. In contrast with the Second Circuit's thorough opinion, the Court's opinion was fairly short, spanning only eight pages.¹⁵⁷ Justice Ginsburg disagreed with the Second Circuit's opinion and held that Congress had indeed occupied the field through enacting the CAA, even before the EPA actually set emissions standards for major emitters.¹⁵⁸ Congress delegated authority to the EPA to decide whether to regulate greenhouse gases, and Justice Ginsburg found that delegation—and not whether the EPA actually regulates greenhouse gases—constituted occupying the field.¹⁵⁹ Indeed, the Court noted that even if the EPA chose not to regulate greenhouse gas emissions, federal common law claims of nuisance would not be the appropriate means

endanger the public health and public welfare of future generations).

^{153.} Massachusetts v. EPA, 549 U.S. 497, 533 (2007). The EPA released its final rules for regulating greenhouse gases emitted from power plants in July 2012. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 and GHG Plantwide Applicability Limits, 77 Fed. Reg. 41,051 (July 12, 2012) (to be codified at 40 C.F.R. pt. 52).

^{154.} Action to Ensure Authority to Implement Title V Permitting Programs Under the Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 82,254 (Dec. 30, 2010) (to be codified at 40 C.F.R. pts. 52 & 70). This rule provides an "implementation strategy" for issuing federal permits to "major" stationary sources. *Id.* For other criteria pollutants, 100 tons-per-year (tpy) emissions will generally constitute a major source. *Id.* at 82,256. The Tailoring Rule raises that level to 100,000 tpy of greenhouse gas emissions. *Id.*

^{155.} 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 and 49 C.F.R. pts. 531, 533, 536, 537 & 538).

^{156.} Limitation of Approval of Prevention of Significant Deterioration Provisions Concerning Greenhouse Gas Emitting-Sources in State Implementation Plans, 75 Fed. Reg. 82,536 (Dec. 30, 2010) [hereinafter PSD Rule] (to be codified at 40 C.F.R. pt. 52). Because the Tailoring Rule changed the limits for major sources of greenhouse gas emissions, the PSD rule limited the application of prevention of significant deterioration plans—in place before the Tailoring Rule—that addressed greenhouse gas emissions.

^{157.} Am. Elec. Power, 131 S. Ct. at 2532-40.

^{158.} Id. at 2538.

^{159.} *Id.* at 2538–39. Professor Jonathan Adler notes that the displacement analysis was the "weakest and least convincing portion" of the Second Circuit's opinion, as it ignored the clear language of *Milwaukee II* that suggested that displacement of interstate nuisance claims depend merely on legislative action. Jonathan H. Adler, *A Tale of Two Climate Cases*, 121 YALE L.J. ONLINE 109, 110–11 (2011), *available at* http://yalelawjournal.org/2011/09/13/adler.html.

of challenging that decision.¹⁶⁰ The Court declined to decide the state law claims, but hinted that the CAA may also preempt such claims.¹⁶¹

The Court reduced the case to a single issue: displacement.¹⁶² The standing and political question issues received scant treatment from the Court. An equally divided Court affirmed the Second Circuit's decision on standing.¹⁶³ Justice Ginsburg noted that four of the justices believed at least some of the plaintiffs to have Article III standing under *Massachusetts*, while the other either distinguished the *American Electric* and *Massachusetts*.¹⁶⁴ Justice Ginsburg did not discuss the Second Circuit's analysis on standing, nor did she provide any further guidance.¹⁶⁵

After briefly setting up the issues of the political question doctrine and whether plaintiffs had indeed stated a claim under federal common law for the abatement of greenhouse gas emissions, Justice Ginsburg rendered the points moot. Calling the issues an "academic question," the Court held that the CAA and the EPA actions it authorizes displace any such claims.¹⁶⁶ Finally, Justice Ginsburg suggested that while such complex scientific determinations were best left to expert agencies like the EPA, as opposed to "ad hoc, caseby-case injunctions" issued by district court judges,¹⁶⁷ the agency's decisions would be subject to review in regulatory challenges.¹⁶⁸

2013]

^{160.} *Am. Elec. Power*, 131 S. Ct. at 2538–39. Justice Ginsburg went on to explain that Federal courts would still have the power to review the EPA's decision, if challenged, to determine if the decision was arbitrary and capricious. *Id.* at 2539.

^{161.} Id. at 2540. The Court noted that neither party had briefed the Court on the state law claims. Id.

^{162.} Before reaching that holding though, Justice Ginsburg first noted that the EPA was regulating greenhouse gases in response to *Massachusetts v. EPA. Id.* at 2533. The Court pointed to several steps the EPA and federal government were taking to regulate the gases: the EPA issued the Endangerment and Cause or Contribute findings; the EPA and the Department of Transportation issued a final rule regulating emissions from light-duty vehicles; the EPA set requirements for major stationary emitters to use the best available control technology; and the EPA had begun rulemaking to set limits on greenhouse gas emissions from major emitters and was committed to issuing a final ruling by May 2012. *Id.*

^{163.} Id. at 2535. Justice Sotomayor took no part in the decision. Id. at 2540.

^{164.} *Id*.

^{165.} Id. at 2535.

^{166.} Am. Elec. Power, 131 S. Ct. at 2537.

^{167.} Id. at 2539. This opinion was contrary to the Second Circuit's opinion that district court judges

846 GEORGIA STATE UNIVERSITY LAW REVIEW

[Vol. 29:3

B. Displacing A Nuisance: Analyzing The American Electric *Decision*

1. Displacing Connecticut Through Milwaukee II

On the issue of displacement, the American Electric Court registered a unanimous vote.¹⁶⁹ The Court took particular guidance from Milwaukee II, noting displacement turns only on whether Congress has occupied the field in question, "not whether it has been occupied in a particular manner."¹⁷⁰ Yet Justice Rehnquist, in authoring the Milwaukee II opinion, was clear that Congress had occupied the field of water pollution "through the establishment of a comprehensive regulatory program."171 Justice Rehnquist went further in that case, noting that the CWA did more than merely speak to the issue of interstate water pollution.¹⁷² He wrote that the Amendments to the Act, coming after Milwaukee I, represented a "total restructuring" and "complete rewriting" of existing water pollution laws.¹⁷³ Justice Rehnquist reasoned that Congress-in creating such a "self-consciously comprehensive" regulatory system for water pollution-left no room for federal common law to fill in the gaps.¹⁷⁴ Thus, when the *Milwaukee II* Court noted the question was not "whether [the field] has been occupied in a particular manner," Justice Rehnquist was referring to specific permitting and

routinely deal with complex scientific issues when they relate to federal common law claims. *Connecticut II*, 582 F.3d 309, 329 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011).

^{168.} *Am. Elec. Power*, 131 S. Ct. at 2539. In noting that the EPA's decisions would not "escape judicial review," Justice Ginsburg clarified the decisions would not stand if they were "arbitrary, capricious, [or] an abuse of discretion." *Id.* Despite this being a notoriously low standard for agencies to meet, it is interesting that the EPA failed to meet the standard in *Massachusetts. See* Massachusetts v. EPA, 549 U.S. 497, 534 (2007).

^{169.} The vote was 8-0, as Justice Sotomayor did not participate. *Am. Elec. Power*, 131 S. Ct. at 2540. Justice Alito filed a short separate opinion, joined by Justice Thomas, which concurred in part and concurred in the judgment. *Id.* at 2540–41 (Alito, J., concurring in part and concurring in the judgment). 170. *Id.* at 2538 (quoting *Milwaukee II*, 451 U.S. 304, 324 (1981)).

^{171.} Milwaukee II, 451 U.S. at 317.

^{172.} *Id.* Indeed, Rehnquist pointed out the Federal Water Pollution Control Act before the 1972 amendments were "inadequate to supplant federal common law." *Id.*

^{173.} *Id.* The *Milwaukee II* Court further asserted that the CWA represented congressional intent to create an exhaustive and comprehensive regime of water pollution regulation. *Id.* at 318. 174. *Id.* at 319.

2013]

CLIMATE CHANGE LITIGATION

regulating decisions made within an already comprehensive regulatory regime.¹⁷⁵

It is not clear whether the CAA represents the same sort of comprehensive regulatory regime as the CWA. Whereas Congress completely rewrote interstate water pollution laws with the CWA,¹⁷⁶ it has taken no such actions regarding global warming.¹⁷⁷ The EPA was forced into considering regulation of greenhouse gases in the first instance.¹⁷⁸ As noted by Justice Ginsburg, the EPA did respond, putting in place initial measures to address greenhouse gas emissions¹⁷⁹ and proposing to release limits for electrical generating units (EGUs)¹⁸⁰ in May 2012.¹⁸¹ The CWA, on the other hand, requires permits for every point source of water pollution.¹⁸² Dismissing that argument, the American Electric Court essentially determined that Milwaukee II stood for the proposition that any regulatory regime would suffice.¹⁸³ It is hard to argue, though, that the CAA and the EPA do not comprehensively regulate greenhouse gas emissions from fossil-fuel-fired power plants, and such a narrow reading is sufficient to justify the outcome of the case.¹⁸⁴

^{175.} *Id.* at 324. Indeed, Justice Rehnquist noted that the issue in question was the "*nature* of the problems, *not* the extent to which the problems have been addressed." *Id.* at 323.

^{176.} Id. at 317.

^{177.} See Alex, supra note 15, at 82–84.

^{178.} Massachusetts v. EPA, 549 U.S. 497, 534 (2007) (noting that the EPA acted arbitrarily and capriciously in refusing to regulate greenhouse gases).

^{179.} Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2538 (2011); *see also* PSD Rule, 75 Fed. Reg. 82,536 (Dec. 30, 2010) (to be codified at 40 C.F.R. pt. 52); Action to Ensure Authority to Implement Title V Permitting Programs Under the Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 82,254 (Dec. 30, 2010) (to be codified at 40 C.F.R. pts. 52 & 70); 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 and 49 C.F.R. pts. 531, 533, 536, 537 & 538).

^{180.} Proposed Settlement Agreement, 75 Fed. Reg. 82,392 (Envtl. Prot. Agency Dec. 30, 2010) (notice).

^{181.} *Id.* ("Under the proposed settlement agreement EPA will take final action with respect to the proposed rule no later than May 26, 2012.").

^{182. 33} U.S.C. § 1311(a) (2006) ("Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of *any pollutant by any person* shall be unlawful.") (emphasis added). A point source is "any discernible, confined and discrete conveyance . . . from which pollutants are . . . discharged." *Id.* § 1362(14).

^{183.} Am. Elec. Power, 131 S. Ct. at 2538 ("Congress selects different regulatory regimes to address different problems.").

^{184.} Professor Adler asserts that the Court's decision was clear, as the plaintiffs' claims would certainly be displaced "if the CAA's expansive statutory scheme was to apply to GHGs...." Adler, *supra* note 159, at 110–11. He further asserts that the language of *Milwaukee II* clearly states that the

Yet a broader reading of the case suggests that climate change itself needs a comprehensive regulatory regime into which contributions from greenhouse gas emissions from electric utilities would fall.¹⁸⁵ When Justice Ginsburg opines that courts are not suited to handle global warming nuisance claims through "ad hoc, case-bycase injunctions" due to the magnitude and complexity of the issue,¹⁸⁶ she demonstrates why the CAA does not occupy the entire field of climate change mitigation: climate change is a problem of a magnitude greater than any contemplated by the CAA. The first purpose of the Act is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare,"187 yet the emissions of greenhouse gases do more than just degrade air resources. Ocean acidification, for instance, is another nasty consequence of anthropogenic emissions of greenhouse gases.¹⁸⁸ While the CAA does include effects to water as a part of the public welfare,¹⁸⁹ the Act is limited to the public welfare of the United States population.¹⁹⁰ The world's oceans do not belong to the United States, and failing to address that aspect of emissions could lead to retaliation from other nations. Further, the Act only addresses anthropogenic emissions of greenhouse gases, and not change.¹⁹¹ deforestation-the other major driver of climate Therefore, American Electric would not bar a federal common law nuisance claim against companies who contribute to deforestation. The Court correctly found that-in the narrow circumstances

question is not "whether the field has been occupied . . . in a particular manner." *Id.* at 111.

^{185.} Massachusetts v. EPA, 549 U.S. 497, 512 (2007) (arguing that "climate change had its own 'political history'" and that Congress did not intend the CAA to apply to international atmospheric deposits). This was one of EPA's arguments in *Massachusetts. Id.*

^{186.} *Am. Elec. Power*, 131 S. Ct. at 2539–40 (noting that expert agencies are better suited to dealing with "issues of this order").

^{187. 42} U.S.C. § 7401(b)(1).

^{188.} ALLISON ET AL., *supra* note 5, at 36 (noting that the CO₂ content of the oceans have risen by about 100 gigatons since the beginning of the industrial revolution). This acidification threatens marine life, and could be particularly threatening to coral reefs. *See* U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 151–52.

^{189. 42} U.S.C. § 7602(h).

^{190.} Id. § 7401(b)(1) (noting that the Act seeks to protect the "Nation's ... population").

^{191.} U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 1, at 14 (noting that deforestation accounts for about 20% of anthropogenic contributions to atmospheric greenhouse-gas levels).

presented by the case—the CAA displaces federal common law claims of nuisance.¹⁹² Unfortunately for both advocates of climate change action and the population at-large, global warming is not confined to those circumstances.

2. Paralysis by [Lack of] Analysis

The Supreme Court's decision in *American Electric* fails to answer some questions posed by climate change litigation while simultaneously creating others. The decision regarding displacement was fairly straightforward and clear,¹⁹³ but there was a distinct lack of analysis regarding the other issues of the case.¹⁹⁴

a. Abating Monetary Claims?

The Court effectively eliminated federal common law nuisance claims against electric utilities in the fight against global warming,¹⁹⁵ at least in cases where injunctive relief is the desired result.¹⁹⁶ It is hard to see how any plaintiff would survive a similar displacement analysis in bringing a federal claim for money damages. Indeed, in September 2012, the Ninth Circuit Court of Appeals ruled that *American Electric*'s holding applied to damages cases.¹⁹⁷ In

^{192.} See Adler, supra note 159, at 110–11.

^{193.} *Id.* (noting that the Justices were in complete agreement on the issue of displacement and that the "clear language" of *Milwaukee II* demanded such a finding).

^{194.} See Daniel A. Farber, Standing on Hot Air: American Electric Power and the Bankruptcy of Standing Doctrine, 121 YALE L.J. ONLINE 121, 121 (2011), available at http://yalelawjournal.org/2011/09/13/farber.html (noting that the Court "devoted only a few cryptic sentences" to discussing standing); Hari M. Osofsky, AEP v. Connecticut's Implications for the Future of Climate Change Litigation, 121 YALE L.J. ONLINE 101, 101 (2011), available at http://yalelawjournal.org/2011/09/13/osofsky.html (noting that the American Electric decision "largely sidesteps" several of the issues).

^{195.} Maxine Burkett, *Climate Justice and the Elusive Climate Tort*, 121 YALE L.J. ONLINE 115, 117 (2011), *available at* http://yalelawjournal.org/2011/09/13/burkett.html (noting such claims are barred as long as the EPA has regulatory authority).

^{196.} Michael B. Gerrard, *What Litigation of a Climate Nuisance Suit Might Look Like*, 121 YALE L.J. ONLINE 135, 135 (2011), *available at* http://yalelawjournal.org/2011/09/13/gerrard.html (suggesting federal common law claims for money damages may still survive). Indeed, the *American Electric* case explicitly refers to claims seeking injunctive relief throughout the opinion, referring to the "common law right to seek abatement of carbon-dioxide emissions" and claims seeking "curtailment of greenhouse gas emissions." Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2537 (2011).

^{197.} Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 857 (9th Cir. 2012) ("AEP

affirming the lower court's decision in *Kivalina*, the Ninth Circuit held that "under current Supreme Court jurisprudence, if a cause of action is displaced, displacement is extended to all remedies."¹⁹⁸ Whether the Ninth Circuit's reasoning is sound is beyond the scope of this article.¹⁹⁹

Yet it is difficult to see why the Supreme Court did not explicitly hold that the CAA preempted all federal common law claims of nuisance against electric utilities for greenhouse gas emissions.²⁰⁰ Certainly, such a holding would have clarified the issue for future litigants. The Court, however, declined to even analyze whether the plaintiffs properly stated federal common law claims.²⁰¹ While Justice Ginsburg dismissed the issue as an "academic question,"²⁰² it is quite likely that a litigant or enterprising attorney will make it a practical reality, wasting judicial resources on an issue that could have been settled.

b. The State of State Claims

The Court did not rule on the state law claims of nuisance.²⁰³ Traditionally, the Court is less willing to find preemption of state law by the federal government, requiring a finding of a manifest congressional intent to preempt the state law.²⁰⁴ By failing to address

extinguished Kivalina's federal common law public nuisance damage action, along with the federal common law public nuisance abatement actions.").

^{198.} Id.

^{199.} In reaching its holding, the Ninth Circuit relied on prior Supreme Court decisions in *Exxon Shipping Co. v. Baker*, 554 U.S. 471 (2008), and *Middlesex County Sewerage Authority v. National Sea Clammers Association*, 453 U.S. 1 (1981). *Id.* The concurring opinion, however, noted that there was "tension in Supreme Court authority on whether displacement of a claim for injunctive relief necessarily calls for displacement of a damages claim." *Id.* at 858 (Pro, J., concurring).

^{200.} The Court wrote "that the Clean Air Act displaces federal common law." *Am. Elec. Power*, 131 S. Ct. at 2540. This was surprisingly vague language by the Court. Read in context, it might suggest that the CAA displaces all federal common law nuisance claims relating to greenhouse gases emitted by power plants. It almost certainly does not mean that the CAA now displaces *all* federal common law. As it is unclear, this holding cannot serve as a definitive displacement to anything but federal common law claims seeking abatement or injunctive relief against greenhouse gase emitters.

^{201.} Id. at 2537.

^{202.} Id.

^{203.} Id. at 2540 (noting that the state law claims had not been briefed).

^{204.} *See id.* at 2537; Altria Grp., Inc. v. Good, 555 U.S. 70, 77 (2008); Adler, *supra* note 159, at 112 (noting more than a federal act is required to preempt state law).

851

the issue, the Court again guarantees that courts will hear state law claims for the abatement of greenhouse gases.²⁰⁵ In Georgia, for instance, a plaintiff might bring a nuisance suit under terms that are more favorable to plaintiffs than federal nuisance claims.²⁰⁶ Theoretically, certain states might become hotspots of global warming nuisance suits.²⁰⁷ Consequently, companies may face the prospect of multiple suits in various states with no certainty of a single outcome.²⁰⁸ Without proper briefing, however, the Court was in no position to decide the issue, and properly remanded the remaining claims.²⁰⁹

c. Splitting on Standing

The Court's equally divided affirmation of the Second Circuit's opinion on jurisdiction did little to clarify the issue of standing in climate change litigation cases.²¹⁰ Justice Ginsburg wrote that the dissenters on this issue either distinguished *American Electric* from *Massachusetts v. EPA* or simply adhered to their dissents from that case.²¹¹ Unfortunately, this murky approach does little to inform future litigants. Were new plaintiffs to reach the Supreme Court— perhaps seeking monetary damages in a state law claim—would those dissenting Justices again distinguish the case from *Massachusetts v. EPA*, or simply decide they did not wish to follow the precedent they had previously set? Indeed, Justice Ginsburg's

^{205.} See Osofsky, supra note 194, at 103 (finding that American Electric does not affect the "large number" of state law claims challenging power plants emissions of greenhouse gases).

^{206.} Georgia statutory law describes a nuisance as "anything that causes hurt, inconvenience, or damage to another" so long as the inconvenience would affect an "ordinary, reasonable man." O.C.G.A. § 41-1-1 (2012). The Restatement, contrastingly, requires an "unreasonable interference" with rights. RESTATEMENT (SECOND) OF TORTS § 821B (1979). A common-sense analysis would indicate that the former is a lower threshold to meet than the latter, and knowing that federal claims are now barred, litigants might be encouraged to bring their claims to the state courts.

^{207.} Delaware, known for its flexible corporate law, is the most prominent state for corporate lawsuits. Faith Stevelman, *Regulatory Competition, Choice of Forum, and Delaware's Stake in Corporate Law*, 34 DEL. J. CORP. L. 57, 60 (2009) (noting "Delaware's preeminence in corporate law"). Could a similar situation emerge in climate change litigation law?

^{208.} See supra text accompanying notes 205-07.

^{209.} Am. Elec. Power, 131 S. Ct. at 2540.

^{210.} Farber, *supra* note 194, at 122 (noting that the court's decision left the reasoning of individual justices "mysterious").

^{211.} Am. Elec. Power, 131 S. Ct. at 2535.

subtle jab at the dissenting Justices hints that political ideology may have been a factor.²¹² Additionally, it is unclear how the holding affects the standing of private plaintiffs in future climate change litigation suits.²¹³

3. Scientific Complexity or Political Uncertainty?: Dicta as Distortion

a. Every Breath You Take ... Could Lead to Federal Lawsuits

Perhaps the most disappointing aspects of the *American Electric* decision were the dicta that seem to question the importance of action on anthropogenic global warming.²¹⁴ While the Court in *Massachusetts v. EPA* noted "[t]he harms associated with climate change are serious and well recognized,"²¹⁵ the Court in *American Electric*, in comparing the CAA to the CWA, noted "Congress could hardly preemptively prohibit every discharge of carbon dioxide" as humans emit carbon dioxide "merely by breathing."²¹⁶ This dictum gives credence to the slippery-slope argument, suggesting that greenhouse gas emissions are different from water pollution and

^{212.} Farber, *supra* note 194, at 122 (noting the ideological nature of Article III standing and that the conservative Justices did not find standing in *Massachusetts v. EPA*). Professor Farber interprets the *American Electric* opinion as indicating that the dissenting Justices from *Massachusetts v. EPA* simply "held their ground." *Id.*

^{213.} Compare Osofsky, supra note 194, at 103 (noting the American Electric decision does not clarify whether nongovernmental entities or persons acting alone have standing to bring claims), with Environmental Law and Climate Change Community Podcast: Steve Jones Discusses American Electric Power Co. v. Connecticut, LEXISNEXIS COMMUNITIES (Aug. 8, 2011, 1:00 PM), http://www.lexisnexis.com/community/environmental-climatechangelaw/blogs/climatechange/archive /2012/10/17/lexisnexis ae00 -environmental-law-and-climate-change-community-podcast 3a00 -

steve-jones-on-american-electric-power-co.-v.-connecticut.aspx (claiming that state, city, and private plaintiffs all have standing to bring claims).

^{214.} See Burkett, *supra* note 195, at 118 (noting that the Court took "time in its relatively slender decision to inject doubt about elements of climate science").

^{215.} Massachusetts v. EPA, 549 U.S. 497, 521 (2007) (noting that the EPA itself relied on an "objective and independent assessment" that pointed to the numerous significant harms resulting from global warming) (quoting Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,930 (Envtl. Prot. Agency Sept. 8, 2003) (notice))).

^{216.} *Am. Elec. Power*, 131 S. Ct. at 2538. This argument fails to recognize that humans also emit effluent wastes merely through their use of the restroom, yet the CWA still manages to prohibit the "discharge of any pollutant" unless the polluter obtains a permit. 33 U.S.C. § 1311(a) (2006).

could subject every citizen and small business to lawsuits.²¹⁷ Indeed, one amicus brief for the petitioners suggested that an affirmative ruling by the Court would "permit literally anyone alleging climate-change based damages to sue any entity or natural person in the world."²¹⁸

853

While the slippery-slope argument is alluring, it is faulty and unnecessary. Taking the extreme example of a lawsuit based on a person breathing, basic principles of causation would likely prevent such non-meritorious claims from succeeding. Quite simply, breathing, by its very nature, cannot contribute to the anthropogenic global warming; indeed, human emissions of carbon dioxide—generated by breathing—are part of a closed-loop cycle.²¹⁹

While human breathing may not become a source of litigation, there is some merit in the fears that a judicial affirmation in *American Electric* might have subjected small businesses to suits for their emissions.²²⁰ But, the Court needed only look at the CAA itself and its definitional limits for "major stationary source[s]" to see that setting reasonable limits is quite feasible.²²¹

The Court also reasoned that district courts are simply not capable of imposing injunctions on an "ad hoc, case-by-case" basis,²²² or that

^{217.} The amicus brief of the United States Chamber of Commerce depicts suits that "will destabilize our economy, undermine our democratic process, and impact sensitive foreign policy consideration." Brief Amicus Curiae of the Chamber of Commerce of the United States of America in Support of Petitioners at 5–6, Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011) (No. 10-174), 2011 WL 396512 at *5.

^{218.} Id. at 5.

^{219.} Frequently Asked Global Change Questions, CARBON DIOXIDE INFO. ANALYSIS CENTER, http://cdiac.ornl.gov/pns/faq.html (last visited Nov. 7, 2012). All the carbon in the human body comes from plants, either that we eat, or that the animals we eat ate. *Does Breathing Contribute to CO2 Buildup in the Atmosphere?*, SKEPTICAL SCI., http://www.skepticalscience.com/breathing-co2-carbon-dioxide-intermediate.htm (last updated Sept. 26, 2010). Those plants recently absorbed carbon dioxide from the atmosphere, thus forming the cycle with human breathing. *Id.*

^{220.} In *Massachusetts v. EPA*, for instance, Massachusetts pled injuries that were fairly de minimis at the time. Massachusetts v. EPA, 549 U.S. at 521–23, 526 (noting only 10–20 centimeters of global sea level rise and that the risk of catastrophic harm to the State was "remote"). A crafty lawyer could easily argue that if such de minimis impacts were sufficient to create an actionable injury, certainly any small business's contribution to global greenhouse gas levels would be enough to warrant judicial action.

^{221. 42} U.S.C. § 7602(j) ("[T]he terms 'major stationary source' and 'major emitting facility' mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant.").

^{222.} Am. Elec. Power, 131 S. Ct. at 2539. This opinion was contrary to the Second Circuit's opinion that district court judges routinely deal with complex scientific issues when they relate to federal

such injunctions would invariably lead to inequalities. Yet the courts already hear cases based on complex scientific issues²²³—including both products liability and nuisance claims—and it is possible that decisions or settlements in climate change nuisance cases would force Congress to speak directly on the issue with a new Act or amendments, as they did after *Milwaukee I*.²²⁴

The decision in *Massachusetts v. EPA* essentially ensured that claims like those brought in *American Electric* would not survive.²²⁵ The Court reasoned properly that the CAA, in light of the decision in *Massachusetts v. EPA*, preempted federal common law claims seeking abatement of greenhouse gas emissions from fossil-fuel-fired power plants.²²⁶ Justice Ginsburg's dictum serves only to give ammunition to future litigants in climate change litigation not preempted by *American Electric*.

b. The Court as Climatologist?

Justice Ginsburg's dicta also indicated that judges may not "commission scientific studies or convene groups of experts for advice."²²⁷ This implies two things: first, federal courts are not competent to handle complex scientific issues; and second, that courts would need to commission more research on climate change before competently deciding climate change cases. As to the first, courts frequently make decisions based on studies and testimony of experts.²²⁸ The Court declared the need for trial courts to handle

common law claims. *Connecticut II*, 582 F.3d 309, 328–29 (2d Cir. 2009), *cert. granted*, 131 S. Ct. 813 (2010), *rev'd*, 131 S. Ct. 2527 (2011).

^{223.} *Connecticut II*, 582 F.3d at 329.

^{224.} As Justice Rehnquist notes in *Milwaukee II*, after *Milwaukee I* Congress completely restructured water pollution laws within the United States. *Milwaukee II*, 451 U.S. 304, 317 (1981).

^{225.} Adler, *supra* note 159, at 109–10 (noting that many of the same litigants were involved in both the *Massachusetts v. EPA* and *American Electric* cases, and that the decision in *Massachusetts v. EPA* "all but assured" the decision in *American Electric*).

^{226.} *Id.* at 110–11 (noting that the Second Circuit ignored the clear reasoning of *Milwaukee II* requiring only legislative action, and that the relevant question was not the manner in which Congress occupied the field, but only *if* it had occupied the field).

^{227.} Am. Elec. Power, 131 S. Ct. at 2540.

^{228.} The Supreme Court, in determining that carbon dioxide was a pollutant under CAA definitions in *Massachusetts v. EPA*, relied heavily on the testimony of climatologist Michael MacCracken. *See* Massachusetts v. EPA, 549 U.S. 497, 521–25 (2007).

complex scientific issues—in *Daubert v. Merrill Dow Pharmaceuticals*—when it established that a trial court judge "must ensure that any and all scientific testimony or evidence" is both relevant and reliable.²²⁹ While the *Daubert* standard is not used in administrative challenges like *Massachusetts v. EPA*,²³⁰ it exists precisely to allow judges to act as gatekeepers against poor scientific evidence.²³¹

Despite the second implication of Justice Ginsburg's comment, courts do not need to commission new studies on climate change to decide climate change cases. First, it is not the courts' job to create new scientific data, but rather to exercise gatekeeping duties and only admit "[p]ertinent evidence based on scientifically valid principles."²³² Second, should the courts need more clarity on any particular area of the science, there are almost certainly studies dealing with the issue.²³³ In *Daubert*, Justice Blackmun asserted the Court should be more optimistic in the capabilities of juries to wade through scientific evidence.²³⁴ The Court should likewise exhibit the same confidence in district courts to handle cases dealing with complex scientific material.

2013]

^{229.} Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 589 (1993).

^{230.} Ryan Hackney, Note, *Flipping* Daubert: *Putting Climate Change Defendants in the Hot Seat*, 40 ENVTL. L. 255, 260 (2010) (noting that neither *Daubert* nor the Federal Rules of Evidence apply to administrative law cases).

^{231.} Id. at 264-65 (noting Daubert's two-prong test for admitting scientific evidence).

^{232.} Daubert, 509 U.S. at 597.

^{233.} The history underpinning the science of climate change-and humanity's role in it-stretches back as far as 1824, when Joseph Fourier first noted that "atmospheric gases trap heat, raising the surface temperature" of the earth. POWELL, supra note 20, at 36. There are hundreds of studies published just in the few years since the cutoff to the fourth IPCC assessment. ALLISON ET AL., supra note 5, at 5. This is not to imply that climate science is settled on every issue; there are many areas of uncertainty left in the field of climate science that require more research. See BERNSTEIN ET AL., supra note 73, at 72-73 (noting both "robust findings" and "key uncertainties" in climate science). Nevertheless, the climatescience community is confident that the climate is changing and that human emissions of greenhouse gases constitute the major cause. U.S. GLOBAL CHANGE RESEARCH PROGRAM, supra note 1, at 12. Even with uncertainties, it is clear humanity faces grave consequences if we do not significantly reduce greenhouse gas emissions. BERNSTEIN ET AL., supra note 73, at 65, 72-73 ("Adaptation is necessary both in the short term and longer term to address impacts resulting from the warming that would occur even for the lowest stabilisation scenarios assessed. . . . Unmitigated climate change would, in the long term, be likely to exceed the capacity of natural, managed and human systems to adapt."); U.S. GLOBAL CHANGE RESEARCH PROGRAM, supra note 1, at 12. There is enough science for courts to make decisions on climate change litigation.

^{234.} Daubert, 509 U.S. at 596.

While the Court was correct that the CAA displaced federal common law claims seeking abatement of greenhouse gas emissions from fossil-fueled-fired power plants, it incorrectly asserted that absent such displacement, district courts have neither the knowledge base nor the ability to hear such claims. With its distracting decision, the Court clarified only that federal common law nuisance claims for abatement of emissions by fossil-fuel-fired power plants are preempted by federal law. Litigants, lawyers, and legislators are left to determine the best path forward in the fight against catastrophic climate change, and the role the courts will have in that fight.

III. AMERICAN ECLECTIC: USING ALL LITIGATION OPTIONS IN THE FIGHT AGAINST GLOBAL WARMING

While the decision in *American Electric* answered few questions, the Court was clear that expert agencies under the authority of the federal government are in the best position to address global warming.²³⁵ Nevertheless, the current regulatory system is inadequate to handle climate change,²³⁶ and until Congress speaks directly on climate change *in toto* with new legislation, states and advocates will continue to initiate climate change litigation. Climate change advocates, including states, face two questions: what litigation options are still available, and is litigation still an effective means of effectuating change in light of the EPA's authority to regulate greenhouse gas emissions? The answers are fairly simple: many litigation options in the fight against climate change.

A. Litigation Options

American Electric removed one arrow from the litigation quiver of climate change advocates—federal common law nuisance claims

^{235.} See Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2539 (2011).

^{236.} For instance, the CAA does not address global warming contributions from deforestation, nor from stationary sources that do not qualify as major. It does not provide a means for moving citizens whose land is lost from climate change, as in *Kivalina*, nor does it provide a means of recovery for private citizens who have lost their land, their homes, or their lives from climate change.

seeking abatement of greenhouse gas emissions from fossil-fuel-fired power plants.²³⁷ The *American Electric* dicta suggest that other forms of climate change litigation would suffer the same fate upon reaching the Court.²³⁸ Yet by failing to explicitly rule on anything other than the narrow issue, the Court left the door open for many forms of climate change litigation.

857

Commentators have suggested various approaches to climate change litigation.²³⁹ Nuisance still remains an option in state law claims²⁴⁰ and potentially in federal common law claims seeking damages as opposed to abatement,²⁴¹ though the Court's opinion in *American Electric* suggests that the judicial system is not suited to handle such claims.²⁴² Tort law also provides other avenues of litigation potentially available to litigants, including claims for misrepresentation, fraud, and product liability.²⁴³

The tobacco industry lawsuits of the 1990s may provide guidance to climate change litigants in tort suits. Some commentators suggest using the tobacco litigation as a model for litigation against oil and car companies for health dangers related to their pollutions,²⁴⁴ and a

^{237.} See Burkett, supra note 195, at 115.

^{238.} Indeed, much of the dicta indicate that the climate change issues are too large and complex for the judiciary. *See Am. Elec. Power*, 131 S. Ct. at 2539–40.

^{239.} See generally Robin Kundis Craig, Adapting to Climate Change: The Potential Role of State Common-Law Public Trust Doctrines, 34 VT. L. REV. 781, 781 (2010) (using public trust doctrines in "adaptive management-based climate change adaptation regimes"); David A. Grossman, Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation, 28 COLUM. J. ENVTL. L. 1 (2003) (developing various tort theories of climate change litigation); Angela Lipanovich, Comment, Smoke Before Oil: Modeling a Suit Against the Auto and Oil Industry on the Tobacco Tort Litigation is Feasible, 35 GOLDEN GATE U. L. REV. 429 (2005) (using tobacco tort litigation as a model for suits against the auto and oil companies).

^{240.} Adler, supra note 159, at 112.

^{241.} Gerrard, *supra* note 196, at 135 (suggesting that federal common law claims for money damages may still survive). The litigation begun in *Native Village of Kivalina v. ExxonMobil* is pending review in the Ninth Circuit, and may provide further guidance. *See* Burkett, *supra* note 195, at 116. The Ninth Circuit will thus have a chance to decide whether the CAA also preempts federal common law claims of nuisance seeking damages, among the other issues the case presents. For a discussion of the case, see *supra* Part I.C.1.c.

^{242.} Adler, *supra* note 159, at 112 (noting that the *American Electric* decision could "chill" state based nuisance claims).

^{243.} See Grossman, supra note 239, at 39. But see Donald G. Gifford, Climate Change and the Public Law Model of Torts: Reinvigorating Judicial Restraint Doctrines, 62 S.C. L. REV. 201, 204 (2010) (noting that the tort model is the "wrong tool").

^{244.} See generally Lipanovich, supra note 239, at 429. But see Thomas A. Donovan, Litigation: An Antidote for Democracy, FED. LAW., Feb. 2007, at 8, 9, 28 (arguing that tobacco litigation is not a valid

similar strategy may be used in the climate change context. Critics have argued that the comparison of the tobacco and fossil fuel industries is not valid by noting that carbon dioxide itself is not harmful to humans, unlike tobacco smoke.²⁴⁵ It is unclear, however, that a substance must be inherently dangerous to humans to be the subject of litigation.²⁴⁶ Moreover, the comparison between the industries is one of form rather than substance. Both the fossil fuel and tobacco industries have the financial resources to extend litigation as long as possible.²⁴⁷ Further, both industries have sought to obfuscate the truth about the dangers of their products.²⁴⁸ If litigants can reach the discovery stage against major fossil fuel companies, they may be able to uncover documents similar to those resulting from tobacco litigation that clearly showed the tobacco companies knew their products were harmful.²⁴⁹ Indeed, some similar internal documents from fossil fuel companies have already been exposed.²⁵⁰ Companies may begin settling if more evidence of deliberate misinformation can be found.

Finally, many federal statutes provide avenues of litigation relating to climate change. Citizen suits are available under the Endangered Species Act $(ESA)^{251}$ and the CAA.²⁵² While the National

comparison for global warming suits).

^{245.} Donovan, *supra* note 244, at 9, 28 ("[C]arbon dioxide is an essential component of the basic food cycle by which green plants produce oxygen and sugars."). Donovan also uses the same fallacious reasoning that led Justice Ginsburg to make her "merely by breathing" comment. *Id.* at 28 ("Every breath a human being takes produces carbon dioxide.").

^{246.} Water, for instance, is also a basic building block of animal and plant life, yet few would protest a landowner suing to stop another landowner from dumping thousands of gallons of water onto the first landowner's property.

^{247.} *See* Grossman, *supra* note 239, at 6 (noting both the tobacco and fossil fuel industries' "ability to challenge everything" resulting from vast financial resources).

^{248.} See generally ORESKES & CONWAY, supra note 20 (discussing both the tactics and persons involved in creating doubt about the dangers of smoking and global warming).

^{249.} To view documents unearthed in tobacco litigation, see generally TOBACCODOCUMENTS.ORG, http://tobaccodocuments.org (last visited July 19, 2012). Included among the documents is the infamous 1969 "doubt is our product" memo that suggested using doubt to counter the body of facts linking smoking to cancer. *Smoking and Health Proposal*, TOBACCODOCUMENTS.ORG, *supra*.

^{250.} See UNION OF CONCERNED SCIENTISTS, SMOKE, MIRRORS & HOT AIR: HOW EXXONMOBIL USES BIG TOBACCO'S TACTICS TO MANUFACTURE UNCERTAINTY ON CLIMATE SCIENCE 10 (2007), available at www.ucsusa.org/assets/documents/global_warming/exxon_report.pdf.

^{251. 16} U.S.C. § 1540(g) (2006). See generally Lawrence Liebesman, Elizabeth Lake & Peter Landreth, *The Endangered Species Act and Climate Change*, 39 ENVTL. L. REP. NEWS & ANALYSIS 11173 (2009); Hanspeter Walter, Comment, *The Outer Limits of Endangered Species Act Liability—the*

Environmental Policy Act (NEPA) does not have a citizen suit provision, citizens can challenge compliance with NEPA under the Administrative Procedure Act (APA).²⁵³

859

Climate change litigants will have to address many of the issues the Court left undecided in *American Electric*. Discussing each of these issues in detail is beyond the scope of this Comment.²⁵⁴ It is fairly certain, however, that in any tort-related suits, the issues of standing and political question will continue to play a role. The purpose of the lawsuit, however, will likely dictate which type of claim a litigant chooses, and any claim—whether regulatory or for damages—may play a part in combating global warming.

B. The Heat Goes On: Litigation As A Tool

1. Monitoring Current Enforcement

In light of the EPA's authority to regulate greenhouse gas emissions and the Court's decision in *American Electric*, global warming activists must ask themselves whether litigation is still a useful way to spur governmental action. Indeed, it may be that such litigation is becoming counterproductive. Is it time to "call off the dogs" and let the federal government work? The answer is a resounding no.²⁵⁵ Concerned advocates and states must continue to litigate climate change issues.

ESA's Indirect Effect Regulation and Its Application to Climate Change, 41 ENVTL. L. REP. NEWS & ANALYSIS 10204 (2011).

^{252. 42} U.S.C. § 7604 (2006). This section allows for citizen suits against any party for, *inter alia*, violating emissions standards, but not for recovery of damages. *Id.* § 7604(a).

^{253. 86} AM. JUR. 3D *Proof of Facts* § 12 (2005). Under the APA, citizens may seek judicial review of agency decisions to determine if those decisions were arbitrary and capricious. 5 U.S.C. §§ 702, 706(2); *see also* Amy L. Stein, *Climate Change Under NEPA: Avoiding Cursory Consideration of Greenhouse Gases*, 81 U. COLO. L. REV. 473, 473 (2010) (arguing that while NEPA does not require consideration of climate change effects, "inclusion of climate change in NEPA documentation is inevitable").

^{254.} For more information on the issue of standing, see Farber, *supra* note 194, at 121. For more information on the political question doctrine as it applies to climate change litigation, see generally James R. May, AEP v. Connecticut *and the Future of the Political Question Doctrine*, 121 YALE L.J. ONLINE 127 (2011), *available at* http://yalelawjournal.org/2011/09/13/may.html.

^{255.} But see David A. Dana, *The Mismatch Between Public Nuisance Law and Global Warming*, 18 SUP. CT. ECON. REV. 9, 11–12 (2010) (noting that the common law courts are not the "appropriate institutions to address the problem of climate change").

Climate change is an issue that requires action sooner rather than later.²⁵⁶ While the EPA, as an expert agency, may be in the best position to deal with the issue, as the American Electric Court suggests, it would be unwise for advocates to postpone litigation for two reasons: first, the EPA's ability and authority to regulate greenhouse gases are subject to change; and second, even if the EPA regulates those emissions, the process may be delayed. The EPA, an administrative agency, is subject to policy changes with each new president.²⁵⁷ Future policy changes may undermine any regulatory action the EPA takes on greenhouse gas emissions.²⁵⁸ Moreover, the agency is subject to the whim of Congressional funding. Hostile Republican legislators in 2011 threatened the EPA's ability to enforce any of its regulations.²⁵⁹ Congressional rhetoric portrays the agency as a job-killing behemoth.²⁶⁰ Precious time will be lost if advocates refrain from litigating the issue and Congress manages to limit or repeal the agency's ability to regulate greenhouse gas emissions.

Even if Congressional threats to the EPA do not succeed, *American Electric* suggests that the EPA's authority to regulate greenhouse gas emissions displaces federal common law nuisance claims, *even if* the EPA refuses to regulate greenhouse gas emissions from existing power plants.²⁶¹ Delays in the rulemaking process

^{256.} See ALLISON ET AL., supra note 5, at 7 ("The turning point must come soon.").

^{257.} See Shahrzod Hanizavareh, *Affirming the Status Quo? Regulating the National Ambient Air Quality Standards for Ozone*, 36 ECOLOGY L.Q. 599, 604 (2009) (noting that it is difficult to determine what priorities the EPA will follow under a "new administration").

^{258.} See May, supra note 254, at 131 (noting that many 2012 presidential candidates "have made blocking EPA action on climate change a priority").

^{259.} See Lisa P. Jackson, Op-Ed, "Too Dirty to Fail"?: House Republicans' Assault On Our Environmental Laws Must Be Stopped, L.A. TIMES, Oct. 21, 2011, at A31, available at http://articles.latimes.com/2011/oct/21/opinion/la-oe-jackson-train-act-20111021 (noting that Republicans in the 2011 House of Representatives have "averaged roughly a vote every day...to undermine the Environmental Protection Agency").

^{260.} See James Rosen, Regulation Nation: EPA Chief Rejects GOP Charges She's Imposing Job-Killing Rules, FOXNEWS.COM (Sept. 22, 2011), http://www.foxnews.com/politics/2011/09/22/regulation -nation-epa-chief-rejects-gop-charges-shes-imposing-job-killing-rules/.

^{261.} Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2538–39 (2011). Justice Ginsburg did note that an EPA decision not to issue regulations would be subject to judicial review, albeit on an arbitrary and capricious standard. *Id.* at 2539.

could postpone any actual regulation of those emissions.²⁶² Furthermore, the EPA's authority to regulate and the regulations themselves are often challenged in court,²⁶³ which could lead to further delay in implementing new regulations. Thus, advocates must use litigation to put pressure on the EPA to ensure it complies with its duty to regulate greenhouse gases. That pressure should be shifted to fossil fuel companies if the EPA fails to issue regulations that are sufficient to make an impact on global warming.

2. Turning Up the Heat on Congress: Litigating to Legislate

The only solution to anthropogenic global warming is a concerted global effort.²⁶⁴ Such an effort cannot succeed without the leadership, or at least support, of the United States.²⁶⁵ Real change in the United States requires comprehensive legislation that covers all facets of global warming: greenhouse gas emissions, land use, efficiency, and sustainable growth. In addition to maximizing time until the EPA either issues regulations or is prevented from doing so by Congress, litigation advances the goal of such comprehensive legislation in three ways.

First, litigation keeps the pressure on fossil fuel companies and other large emitters. Comprehensive legislation is a near impossibility as long as the largest contributors to global greenhouse gas emissions are able to exert powerful control over the nation's

^{262.} Transcript of Oral Argument at 51, Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011) (No. 10-174), *available at* http://www.supremecourt.gov/oral_arguments/argument_transcripts/10-174.pdf (noting that "[a] lot can happen to delay or derail" the EPA's promise to issue EGU limits in May, 2012).

^{263.} Indeed, the Tailoring Rule and Endangerment findings have already been challenged, and, thankfully, upheld. Coal. for Responsible Regulation, Inc. v. EPA, 684 F.3d 102, 113–14 (D.C. Cir. 2012). For more information about this case, see generally Ayesha Rascoe & Jonathan Stempel, *U.S. Court Upholds EPA's Greenhouse Gas Rules*: Coalition for Responsible Regulation v. EPA, WESTLAW J. ENVTL., July 3, 2012, at 1.

^{264.} See ALLISON ET AL., supra note 5, at 7 ("To stabilize climate, a decarbonized global society with near-zero emissions of CO_2 and other long-lived greenhouse gases—needs to be reached well within this century.").

^{265.} Bill Blakemore, *U.N. Leader on Global Warming: We Need U.S. Leadership*, ABC NEWS (Sept. 24, 2007), http://abcnews.go.com/Technology/GlobalWarming/story?id=3645491&page=1 (noting that China will not impose strict carbon emissions limits until the United States does, and that the United States "must set the example").

energy policy and the climate change discussion.²⁶⁶ While the companies have the financial resources to battle in court, it is imperative that advocates and states make them do so. One need only look at the tobacco litigation of the 1960s through the 1990s to understand that success against a major industry is possible.²⁶⁷ Here, though, the stakes are even higher. The chances of obtaining a largescale settlement from the fossil fuel industry is likely smaller now that the Court has ruled that some federal common law nuisance claims are displaced, because lower courts may hold that nuisance claims for money damages are also displaced.²⁶⁸ However, advocates of climate change legislation should keep trying to obtain such a settlement through other tort remedies. A substantially damaging settlement may encourage fossil fuel companies to reposition their assets into more sustainable technologies to avoid more settlements, thus minimizing future emissions. Alternatively, if the fossil fuel companies feel threatened enough, they may begin to use their clout to persuade Congress to pass comprehensive legislation to protect their industry from such wide-ranging suits.²⁶⁹

Second, litigation keeps the issue in the public consciousness during a time when the media is failing at its responsibilities to the public.²⁷⁰ The media's coverage of climate change has been both inadequate and misleading.²⁷¹ Indeed, some polls suggest Americans

^{266.} See Dan Froomkin, *How the Oil Lobby Greases Washington's Wheels*, HUFFINGTON POST, http://www.huffingtonpost.com/2011/04/06/how-the-oil-lobby-greases_n_845720.html (last updated June 6, 2011, 6:12 AM) (noting the difficulty of repealing oil subsidies due to the influence of the oil lobby). For a discussion of the way climate science was manipulated in the Bush administration, see HOGGAN & LITTLEMORE, *supra* note 20, at ch. 13.

^{267.} Hessler, *supra* note 24, at 437–38 (noting that after decades of successful litigation, tobacco companies finally were required to pay out massive settlements).

^{268.} See, e.g., Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012); see also Adler, supra note 159, at 112 (noting other nuisance claims may be "chilled").

^{269.} There is obviously no guarantee that comprehensive legislation crafted in response to fossil fuel industry lobbying would achieve the goals of climate change advocates. Indeed, such legislation could produce results that prevent positive results in slowing or halting climate change. It would, however, provide more certainty for litigants and establish a framework in which advocates and states could operate.

^{270.} See Joe Romm, The New York Times Asks "Where Did Global Warming Go?" While Ignoring Its Own Failed Coverage, THINKPROGRESS.ORG (Oct. 16, 2011, 12:48 PM), http://thinkprogress.org/romm/2011/10/16/345114/ny-times-asks-where-did-global-warming-go-while-ignoring-its-own-failed-coverage/.

^{271.} Matthew F. Pawa & Benjamin A. Krass, Behind the Curve: The National Media's Reporting on

believe less in climate change now than just a few years ago.²⁷² Litigation, especially high-profile litigation, forces the issue into the public sphere, even though it may receive a negative connotation in the media. The more the public hears about the issue, the greater chance that people will demand their local and state politicians take action.

Finally, litigation sends a clear message to Congress that simple appeasements will not suffice.²⁷³ Comprehensive legislation is needed—legislation that mandates consistently declining emissions levels while simultaneously propping up replacement sources of energy.²⁷⁴ Fill-in measures, like the EPA's authority to regulate emissions from power plants, are not sufficient. Humans need energy, and there can be no doubt that we must strike a balance between energy needs and risks to the environment. Catastrophic climate change, however, is simply a risk that we cannot take; it overwhelms the short-term benefits we receive from the burning of fossil fuels.²⁷⁵ Advocates and states must demonstrate to Congress

274. See supra note 264.

Global Warming, 33 B.C. ENVTL. AFF. L. REV. 485, 485 (2006) ("[T]he press has unwittingly distorted coverage of global warming science by uncritically accepting the industry view that the science is in dispute."); *see also* AARON HUERTAS & DENA ADLER, UNION OF CONCERNED SCIENTISTS, IS NEWS CORP. FAILING SCIENCE?: REPRESENTATIONS OF CLIMATE SCIENCE ON FOX NEWS CHANNEL AND IN THE WALL STREET JOURNAL OPINION PAGES 7 (2012), *available at* http://www.ucsusa.org/assets/docu ments/global_warming/Is-News-Corp-Failing-Science.pdf (finding "93 percent of 40 representations of climate science on Fox News Channel to be misleading"); Ben Dimiero, *FOXLEAKS: Fox Boss Ordered Staff to Cast Doubt on Climate Science*, MEDIAMATTERS FOR AM. BLOG(Dec. 15, 2010, 8:00 AM), http://mediamatters.org/blog/201012150004; *Media Coverage of Climate Change/Global Warming*, CENTER FOR SCI. & TECH. POL'Y RES., http://sciencepolicy.colorado.edu/media_coverage/ (last updated Jan. 2013) (showing a decrease in climate change coverage in worldwide newspapers since 2009).

^{272.} Majority of Republicans No Longer See Evidence of Global Warming, PEW RES. CENTER (Nov. 2, 2010), http://pewresearch.org/databank/dailynumber/?NumberID=1126. But see ANTHONY LEISEROWITZ ET AL., YALE PROJECT ON CLIMATE CHANGE COMMC'N & GEORGE MASON UNIV. CENTER FOR CLIMATE CHANGE COMMC'N, CLIMATE CHANGE IN THE AMERICAN MIND: PUBLIC SUPPORT FOR CLIMATE & ENERGY POLICIES IN MAY 2011 2, 19 (2011), available at http://environment.yale.edu/climate/files/PolicySupportMay2011.pdf (finding 71% of Americans believe climate change should be a medium, high, or very high priority, including 50% of Republicans). 273. Daniel A. Farber, *Basic Compensation for Victims of Climate Change*, 155 U. PA. L. REV. 1605, 1649 (2007) ("[T]he greatest function of litigation may be to prod legislative action.").

^{275.} Not only does the risk of catastrophe grow with each passing year of inaction, so too grows the cost of moving to clean energy. *See* ALLISON ET AL., *supra* note 5, at 7; Press Release, Int'l Energy Agency, The World is Locking Itself into an Unsustainable Energy Future Which Would Have Far-Reaching Consequences, IEA Warns in its Latest World Energy Outlook (Nov. 9, 2011), *available at*

through continuing litigation that the issue is critical and that plaintiffs like those in *Kivalina* and *Comer* are suffering genuine losses that demand redress that current statutes do not currently provide.

CONCLUSION

American Electric proved less important for the precedent it set than for the questions it left unanswered. While courts wrestled over standing, the political question doctrine, and displacement in climate change nuisance cases in the years preceding American Electric, the Supreme Court relied only on the clear displacement path illuminated by its earlier decision in Massachusetts. While the decision in American Electric narrowed the litigation options that climate change advocates have at their disposal, it subtly sent a message to Congress that greater federal action is needed. In writing such a narrow ruling, Justice Ginsburg also sent a message to states and advocates whether intentionally or not—that climate change litigation is not dead. Until Congress enacts comprehensive climate change legislation, global warming lawsuits will, and must, continue.

http://www.iea.org/newsroomandevents/pressreleases/2011/november/name,20318,en.html ("Delaying action is a false economy: for every \$1 of investment in cleaner technology that is avoided in the power sector before 2020, an additional \$4.30 would need to be spent after 2020 to compensate for the increased emissions.").