

Michigan Journal of Environmental & Administrative Law

Volume 4 | Issue 2


2015

Too Many Cooks in the Climate Change Kitchen: The Case for an Administrative Remedy for Damages Caused by Increased Greenhouse Gas Concentrations

Benjamin Reese

University of Michigan Law School

Follow this and additional works at: <https://repository.law.umich.edu/mjeal>

 Part of the [Courts Commons](#), [Environmental Law Commons](#), [Legal Remedies Commons](#), [State and Local Government Law Commons](#), [Supreme Court of the United States Commons](#), and the [Torts Commons](#)

Recommended Citation

Benjamin Reese, *Too Many Cooks in the Climate Change Kitchen: The Case for an Administrative Remedy for Damages Caused by Increased Greenhouse Gas Concentrations*, 4 MICH. J. ENVTL. & ADMIN. L. 355 (2015).

Available at: <https://repository.law.umich.edu/mjeal/vol4/iss2/5>

This Note is brought to you for free and open access by the Journals at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in Michigan Journal of Environmental & Administrative Law by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.

TOO MANY COOKS IN THE CLIMATE CHANGE KITCHEN: THE CASE FOR AN ADMINISTRATIVE REMEDY FOR DAMAGES CAUSED BY INCREASED GREENHOUSE GAS CONCENTRATIONS

*Benjamin Reese**

Recent federal and state court decisions have made clear that federal common law claims against emitters of greenhouse gases are not sustainable; however, those same courts seem to have given state common law tort claims the green light, at least if the claims are brought in the state where the polluters are located. This Note contends that such suits are not an adequate remedy for those injured by climate change because they will face nearly insurmountable barriers in state court, and because there are major policy-level drawbacks to relying on state tort law rather than a federal solution. This Note then proposes a federal regulatory system of climate change compensation and explains several reasons why it is a preferable means of compensating climate change's victims.

INTRODUCTION	356
I. HOW CURRENT LAW CREATES ROOM FOR PLAINTIFFS: WHY STATE TORT LAW IS NOT PREEMPTED BY THE CLEAN AIR ACT	360
A. <i>Federal Regulatory Authority and the Unavailability of Federal Common Law</i>	360
B. <i>The Ouellette Decision and the Availability of State Tort Law</i>	364
II. PROBLEMS WITH TORT: LEGAL BARRIERS TO SUCCESS AND POLICY- LEVEL DRAWBACKS	366
A. <i>Barriers to Success Under Negligence and Public Nuisance Theories</i>	367

* J.D. Candidate, May 2016, University of Michigan Law School. The author is an Articles Editor on the *Michigan Law Review* and a former General Member on the *Michigan Journal of Environmental & Administrative Law*. The author would like to thank Professor Howard Learner, of the Environmental Law and Policy Center, whose course on Energy Law and Climate Change provided the impetus for this research. In addition, thanks to the Editorial Board and staff of *Michigan Journal of Environmental & Administrative Law* for their time and invaluable assistance. Finally, the author would like thank his family—particularly his parents and brother, Michael—and mentors—including Drs. James & Mabry O'Donnell and the Hon. Janet Dyar Welch—for their steadfast support through all of his endeavors.

1.	Negligence Claims Will Not Have a High Probability of Success	367
2.	Public Nuisance Claims Will Fare No Better	371
B.	<i>A Tort-Based Remedy Should Also be Eschewed for Policy Reasons</i>	372
1.	Tort Law Will Place an Onerous Burden on Plaintiffs	372
2.	The Largest Emitters are Likely to Escape Liability Under a Tort Law Regime	373
3.	Judges Are Not Climate Scientists	375
4.	Tort Law Lacks Predictability	376
III.	AN ADMINISTRATIVE ANSWER: A PROPOSED REMEDY AND ITS POLICY ADVANTAGES	376
A.	<i>The Polluter Funded Anthropogenic Climate Change (PFACC) Fund</i>	377
1.	The Polluter Pays: Basic Principles of a Responsibility-Based Regime	377
2.	Compensating the Victims: Direct Payment of Claims	379
3.	Connecting Payment with Compensation: An Adjudicative Framework	380
B.	<i>The PFACC Fund Is Preferable to State Tort Law</i>	381
1.	EPA Has the Necessary Scientific Expertise	382
2.	Appropriately Balancing Victim and Industry Interests	383
	CONCLUSION	384

INTRODUCTION

Climate change is real, and humans are causing it.¹ The fact that one in four Americans is skeptical of this conclusion² is simply irrelevant. To quote a well-known comedian: “[Y]ou don’t need people’s opinion on a fact. You might as well have a poll asking, which number is bigger, fifteen or five?”³ Indeed, of those peer-reviewed scientific papers taking a position on anthro-

1. Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report* 5–12 (2014) [hereinafter *Synthesis Report*], available at https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT_Corr2.pdf.

2. Lydia Saad, *One in Four in U.S. Are Solidly Skeptical of Global Warming*, GALLUP (Apr. 22, 2014), <http://www.gallup.com/poll/168620/one-four-solidly-skeptical-global-warming.aspx>.

3. *Last Week Tonight with John Oliver: Climate Change Debate* (HBO television broadcast May 11, 2014), available at <http://www.hbo.com/last-week-tonight-with-john-oliver/episodes/01/03-may-11-2014/video/climate-change-debate.html#/>.

pogenic global warming (AGW), 97.2% endorsed the consensus view that climate change is occurring and that humans are causing it.⁴ This Note, however, is not designed to counter the stubbornness of a dogmatic few. Rather, it focuses on how the legal system should address the damage that climate change will cause to private property interests.

The science behind the “greenhouse effect” by which carbon dioxide (CO₂) and other greenhouse gases (e.g. methane) trap heat from the sun in our atmosphere is widely known, even to skeptics. And, from there the connection to human activity is obvious. As the Intergovernmental Panel on Climate Change explains:

Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are *extremely likely* to have been the dominant cause of the observed warming since the mid-20th century.⁵

Even if we were to cease all greenhouse gas emissions today, many of the effects long predicted by scientists would still occur because CO₂ would not simply vanish from the atmosphere once existing concentrations were stabilized.⁶ Globally, those impacts include: “decreased agricultural production; coastal flooding, erosion, and submergence; increases in heat-related illness and other stresses due to extreme weather events; reduction in water availability and quality; displacement of people and increased risk of violent conflict; and species extinction and biodiversity loss.”⁷

In the last year alone we have seen some of these damaging effects of AGW. For instance, increased rainfall concentrations and higher water temperatures resulting from AGW-related weather changes contributed to a massive toxic algae bloom in Lake Erie in the summer of 2014, which forced

4. John Cook et al., *Quantifying the Consensus on Anthropogenic Global Warming in the Scientific Literature*, ENVTL. RES. LETTERS, May 15, 2013, at 4, available at stacks.iop.org/ERL/8/024024.

5. *Synthesis Report*, *supra* note 1, at 4 (emphasis in original).

6. Solomon et al., *Irreversible Climate Change Due to Carbon Dioxide Emissions*, 106 PROC. NAT'L ACAD. SCI. 1704 (2009).

7. COUNCIL OF ECONOMIC ADVISORS, THE COST OF DELAYING ACTION TO STEM CLIMATE CHANGE 9-10 (2014) [*hereinafter* COST OF DELAYING ACTION].

residents of Toledo, Ohio to deal with a two-day drinking water ban.⁸ Likewise, the massive snowfalls of November 2014, which crippled much of the upstate New York and captivated social media users around the world, are, perhaps counter-intuitively, tied to AGW's impact on the jet stream (which pushed unseasonably cold air southwards) and increased water temperatures on Lake Erie.⁹ But, these impacts pale in comparison to those resulting from the increased incidence and severity of extreme weather events—like Hurricane Sandy in New Jersey and more powerful tornados in the Midwest.¹⁰

These events will hardly be the last of it. Estimates reveal that in 2010 the global cost of coping with the public and private property damage associated with climate change totaled \$591 billion.¹¹ The damages will only get worse: the U.S. Council of Economic Advisors predicts that allowing greenhouse gases to accumulate sufficiently to cause an increase in average global temperatures of three degrees rather than two could lead costs to increase by approximately 0.9% of global output. To put that into perspective, 0.9% of the estimated 2014 gross domestic product (GDP) of the U.S. alone totals \$150 billion.¹² The Natural Resources Defense Council estimates that, if current trends continue, the costs of coping with climate change will total 3.6% of U.S. GDP, and the cost of coping with hurricane damage, real estate loss, and energy and water costs alone will total \$1.9 trillion.¹³ And, not only environmentalists are worried about climate change: insurance companies worldwide have joined the scientific and environmental commu-

8. Briah Kahn, *Lake Erie Algae Bloom Matches Climate Change Projections*, SCI. AM. (Aug. 5, 2014), <http://www.scientificamerican.com/article/lake-erie-algae-bloom-matches-climate-change-projections/?print=true>; Jane J. Lee, *Driven by Climate Change, Algae Blooms Behind Ohio Water Scare are New Normal*, NAT'L GEOGRAPHIC (Aug. 4, 2014), <http://news.nationalgeographic.com/news/2014/08/140804-harmful-algal-bloom-lake-erie-climate-change-science/>.

9. Paul Huttner, *Buffalo Mega Snowstorm Tied to Climate Change?*, MINN. PUB. RADIO NEWS (Nov. 19, 2014, 5:21 PM), <http://blogs.mprnews.org/updraft/2014/11/is-climate-change-juicing-buffalo-mega-storm/>.

10. See, e.g., David Biello, *What Role Does Climate Change Play in Tornadoes?*, SCI. AM. (May 21, 2013), <http://www.scientificamerican.com/article/kevin-trenberth-on-climate-change-and-tornadoes/>; Sam Eaton, *Climate Change and Sandy*, NOVA (Nov. 15, 2012), <http://www.pbs.org/wgbh/nova/earth/climate-change-sandy.html>.

11. CANADIAN CENTRE FOR POLICY ALTERNATIVES, *PAYBACK TIME? WHAT THE INTERNATIONALIZATION OF CLIMATE LITIGATION COULD MEAN FOR CANADIAN OIL AND GAS COMPANIES* 5 (2014), available at <https://www.policyalternatives.ca/publications/reports/payback-time>.

12. COST OF DELAYING ACTION, *supra* note 7, at 4.

13. NATURAL RESOURCES DEFENSE COUNCIL, *THE COST OF CLIMATE CHANGE: WHAT WE'LL PAY IF GLOBAL WARMING CONTINUES UNCHECKED* iv (2008), available at <http://www.nrdc.org/globalWarming/cost/cost.pdf>.

nities in estimating large-scale impacts of climate change¹⁴ and calling for action to curb the damage.¹⁵

Accordingly, while it is critical for policymakers to work to prevent as much of this damage as is possible, they should also consider how we will compensate those who have been injured by at least the more concrete of these phenomena.¹⁶ After all, the law is reluctant to conclude that any person who has suffered an injury lacks a legal remedy.¹⁷ Many authors have considered the feasibility of using traditional public nuisance suits (on both the state and federal levels) to provide such compensation.¹⁸ Others have suggested that other alternatives, including administrative schemes, might be available or preferable.¹⁹

This Note contends that, following the Supreme Court's preclusion of federal common law nuisance suits in *American Electric Power v. Connecticut (AEP)*,²⁰ tort law is an unworkable solution to the problem of compensating climate change victims. It further argues that an administrative solution, as proposed herein, presents a better alternative. Part I outlines the current legal environment that sets the stage for the possibility of state tort law climate change suits. Part II explains the nearly insurmountable legal barriers faced by plaintiffs seeking to bring such suits and the policy reasons that

14. See, e.g., SWISS RE, *THE HIDDEN RISKS OF CLIMATE CHANGE: AN INCREASE IN PROPERTY DAMAGE FROM SOIL SUBSISTENCE IN EUROPE* (2011), available at http://www.preventionweb.net/files/20623_soilsubsidencepublicationfinalen1.pdf (concluding that soil subsidence damage in France alone increased by fifty percent since 1990, costing approximately 340 million Euros, and indicating that climate change will further magnify these risks).

15. Donald Wuebbles & Aaron Packman, *Extraordinary Extremes: Climate Scientists Explain Our Crazy Weather*, CHI. TRIB., June 6, 2012, http://articles.chicagotribune.com/2012-06-06/opinion/ct-perspec-0606-climate-20120606_1-climate-change-climate-scientists-extreme-weather.

16. See generally Daniel A. Farber, *Basic Compensation for Victims of Climate Change*, 155 U. PA. L. REV. 1605, 1640-55 (2007) (proposing a compensation scheme for victims of events resulting from climate change).

17. See, e.g., *Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 163 (1803) ("The very essence of civil liberty certainly consists in the right of every individual to claim the protection of the laws, whenever he receives an injury. One of the first duties of government is to afford that protection.").

18. See, e.g., 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 (2008); David A. Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 COLUM. J. ENVTL. L. 1 (2003).

19. See, e.g., Randall S. Abate, *Corporate Responsibility and Climate Justice: A Proposal for a Polluter-Financed Relocation Fund for Federally Recognized Tribes Imperiled by Climate Change*, 25 FORDHAM ENVTL. L. REV. 10 (2013); Farber, *supra* note 16, at 1648-52; Melissa Farris, Note, *Compensating Climate Change Victims: The Climate Compensation Fund as an Alternative to Tort Litigation*, 2 GRANT L. & POL'Y J. 49 (2009).

20. *Am. Elec. Power v. Connecticut*, 131 S. Ct. 2527 (2011).

make tort law an undesirable solution on a more general level. Finally, Part III sketches the outline of a possible regulatory framework for climate change compensation and argues that it would be superior to tort law on a policy level.

I. HOW CURRENT LAW CREATES ROOM FOR PLAINTIFFS:
WHY STATE TORT LAW IS NOT PREEMPTED
BY THE CLEAN AIR ACT

This Part ultimately concludes that there is no legal barrier to filing a state tort law claim against greenhouse gas emitters under current law. Section I(A) briefly sketches the source of federal authority to regulate greenhouse gases and the reasons why this precludes a federal public nuisance suit. Section I(B) then explains why similar reasoning does not apply to state tort law suits against emitters.

*A. Federal Regulatory Authority and the Unavailability of
Federal Common Law*

The Clean Air Act (CAA) requires the Administrator of the Environmental Protection Agency (EPA) to regulate any “air pollutant[s]” that “in his judgment cause, or contribute to, air pollution, which may reasonably be anticipated to endanger public health or welfare.”²¹ The definition of “air pollutant” in the CAA is broad and capacious,²² as is the definition of welfare, which includes “effects on . . . weather . . . and climate.”²³ Understandably, then, efforts by EPA under the Bush Administration to disclaim any authority under the CAA to regulate greenhouse gases²⁴ were viewed with skepticism and triggered litigation.

The Supreme Court of the United States unambiguously rejected EPA’s conclusion, stating that it had

[L]ittle trouble concluding . . . that the statutory text [of the CAA] forecloses EPA’s reading. . . . On its face, the definition [of air pollutant in the CAA] embraces all airborne compounds of whatever stripe, and underscores that intent through the repeated use of the word “any.” Carbon dioxide, methane, nitrous oxide, and

21. 42 U.S.C. § 7521(a)(1).

22. 42 U.S.C. § 7602(g) (defining air pollutant as “any air pollution agent or combination of such agents, including any physical chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.”).

23. 42 U.S.C. § 7602(h).

24. See, e.g., Proposed Consent Decree, Clean Air Act Citizen Suit, 68 Fed. Reg. 52,922 (Sept. 8, 2003).

hydrofluorocarbons are without a doubt [air pollutants]. The statute is unambiguous.²⁵

Massachusetts sent EPA back to the drawing board, and since President Obama took office in 2008, it has aggressively sought to implement regulations to reduce greenhouse gas emissions.²⁶

Despite the fact that *Massachusetts* itself was a five-to-four decision,²⁷ there appears to be at least a seven-to-two majority in favor of upholding it, at least on *stare decisis* grounds.²⁸ Indeed, in *AEP* only Justices Thomas and Alito expressed any willingness to reconsider the Court's conclusion that greenhouse gases fall within the CAA's definition of air pollutants.²⁹ This understanding is largely consistent with later decisions reinforcing the traditional *Chevron* deference³⁰ given to EPA in recognition of its expertise in environmental matters.³¹ Even when the Court struck down a small portion of EPA's attempt to regulate greenhouse gas emissions in *Utility Air Regulatory Group*,³² it did so only after denying review on a host of issues considered at the Circuit Court level and made no mention of any desire to review *Massachusetts*.³³

25. *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497, 528–29 (2007).

26. See, e.g., 74 Fed. Reg. 66,496 (Dec. 15, 2009) (codified at 40 C.F.R. ch. 1) (concluding that greenhouse gases did endanger the public health and welfare); 75 Fed. Reg. 25,324 (May 7, 2010) (codified at 40 C.F.R. pts. 85, 86, 600, 49 C.F.R. pts. 531, 533, 536, 537, 538) (joint final rule issued by the EPA and Department of Transportation regulating greenhouse gas emissions from medium- and heavy-duty motor vehicles); 79 Fed. Reg. 34,830 (June 18, 2014) (to be codified at 40 C.F.R. pt. 60) (proposed rule to regulate greenhouse gas emissions from existing power plants).

27. The majority consisted of Justices Stevens, Kennedy, Souter, Breyer, and Ginsburg. *Massachusetts*, 549 U.S. at 501.

28. Howard A. Learner, *Emerging Clarity on Climate Change Law: EPA Empowered and State Common Law Remedies Enabled*, 44 ENVTL. L. REP. 10744, 10745 (2014). Both Chief Justice Roberts and Justice Scalia, though they dissented in *Massachusetts* itself, 549 U.S. at 501, joined Justices Kennedy, Breyer, Kagan, and Ginsburg in applying it as binding precedent in *Am. Elec. Power v. Connecticut (AEP)*, 131 S.Ct. 2527, 2530 (2011). Presumably, though she did not participate in *AEP*, Justice Sotomayor would also preserve the decision. See *Util. Air Regulatory Grp. v. Env'tl. Prot. Agency*, 134 S.Ct. 2427, 2449–50 (2014) (Breyer, J., dissenting) (Justice Sotomayor joined Justice Breyer in applying *Massachusetts* with no hint of reservation).

29. *AEP*, 131 S. Ct. at 2540–41 (2011) (Alito, J., concurring); see also Learner, *supra* note 28 at 10745.

30. *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

31. See Learner, *supra* note 28, at 10746–47 (citing *Env'tl. Prot. Agency v. EME Homer City Generation*, 134 S. Ct. 1584 (2014); *Util. Air Regulatory Grp. v. Env'tl. Prot. Agency*, 134 S. Ct. 2427 (2014); and *White Stallion Energy Ctr. v. Env'tl. Prot. Agency*, 748 F.3d 1222 (D.C. Cir. 2014)).

32. *Util. Air Regulatory Grp.*, 134 S. Ct. 2427 (2014).

33. See Learner, *supra* note 28, at 10,745.

In short, federal authority to regulate greenhouse gases under the CAA is now clear and appears to be virtually unassailable. The Court in *Massachusetts* rejected EPA's attempt to disclaim authority and has subsequently rejected challenges to it. Of course, what is good news for EPA and its Clean Power Plan spells defeat for plaintiffs seeking compensation for climate change damage via federal public nuisance suits.³⁴

A public nuisance is “[a]n unreasonable interference with a right common to the general public, such as a condition dangerous to health, offensive to community moral standards, or unlawfully obstructing the public in the free use of public property.”³⁵ Such wrongs frequently form the basis for civil liability and suits seeking redress for them are often brought by government officials, as in *AEP*. Notwithstanding the general rule that “[t]here is no federal general common law,”³⁶ public nuisance suits can provide the basis for the exercise of common law powers by federal courts.³⁷ But, these powers are not plenary; they operate only where federal legislation leaves gaps that must be filled by the court.³⁸

Accordingly, when “federal statutory law governs a question previously the subject of federal common law” the federal common law is displaced and federal courts are without power to expand liability via public nuisance rulings.³⁹ Twin rulings concerning the Clean Water Act (CWA) and pollution in Lake Michigan illustrate the impact of this doctrine. In *Milwaukee I*, the Court allowed a suit by the state of Illinois against the City of Milwaukee and several other defendants over pollution in the lake on public nuisance grounds because the federal law governing water pollution (which would become known as the CWA following amendment) did not provide the sort of remedies Illinois was seeking.⁴⁰ However, in *Milwaukee II*, after Congress enacted sweeping amendments and provided a remedy, the Court found that the federal common law had been displaced by the CWA and that public nuisance suits were barred accordingly.⁴¹

With regards to greenhouse gas emissions, the CAA is equally fatal to attempts to litigate public nuisance suits. Faced with a suit by several states,

34. *AEP*, 134 S. Ct. at 2537.

35. BLACK'S LAW DICTIONARY 1235 (10th ed. 2014).

36. *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938).

37. Damian Michael Brychcy, Note, American Electric Power v. Connecticut: *Disaster Averted by Displacing the Federal Common Law of Nuisance*, 46 GA. L. REV. 459, 471 (2012).

38. *United States v. Kimbell Foods*, 440 U.S. 715, 727 (1979) (concluding that “[i]t is precisely when Congress has not spoken” that federal courts can utilize common law powers).

39. *City of Milwaukee v. Illinois (Milwaukee II)*, 451 U.S. 304, 316-17.

40. *Illinois v. City of Milwaukee (Milwaukee I)*, 406 U.S. 91, 93, 103 (1972); see also Brychcy, *supra* note 37, at 473.

41. *Milwaukee II*, 451 U.S. at 305, 317-19; see also Brychcy, *supra* note 37, at 472-74.

including Connecticut and New York, claiming that greenhouse gas emissions were a public nuisance threatening public lands, infrastructure, and health, the Second Circuit attempted to distinguish *Milwaukee II* by emphasizing that EPA had not regulated pursuant to its CAA authority at the time.⁴² The Supreme Court reversed, emphasizing that, like the CWA, the CAA is comprehensive and provides access to precisely the sort of injunctive remedies sought by the plaintiffs (i.e., limits on emissions).⁴³ The Court further rejected the Second Circuit's attempt to allow public nuisance claims until EPA promulgated regulations, suggesting that such suits would not be allowed even if EPA declined to regulate altogether.⁴⁴ In short, the Court explained: "[t]he judgments the plaintiffs would commit to federal judges, in suits that could be filed in any federal district, cannot be reconciled with the decision-making scheme Congress enacted."⁴⁵

Of course, *AEP* technically only precluded federal public nuisance suits seeking injunctive relief. The small, largely Native American village of Kivalina attempted to circumvent *AEP* by seeking damages rather than an injunction against a slew of greenhouse gas emitters via a federal public nuisance suit, and if ever there was a compelling case for the exercise of federal common law power it was Kivalina's:

Kivalina's survival has been threatened by erosion resulting from wave action and sea storms for several decades. The villagers of Kivalina depend on the sea ice that forms on their coastline in the fall, winter, and spring each year to shield them from powerful coastal storms. But in recent years, the sea ice has formed later in the year, attached later than usual, broken up earlier than expected, and has been thinner and less extensive in nature. As a result, Kivalina has been heavily impacted by storm waves and surges that are destroying the land where it sits. Massive erosion and the possibility of future storms threaten buildings and critical infrastructure in the city with imminent devastation. If the village is not relocated, it may soon cease to exist.⁴⁶

However, the Ninth Circuit rejected Kivalina's challenge, citing several Supreme Court cases that have refused to condition displacement analysis on

42. Connecticut v. Am. Elec. Power, 582 F.3d 309, 379–81 (2d Cir. 2009).

43. Am. Elec. Power v. Connecticut, 131 S. Ct. 2527, 2537–38 (2011).

44. *Id.* at 2538–39.

45. *Id.* at 2540.

46. Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 853 (9th Cir. 2012) (internal citation omitted).

the type of remedy sought by the plaintiffs.⁴⁷ The Supreme Court's denial of certiorari in *Kivalina*⁴⁸ suggests that further efforts to pursue federal public nuisance claims are likely a lost cause.⁴⁹ State tort law nuisance suits, however, are a completely different story.

B. *The Ouellette Decision and the Availability of State Tort Law*

The Constitution expressly provides that state law is preempted where it conflicts with valid federal laws.⁵⁰ Determining when a state law is sufficiently in conflict with federal law to be preempted, however, can be a confusing proposition.⁵¹ Thankfully, courts seeking to determine the preemptive effect of the CAA do not operate on a blank slate.

In *International Paper Company v. Ouellette*, the Supreme Court considered the extent to which state tort lawsuits were preempted by the CWA.⁵² In that case, the International Paper Company operated a pulp mill on the New York side of Lake Champlain.⁵³ Several residents/tenants who owned or occupied land on the Vermont side of the lake brought a nuisance suit under Vermont common law based on water pollution from the mill.⁵⁴ The Supreme Court concluded that, although the CWA contained a savings clause, that savings clause did not allow these suits to be brought under Vermont law.⁵⁵ Rather, the Court made a distinction between suits brought under the law of the "source" state (where the polluter is located) and those brought under the law of the "affected" states (those where the pollution

47. *Id.* at 857 (citing *Exxon Shipping Co. v. Baker*, 554 U.S. 471, 489 (2008); *Middlesex Cnty. Sewerage Auth. v. Nat'l Sea Clammers Ass'n*, 453 U.S. 1, 21–22 (1981)) ("Thus, under current Supreme Court jurisprudence, if a cause of action is displaced, displacement is extended to all remedies.").

48. *Id.*, *cert. denied*, 133 S. Ct. 2390 (2013).

49. *Learner*, *supra* note 28, at 10744.

50. U.S. CONST. art. VI, cl. 2; *see also* *McCulloch v. Maryland*, 17 U.S. (4 Wheat) 316 (1819).

51. *Compare* *Wyeth v. Levine*, 555 U.S. 555 (2009) (concluding that state tort law claims against *brand name* prescription drug manufacturers alleging a failure to adequately warn *are not* preempted by the Federal Food, Drug, and Cosmetic Act because manufacturers were free to depart from FDA mandates to increase safety), *with* *Pliva, Inc. v. Mensing*, 131 S. Ct. 2567 (2011) (concluding that state tort law claims alleging similar failure to warn claims as *Wyeth's* plaintiffs against *generic* drug manufacturers *are* preempted because generic manufacturers are not free to add or subtract warnings from those provided by brand name manufacturers).

52. *Int'l Paper Co. v. Ouellette*, 479 U.S. 481 (1987).

53. *Id.* at 483–84.

54. *Id.* at 484.

55. *Id.* at 493–97.

travels).⁵⁶ Because the CWA allows states to impose their own standards (so long as they meet federal minimum requirements), the Court felt that allowing suits under affected states' laws would effectively give them veto power over the policy choices of the source state.⁵⁷ But, the Court went on to say that the plaintiffs could still sue under New York law, because tort suits brought in the source state posed no similar risk and because Congress meant to protect *them* with the CWA's savings clauses.⁵⁸

To quote the Third Circuit, "there is little basis for distinguishing the Clean Air Act from the Clean Water Act—the two statutes feature nearly identical savings clauses and employ similar 'cooperative federalism' structures."⁵⁹ Writing for a unanimous panel, Judge Fuentes in *Bell v. Cheswick Generating Station* explained:

As a side-by-side comparison of the text indicates, the only meaningful difference between the two states' rights savings clauses is the portion of the Clean Water Act . . . which refers to the boundary waters of the states. The reason why such language is not included in the Clean Air Act is clear: there are no such jurisdictional boundaries or rights which apply to the air. If anything, the absence of any language regarding state boundaries in the states' rights savings clause of the Clean Air Act indicates that Congress intended to preserve more rights for the states, rather than less. In no way can this omission be read to preempt all state law tort claims.⁶⁰

Two other federal circuit courts have reached similar, or at least not contradictory, conclusions.⁶¹ Likewise, in *Freeman v. Grain Processing Corp.*,⁶² the Iowa Supreme Court recently concluded that the CAA does not preempt nuisance suits under the law of the source state so long as they do not seek to impose standards that are less strict than the federal minimum, saying:

56. See *id.* at 495, 497.

57. *Id.* at 495.

58. *Id.* at 497–500.

59. *Bell v. Cheswick Generating Station*, 734 F.3d 188, 196 (3d Cir. 2013) (quoting Scott Gallisdorfer, Note, *Clean Air Act Preemption of State Common Law: Greenhouse Gas Nuisance Claims After AEP*, 99 VA. L. REV. 131, 150 (2013)).

60. *Id.* at 195 (emphasis omitted).

61. *Her Majesty the Queen in Right of the Province of Ontario v. Detroit*, 874 F.2d 332, 342 (6th Cir. 1989) (concluding that the CAA preempted state law only to the extent that it is less strict than federal standards); *North Carolina ex rel. Cooper v. Tenn. Valley Auth.*, 615 F.3d 291, 306 (4th Cir. 2010) (reversing and remanding a public nuisance suit where the district court considered the CAA similar to the CWA on preemption grounds, because the district court applied the law of the affected state in violation of *Ouellette*).

62. *Freeman v. Grain Processing Corp.*, 848 N.W.2d 58 (Iowa 2014).

[S]tate common law and nuisance actions have a different purpose than the regulatory scheme established by the CAA. The purpose of state nuisance and common law actions is to protect the use and enjoyment of specific property, not to achieve a general regulatory purpose. It has long been understood that an activity may be entirely lawful and yet constitute a nuisance because of its impairment of the use and enjoyment of specific property. . . . We therefore decline to conclude that the increased complexity of the CAA has categorically elbowed out a role for the state nuisance and common law claims presented here.⁶³

The Supreme Court recently denied certiorari in both *Bell*⁶⁴ and *Freeman*.⁶⁵

While it is generally dangerous to draw conclusions from a denial of certiorari, the Supreme Court, in *AEP*, specifically cited *Ouellette* when it made clear that it *was not* ruling on the availability of state tort law claims.⁶⁶ This, coupled with the denial of certiorari and the relative consensus among lower courts, provides a compelling reason to think that plaintiffs seeking to bring state nuisance claims against greenhouse gas emitters in the state where the emitter is located will not find the CAA to be an obstacle.⁶⁷ But, the mere fact that a state tort law claim is available does not mean that it is preferable. The remainder of this Note argues that the difficulties surrounding the use of tort law to compensate climate change victims and the relative advantages of a regulatory system of compensation favor the imposition of a federal program that *would* preempt source state common law.

II. PROBLEMS WITH TORT: LEGAL BARRIERS TO SUCCESS AND POLICY-LEVEL DRAWBACKS

There are several reasons to be concerned about the use of tort law as a means of compensating victims of climate change harms. First, as Section II(A) explains, it is not clear that these plaintiffs would prevail in a tort suit. Moreover, as discussed in Section II(B), even if some plaintiffs were to prevail, tort law is not the most desirable remedy as a policy matter.

63. *Id.* at 84 (internal citation omitted).

64. 134 S.Ct. 2696, 2697 (2014).

65. 2014 WL 4542764 (2014).

66. *Am. Elec. Power v. Connecticut*, 131 S. Ct. 2527, 2540 (2011).

67. *Learner*, *supra* note 28, at 10747-50.

A. Barriers to Success Under Negligence and Public Nuisance Theories

The climate change cases discussed *supra* involve public nuisance suits, generally brought by government officials, but private individuals could also bring such a suit.⁶⁸ It is also possible that plaintiffs could proceed on a more typical negligence claim.⁶⁹ Under either approach, potential plaintiffs face hurdles that, for some, will prove insurmountable. This Section briefly sketches some of the difficulties surrounding both of these types of claims.⁷⁰

1. Negligence Claims Will Not Have a High Probability of Success

To recite the axiomatic, a plaintiff alleging negligence must show that he/she (a) sustained an injury that was (b) proximately caused by (c) the defendant's breach of (d) a legal duty. It is unlikely that any defendant, when faced by a catastrophe on the scale of Kivalina's, would argue that there had been no injury; however, things might become considerably murkier if class action suits alleging higher energy bills due to climate change become common.⁷¹ But, ultimately the majority of a potential plaintiff's problems will lie elsewhere—namely in demonstrating “proximate cause” and “actual cause.”

The touchstone of proximate causation is “foreseeability.”⁷² As the Supreme Court recognized in *Massachusetts*, the idea that humans are contributing to global climate change has been around and under scrutiny since at least the 1970's.⁷³ Thus, it is at least plausible to suggest that CO₂ emitters were aware that they might be contributing to AGW in a generalized sense. But does that mean damages from algae blooms, more dangerous tornadoes, and more frequent hurricanes were reasonably foreseeable? After all, climate

68. Abate, *supra* note 18, at 601.

69. See, e.g., Douglas A. Kysar, *What Climate Change Can Do About Tort Law*, 41 ENVTL. L. 1 (2011).

70. It is not the purpose of this paper to comprehensively evaluate the merits of any particular suit or even of a theory of liability more generally; rather, the purpose here is to highlight the uncertainty surrounding the viability of such suits as a means of showing why tort law broadly speaking is not an ideal way to compensate climate change victims.

71. Cf. Farber, *supra* note 16, at 1610 (suggesting that compensation should only be awarded for the most directly measurable of damages).

72. Scholars have long debated whether “foreseeability” falls within the duty element or the causation element of a negligence claim (in fact, the Second and Third Restatements of Torts disagree as to this question). See Kysar, *supra* note 69, at 10-20. This debate is irrelevant for the purposes of this discussion, though, because plaintiffs will have to demonstrate foreseeability either way.

73. *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497, 507 (2007).

change is a rapidly evolving field and the consequences of climate change were not well known at the time that many of these companies began operating and constructed their facilities.⁷⁴ In some ways, climate change victims bear an uncanny resemblance to Mrs. Palsgraf whose unfortunate encounter with a set of brass scales resulted from a stranger-than-fiction series of events that not even the actors most directly responsible saw coming.⁷⁵

The biggest problem for plaintiffs, however, will be “actual” rather than proximate causation. Simply put, “[u]nder orthodox common law rules concerning causation, a tortfeasor is liable for an indivisible injury that *would not have happened absent that party’s breach*.”⁷⁶ Like a nightmare emerging from another dimension, the causation problems that have plagued toxic torts litigants will surface with a vengeance in climate change litigation.

The problem in toxic torts cases is that it is very difficult to show (a) that a substance is capable of causing the disease suffered by the plaintiff and then, assuming (a) is demonstrated, (b) that it *did actually* cause the disease in this particular instance.⁷⁷ As Albert Lin explains:

Epidemiological studies may establish that a substance can cause the type of harm suffered by a plaintiff, satisfying general causation. But a plaintiff must still demonstrate that the particular harm was in fact the result of exposure to a given substance. Epidemiological studies, however, can only attribute a portion of the incidence of a disease in a population to any particular source. They are not designed to prove specific causation. Specific causation requires a plaintiff to prove by a preponderance of the evidence that the defendant caused that particular plaintiff’s harm. Many courts interpret the preponderance standard to require a relative risk ratio of 2.0 or greater—for example, a defendant’s conduct more than doubled the plaintiff’s risk of injury Thus, if an epidemiological study indicates that exposure to a particular substance increases the incidence of a disease among those exposed by only forty percent, then a court will probably find that the plaintiff failed to meet

74. See *Massachusetts*, 549 U.S. at 507–08; Kristin Engel & Jonathan Overpeck, *Adaptation and the Courtroom: Judging Climate Science*, 3 *Mich. J. Envtl. & Admin. L.* 1, 25–26 (2013).

75. *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99 (N.Y. 1928).

76. Jane Stapleton, *The Two Explosive Proof-of-Causation Doctrines Central to Asbestos Claims*, 74 *BROOK. L. REV.* 1011, 1012 (2009) (emphasis added).

77. Farber, *supra* note 16, at 1636–37.

the burden of proving specific causation unless more direct evidence is offered.⁷⁸

Additionally, where multiple polluters have contributed toxic substances to an area, proving a link between a specific defendant and a plaintiff's harms can be nearly impossible.⁷⁹

Consider, for example, *Aldridge v. Goodyear Tire and Rubber Co.*, in which plaintiffs in sixty-six consolidated cases claimed that exposure to chemicals at work led to their contraction of certain diseases, including cancer.⁸⁰ The district court granted summary judgment to Goodyear in part because only ten percent of the nearly two hundred chemicals to which the plaintiffs were exposed were provided by Goodyear, and even the three Goodyear-supplied chemicals were not exclusively supplied by Goodyear.⁸¹ Despite a twisted subsequent history in which this decision was reversed by the Fourth Circuit to provide limited additional discovery⁸²—which apparently turned up nothing since the plaintiffs requested and were denied even more discovery afterward⁸³—the central premise that plaintiffs required such a link to prevail was *never* questioned.

Similarly, carbon emissions are diffuse: they do not remain in any particular location but travel all over the world.⁸⁴ Moreover, they come from a host of sources large and small.⁸⁵ This makes it impossible to say whose CO₂ is responsible for, say, the fact that the island nation of Tuvalu may soon be completely swallowed by the ocean.⁸⁶

Additionally, it may be nearly impossible for plaintiffs to show that increased concentrations of CO₂ are responsible for their injuries in the first place, because, in many cases, it might be difficult for them to get their evidence in to court. For many years, federal (and state) courts applied what came to be known as the “general acceptance” test, which originated in the D.C. Circuit, to determine whether expert testimony was admissible at

78. Albert C. Lin, *Beyond Tort: Compensating Victims of Environmental Toxic Injury*, 78 S. CAL. L. REV. 1439, 1449–50 (2005).

79. See Farber, *supra* note 16, at 1639.

80. *Aldridge v. Goodyear Tire & Rubber Co.*, 34 F. Supp. 2d 1010, 1012 (D. Md. 1999).

81. *Id.* at 1017–21.

82. *Aldridge v. Goodyear Tire & Rubber Co.*, 223 F.3d 263, 266–67 (4th Cir. 2000).

83. *Aldridge v. Goodyear Tire & Rubber Co.*, 198 F.R.D. 72, 76–81 (2000), *aff'd* 30 Fed. Appx. 184 (2002), *cert. denied* 537 U.S. 1000 (2002).

84. See *Massachusetts v. Envtl. Prot. Agency*, 549 U.S. 497, 525–26 (2007).

85. See Farber, *supra* note 16, at 1652.

86. *Id.* at 1611–12; Denis Culley, *Global Warming, Sea Level Rise and Tort*, 8 OCEAN & COASTAL L.J. 91, 91–93, 105–07 (2002) (describing the effects of sea level rise on Tuvalu and several other island nations).

trial.⁸⁷ The question under this test was whether a specific “methodology [or] expertise had gained general acceptance within the [scientific] community.”⁸⁸ However, the Supreme Court resoundingly rejected that test in *Daubert*, stating that it was incompatible with the “liberal thrust” of the Federal Rules of Evidence; *Daubert* then made reliability rather than “general acceptance” the touchstone of admissibility where scientific evidence is concerned.⁸⁹

The “reliability” framework calls upon courts to consider the totality of the circumstances, but the *Daubert* Court suggested that several factors should be considered:

- i. Whether the theory or technique can be or has been tested;
- ii. Whether the theory has been subjected to peer review and publication;
- iii. The theory or technique’s “known or potential rate or error”;
- iv. Whether there are standards that control the theory or technique’s operation; and
- v. The degree to which the theory or technique has been accepted in the relevant scientific community.⁹⁰

Meeting the factors articulated in framework will present significant difficulties for climate change plaintiffs.

Plaintiffs in climate change tort suits will be relying primarily on climate models to demonstrate causation, but these models are nearly impossible to test.⁹¹ Climate change models seek to predict changes in climate that will occur decades or centuries into the future, which is not conducive to validation in any reasonable time frame for litigation.⁹² Attempts to test model accuracy—based on the ability to correctly predict past events—is undermined by the frequent need to “calibrate” models by adding assumptions in order to get accurate results⁹³ and uncertainties about the values of certain variables in a historical time period.⁹⁴ This lack of testing means

87. *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923).

88. Alvaro Hasani, *Forecasting the End of Climate Change Litigation: Why Expert Testimony Based on Climate Models Should Not Be Admissible*, 32 MISS. C. L. REV. 83, 95 (2013) (citing *Frye*, 293 F. at 1014).

89. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 588–89 (1993).

90. Hasani, *supra* note 88, at 96–97 (citing *Daubert*, 509 U.S. at 593–94).

91. Engel & Overpeck, *supra* note 74, at 23–24.

92. See Hasani, *supra* note 88, at 98–99; see also Brooks E. Harlow et al., *An Inconvenient Burden of Proof?: CO₂ Nuisance Plaintiffs Will Face Challenges in Meeting the Daubert Standard*, 32 ENERGY L.J. 459, 482–84 (2011).

93. See Hasani, *supra* note 88, at 93.

94. See Harlow et al., *supra* note 92, at 483.

that error rates for climate models are largely unknown and unknowable.⁹⁵ Additionally, seemingly small variations drastically impact results; for instance, choices among several reasonable means of accounting for the dynamics of clouds can dramatically impact temperature change predictions.⁹⁶ These results only become more unreliable when attempting to downscale climate models to predict local or regional events (which will form the basis for most climate change suits, like the one brought by Kivalina).⁹⁷

That being said, there are some standards to govern the use of climate models.⁹⁸ Climate change model results have been subject to peer review and publication on a fairly frequent basis⁹⁹ and have gained something akin to general acceptance despite their flaws.¹⁰⁰ Thus, it is far from certain that a judge would or should prevent such evidence from being admitted. This is especially so in the nearly half of *state* jurisdictions that still employ the *Frye* general acceptance test, because, as mentioned *supra*, AGW and climate models are certainly generally accepted in the scientific community.¹⁰¹ But, it is also far from a foregone conclusion that these models *would* be admitted. Moreover, the evidence that is admitted would still be subject to cross-examination on all of these points, making it vulnerable to disbelief.¹⁰²

2. Public Nuisance Claims Will Fare No Better

Proceeding on a public nuisance theory may be more attractive to climate change plaintiffs, primarily because there are far fewer elements (for instance, there is no need to prove that the defendant was actually negligent).¹⁰³ Rather a plaintiff must show only “an unreasonable interference with a right common to the general public.”¹⁰⁴ “[A p]ublic nuisance must affect the public’s common rights, as opposed to merely inflicting an injury to a large number of people’s private rights.”¹⁰⁵ The ability to enjoy the

95. Hasani, *supra* note 88, at 100.

96. *Id.* at 93.

97. Engel & Overpeck, *supra* note 74, at 26-27; Harlow et al., *supra* note 92, at 486-87.

98. Hasani, *supra* note 88, at 100.

99. Harlow et al., *supra* note 92, at 489-90 (emphasizing that there is some reason to question the strenuousness to which the theory and models have been scrutinized, but conceding widespread publication).

100. *Id.* at 491-92.

101. *Id.* at 473-75.

102. *See id.* at 474.

103. *See* Abate, *supra* note 18, at 600 (citing *Wood v. Picollo*, 443 A.2d 1244, 1249 (R.I. 1982)).

104. RESTATEMENT (SECOND) OF TORTS § 821B(1) (1979).

105. Abate, *supra* note 18, at 600 (citing *Waterloo Stock Car Raceway, Inc.*, 409 N.Y.S.2d 40, 43-44 (1978)).

environment would clearly qualify as such,¹⁰⁶ but that does not spell a home run for climate change plaintiffs.

Even if it undeniably harms the public to see the environment submerged beneath the ocean or damaged by the increased severity of weather events, plaintiffs will still have to establish that the *defendants* are the ones interfering with their enjoyment of those resources. This raises all of the same causation issues discussed previously.¹⁰⁷ Thus, a switch in theory from negligence to public nuisance does not help plaintiffs to avoid the most vexing of obstacles to success.¹⁰⁸

B. *A Tort-Based Remedy Should Also be Eschewed for Policy Reasons*

The point of the preceding Section is not to say that climate change plaintiffs will never win a tort suit, but rather to suggest that it is not certain, and outcomes will unquestionably vary from judge to judge and jurisdiction to jurisdiction. As a result, there are a multitude of policy-level disadvantages to utilizing tort law as a means of compensation. This Section provides an overview of four policy disadvantages.

1. Tort Law Will Place an Onerous Burden on Plaintiffs

First, relying on tort law will place an unfair burden on plaintiffs themselves. The consequence of *AEP* and *Kivalina* is that plaintiffs must turn to state law to pursue their claims.¹⁰⁹ The consequence of *Ouellette* is that they may only sue greenhouse gas emitters in the state where they are located (or perhaps incorporated).¹¹⁰ Taken together, these decisions would force climate change plaintiffs who want to be fully compensated to file multiple lawsuits (one in each state to cover all potential emitters), which would be governed by the laws of multiple states. Federal diversity jurisdiction may be available for some, but ultimately this would do little to help since federal judges would likely not join together cases that will be governed by different law, forcing plaintiffs to maintain multiple suits.¹¹¹ Class actions

106. Grossman, *supra* note 18, at 53 (“If, however, pollution prevents the use of a public beach or kills the fish in a navigable stream and thus potentially affects all members of the community, it impinges on a public right and can be characterized as a public nuisance. The enjoyment of the natural environment would seem to constitute such a public right.”).

107. See *supra* notes 72 to 102 and accompanying text.

108. Neither, incidentally, would a claim that greenhouse gas emissions constitute a private nuisance, as a similar showing of interference would be necessary.

109. See *supra* notes 34 to 49 and accompanying text.

110. See *supra* notes 52 to 67 and accompanying text.

111. Not to mention creating the possibility that defendants will try to place the majority of the blame on absent, out-of-state parties, and thus avoid liability.

may be possible, but ultimately a plaintiff would still have to join a class action in every state, or at least every state where a major emitter is located. All this litigation would simply not be practical; it would be expensive, time consuming, exhausting, and only positive for the lawyers who would likely retain most of the judgments.¹¹²

2. The Largest Emitters are Likely to Escape Liability Under a Tort Law Regime

And, the former assertion assumes that liability is even available in all states, which it likely will not be. If anything should be taken from the discussion *supra* of the problems facing plaintiffs trying to succeed against greenhouse gas emitters, it should be that liability is far from a sure thing.¹¹³ The odds that each of fifty jurisdictions will come out on the side of plaintiffs in allowing lawsuits to go forward are astronomically low.

It is true that, even if plaintiffs are unable to meet the traditional tort burdens discussed above, some jurisdictions might be willing to consider creating novel theories of liability. For instance, faced with claims by mothers that the drug diethylstilbesterol (DES) caused cancer in the daughters of some patients to whom it was prescribed, and knowing that those mothers likely could not prove who made the particular pills they took, the California Supreme Court imposed liability on all DES manufacturers in proportion to their market share.¹¹⁴ But this sort of innovation is not common, and is mostly limited to highly unusual cases like the DES suits.¹¹⁵

Moreover, though liability likely will be found in some jurisdictions (whether under traditional or novel theories), those where the largest emitters are located are the least likely to follow along. The reason for this is simple: politics. The largest emitters—speaking broadly now to include car manufacturers and fossil fuel harvesting operations—are powerful constitu-

112. Cf. Valian A. Afshar, Note, *A Blended Approach to Reducing the Costs of Shareholder Litigation*, 113 MICH. L. REV. 315, 318 (2014) (arguing that multiform shareholder litigation results in multiple lawsuits governed by the law of multiple jurisdictions, creating the potential for conflicting judgments and rewarding primarily plaintiffs' attorneys).

113. See *supra* Section II.A.

114. *Sindell v. Abbott Laboratories*, 607 P.2d 924, 937-38 (Cal. 1980).

115. See Farber, *supra* note 16, at 1639-40; see also Daniel J. Grimm, Note, *Global Warming and Market Share Liability: A Proposed Model for Allocating Tort Damages*, 32 COLUM. J. ENVTL. L. 209, 216 (2007) ("Market share liability has often been found appropriate only where products are sufficiently interchangeable such that it is either impossible or overwhelmingly burdensome to isolate individual causation among defendants."); Andrew B. Nace, Note, *Market Share Liability: A Current Assessment of a Decade-Old Doctrine*, 44 VAND. L. REV. 395, 396-97 (1991) (discussing the slow and reluctant spread of market share liability after *Sindell* and mentioning problems that emerged during attempts to apply it to claims outside DES litigation).

ents in many states. For instance, coal mining in West Virginia accounted for somewhere between five and seven percent of the state's GDP from 1997 to 2007; and beyond that, its total economic impact in 2008 included the creation of over 63,000 jobs, \$25.53 billion in business volume and \$3.6 billion in employee compensation.¹¹⁶ Moreover, seventeen states receive more than fifty percent of their electricity from the burning of coal (one of the largest sources of greenhouse gas emissions), including West Virginia (ninety-five percent) and Kentucky (ninety-three percent).¹¹⁷ It would be naïve to think that this economic reality does not influence the decisions of elected politicians, not just because politicians depend on campaign financing from these industries,¹¹⁸ but also because politicians genuinely do not want their constituents to lose their jobs or pay higher energy prices because the coal or power companies are facing AGW liability.¹¹⁹

Indeed, there is ample evidence to suggest that, as much as we would prefer otherwise, powerful interests can and do have an impact on the decisions judges make, at least in the thirty-nine states where judges must run for election.¹²⁰ Even if that were not the case, tort law itself can be easily

116. BUREAU OF BUS. & ECON. RESEARCH, W. VA. UNIV. & CTR FOR BUS. & ECON. RESEARCH, MARSHALL UNIV., *THE WEST VIRGINIA COAL ECONOMY*: 2008 7, 9-10 (2010).

117. The others are: Wyoming, Indiana, Missouri, Utah, North Dakota, Nebraska, Ohio, New Mexico, Colorado, Wisconsin, Kansas, Iowa, Michigan, Arkansas, and Montana. *Facts & Figures – According to EIA Data*, AM.'S POWER: AM. COALITION FOR CLEAN COAL ELEC. (2013), <http://americaspower.org/according-to-eia-data>.

118. Cf. Patrick McGinley, *Collateral Damage: Turning a Blind Eye to Environmental and Social Injustice in the Coal Fields*, 19 J. ENVTL. & SUSTAINABILITY L. 305, 309-16 (2013) (discussing the coal industries development of the “war on coal” campaign to build opposition to federal regulation, which included “multi-million dollar advertising campaign, urg[ing] coal-mining families to join the coal and electric power industry in fighting back against the federal government’s so-called ‘war on coal’”); Eric Biber, *Cultivating a Green Political Landscape: Lesson for Climate Change Policy from the Defeat of California’s Proposition 23*, 66 VAND. L. REV. 399, 403-04 (2013) (discussing how oil companies contributed ninety-three percent of the \$10.5 million dollars raised to support a ballot measure that would delay the implementation of a California greenhouse gas regulation until the State’s unemployment level fell to 5.5 percent).

119. See, e.g., *Obama Administration Targets Coal With Controversial Emissions Regulation*, FOX NEWS (June 2, 2014), <http://www.foxnews.com/politics/2014/06/02/obama-to-announce-rule-to-limit-emissions-from-fossil-burning-plants-part-his/> (describing now Senate Majority Leader Mitch McConnell’s opposition to the EPA’s recent attempts to address global warming, including his assertion that they will raise energy prices); Darren Goode, *Mitch McConnell Launches Pre-emptive Strike on EPA Climate Rule*, POLITICO (Jan. 16, 2014, 5:57 PM), <http://www.politico.com/story/2014/01/mitch-mcconnell-epa-climate-rule-102272.html> (quoting Senate McConnell as he ties increased greenhouse gas regulation to coal industry job losses).

120. *Bill Moyers Journal: Justice for Sale* (Pub. Broad. Serv. Feb. 19, 2010) (replaying and commenting on a similar 1999 broadcast in the wake of *Citizens United*).

modified by state legislatures that are, if anything, more easily influenced.¹²¹ For proof, one need look no further than the West Virginia statehouse, where two weeks after a chemical spill left 300,000 people in and around the state capital without water, the Senate Natural Resources Committee moved forward with a measure backed by the coal industry that would weaken stream protections.¹²² It seems likely that the states where the biggest greenhouse gas emitters are located—the states where lawsuits against them must be brought under *AEP* and *Ouellette*—are also the states where those emitters are most likely to have the political influence to choke off liability before it is imposed (either by judicial decision or legislative fiat). Some might argue that pressure stemming from other states' adoption of schemes that provide a remedy to climate change plaintiffs will eventually lead these recalcitrant few to play along,¹²³ but, given the powerful nature of the interests in question here (including the ordinary ratepayer and miner) and the relative ease of blocking liability, that is far from certain and less than likely.

3. Judges Are Not Climate Scientists

Third, as the discussion *supra* makes clear, judges are not scientists. A survey of judges conducted by Sophia Gatowski revealed that more than half of judges believed that their education left them less than prepared to deal with scientific evidence, and ninety-six percent reported that they had not received continuing legal education instruction in scientific methods and principles:¹²⁴

More generally, they lack the technical or specialized skills to craft the rules that govern risk-generating conduct. . . . Even when courts have access to information, they are limited in [their] capacity to process it. No matter how intelligent or sophisticated, judges are generalists. They ordinarily lack the time let alone the experience to become experts in any given area. (The U.S. Court of Appeals for the D.C. Circuit is often said to be an expert in administrative law because so many cases involve such law, but the

121. See Richard C. Turkington, *Constitutional Limits on Tort Reform: Have the State Courts Placed Insurmountable Obstacles in the Path of Legislative Responses to the Perceived Liability Insurance Crisis?*, 32 VILL. L. REV. 1299, 1299-1302 (1987) (discussing legislative changes to tort law made in the medical malpractice context).

122. Ken Ward, Jr., *Committee Moves to Weaken Water Standards*, SUN. GAZETTE-MAIL (Jan. 22, 2014), <http://www.wvgazette.com/News/201401220087>.

123. See Heather K. Gerken & Ari Holtzblatt, *The Political Safeguards of Horizontal Federalism*, 113 MICH. L. REV. 57, 63, 86-97 (2014).

124. Sophia I. Gatowski et al., *Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-Daubert World*, 25 L. & HUM. BEHAV. 433, 442 (2001).

judges are still not experts in auto safety [or other forms of science or engineering].)¹²⁵

And yet “science hardly gets more complex than AGW theory.”¹²⁶ In short, by relying on tort law we are leaving to non-experts who wholly depend on the parties for information¹²⁷—which of course means that they are presented with contradictory claims from the most partisan of experts on both sides¹²⁸—the task of determining the reliability of some the most complex scientific data imaginable. One could hardly imagine a situation less desirable to anyone seeking a just outcome, whether as a plaintiff or a defendant.

4. Tort Law Lacks Predictability

Finally, tort law fails as a remedy from a defendant’s perspective as well, because it gives industry no certainty as to the rules. Tort, as a common law field, develops case by case, reactively.¹²⁹ Courts can “transform” prior precedent without overruling a seemingly inconsistent earlier decision¹³⁰ and decide each case based on its facts, without offering a hard and fast rule for future cases.¹³¹ The upshot of all this is that industry is left blundering in the dark, unsure of whether (will my jurisdiction allow plaintiffs to go forward?) and for what (what damages will my jurisdiction recognize? How will it apportion damages among defendants?) it will be found liable; and in the case of AGW liability, there is a lot at stake. The result will likely be increased liability insurance premiums, the cost of which may or may not be passed on to consumers.

III. AN ADMINISTRATIVE ANSWER: A PROPOSED REMEDY AND ITS POLICY ADVANTAGES

To summarize, the problem with state tort law as a remedy for climate change related injuries is that there are simply too many actors involved to ensure a coherent and predictable doctrine; too many jurisdictions, each with their own unique common law; too many judges grappling with difficult scientific issues; too many plaintiffs experimenting with new ways to

125. LISA SCHULTZ BRESSMAN, EDWARD L. RUBIN, & KEVIN M. STACK, *THE REGULATORY STATE* 96-97 (2d ed. 2013).

126. Harlow et al., *supra* note 92, at 475.

127. BRESSMAN, RUBIN, & STACK, *supra* note 125, at 96.

128. See Hasani, *supra* note 88, at 101-02.

129. See Susan Rose-Ackerman, *Regulation and the Law of Torts*, 81 AM. ECON. REV. 54, 54 (1991).

130. MELVIN ARON EISENBERG, *THE NATURE OF THE COMMON LAW* 132-35 (1988).

131. BRESSMAN, RUBIN, & STACK, *supra* note 125, at 96.

get past hurdles in the path to compensation; and too many defendants trying to set up new barriers to liability. This Part proposes an alternative in the form of an EPA-administered, polluter-financed system of victim compensation. Section III(A) describes the proposed program and demonstrates that its components would not take the federal government into uncharted waters. Section III(B) then provides several reasons why this program would be superior to state tort lawsuits on a policy level.

A. *The Polluter Funded Anthropogenic Climate Change (PFACC) Fund*

The PFACC Fund program would consist of three essential components: (1) payments from greenhouse gas emitters, (2) resulting in compensation to victims injured by climate change in some tangible way, (3) based upon agency adjudication and claims processing. This Section will explore each of those components and compare them with existing (or previously existing) programs to demonstrate that each could be effectively administered on the federal level.

1. The Polluter Pays: Basic Principles of a Responsibility-Based Regime

The fairest means of obtaining the funds necessary to compensate victims of climate change damage is to tax those responsible for emitting greenhouse gases.¹³² This idea is hardly a novel one. In 1980, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in response to the Love Canal disaster:¹³³

CERCLA was enacted to implement a systematic process for identifying and responding to contaminated sites backed by the largest environmental fund in the history of the United States, the revenues for which were generated by taxpayers and the polluters themselves. An integral component of this statutory scheme was the Hazardous Substance Superfund [Superfund] that Congress created as part of CERCLA to compensate [the] state and federal governments if the responsible parties [could not] be identified or [were] unable to undertake such activities themselves in hazardous waste site cleanups. Taxes generated from the chemical and petroleum industries that benefit[ed] from producing contaminating

132. See Daniel A. Farber, *Adapting to Climate Change: Who Should Pay*, 23 J. LAND USE & ENVTL. L. 1, 29-33 (2007).

133. Daryl Dworkin, *Love Canal and the Superfund—30 Years Later*, EXAMINER (Apr. 22, 2011), <http://www.examiner.com/article/love-canal-and-the-superfund-30-years-later>.

products supplied the Superfund with approximately \$1.5 billion annually. . . . Moreover, the [EPA] seeks to hold those parties who contributed to the contamination responsible for the cost of CERCLA cleanups. Such parties may be asked to help pay for the cleanup of a site even if they acted in full accordance with the law “at the time they disposed of the waste.”¹³⁴

Even though the Superfund tax was allowed to expire in 1995, leading the Treasury Department to subsidize cleanups ever since,¹³⁵ the principle of holding polluters responsible has not been forgotten. In 2012, Congress responded to the Deep Water Horizon oil spill in the Gulf of Mexico by passing the RESTORE Act.¹³⁶ This law created a trust fund into which eighty percent of all fines and civil penalties paid under the Federal Water Pollution Control Act as a result of the spill would be deposited.¹³⁷ These funds, now totaling more than \$653 million, will be given as grants to help restore communities in Alabama, Louisiana, Mississippi, and Texas that were damaged by the spill.¹³⁸

The PFACC Fund should be financed based upon similar principles to CERCLA and the RESTORE Act: by taxing greenhouse gas emitters. Of course, it clearly would not be fair to tax small emitters at the same level as larger ones, so such taxes can and must be tailored to the quantity of gases emitted.¹³⁹ Moreover, the tax should in some way factor-in past emissions; after all, it is hardly fair that relative newcomers (who may have less capital with which to adjust their emissions downward immediately) pay the same amount as emitters who have been dumping millions of tons of CO₂ into the atmosphere for decades.¹⁴⁰ This could be accomplished by selecting a base year upon which to calculate a “past pollution” penalty and adjusting that base year forward yearly so that the penalty for past pollution declines as time goes on.

134. Abate, *supra* note 19, at 18-19 (footnotes omitted).

135. Braunson Virjee, *Stimulating the Future of Superfund: Why the American Recovery and Reinvestment Act Calls for a Reinstatement of the Superfund Tax to Polluted Sites in Urban Environments*, 10 SUSTAINABLE DEV. L. & POLY 27, 27 (2010).

136. Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012, Pub. L. No. 112-141, 126 Stat. 405 (2012).

137. Press Release, U.S. Dep't. of the Treasury, Gulf Coast Region Can Now Receive RESTORE Act Funding from U.S. Treasury (Oct. 14, 2014), <http://www.treasury.gov/press-center/press-releases/Pages/JL2663.aspx>.

138. *Id.*

139. See Daniel A. Farber, *Apportioning Climate Change Costs*, 26 UCLA J. ENVTL. L. & POLY 21, 44-46 (2008).

140. See *id.*

The program described in the preceding paragraph assumes that “emitter” is defined to include only large industrial actors contributing to pollution—i.e. fossil fuel harvesting operations, automobile manufacturers, power companies, etc. It is possible to imagine a world in which smaller sources of greenhouse gas emissions—such as individual car owners and cattle farms—are also subject to taxation. But, measuring the contribution of such small sources to the problem would be, to say the least, daunting; accordingly, the PFACC Fund program should utilize a minimum emissions threshold to determine who or what is subject to tax. Ultimately, smaller emitters would likely see some of the cost in the form of increased prices, so there is no need to fear that small emitters are avoiding *all* financial responsibility.

2. Compensating the Victims: Direct Payment of Claims

The second component of the PFACC Fund program is much more straightforward: victims of climate change effects submitting valid claims should be directly compensated.¹⁴¹ This differs from CERCLA and the RESTORE Act, which assist victims mostly indirectly, CERCLA by funding site cleanup and the RESTORE Act through grants.¹⁴² But, it is not beyond the competency of the federal government, which manages individual accounts and makes payments to individual citizens in a variety of contexts.¹⁴³ Indeed, it would not even be the first system to federalize compensation for injuries that might not be adequately addressed by state law. For instance, in 1969 Congress passed a law to provide compensation to coal miners who contracted black lung disease through a system administered by the Department of Health and Human Services.¹⁴⁴ “The act’s remedial purpose was to recognize the widespread incidence of [black lung disease] among American coal miners and to provide, on a national basis, alleviating compensation. A federal program was needed because in most instances workers’ compensation programs of the several states did not provide benefits.”¹⁴⁵ Likewise, the need for the PFACC Fund stems from the inability of state tort law (or

141. Exactly how those claims would be evaluated and what would be compensated is discussed in Section III.A(3) *infra*.

142. See *supra* notes 131 to 136 and accompanying text. Although, CERCLA did, from time to time, fund relocation of individuals in contaminated areas. Abate, *supra* note 19, at 20-23.

143. See, e.g., Regulations Governing Retirement Savings Bonds, 79 Fed. Reg. 74,023 (Dec. 15, 2014) (to be codified at 31 C.F.R. pt. 347) (establishing a federally administered Roth IRA program to be made available to ordinary citizens in order to encourage saving for retirement).

144. Federal Coal Mine Health and Safety Act of 1969, tit. IV (“Black Lung Benefits”), Pub. L. No. 91-173, 83 Stat. 742 (1969) (prior to 1972 amendment).

145. Moore v. Harris, 623 F.2d 908, 914 (4th Cir. 1980).

other remedies on the state level) to adequately compensate individual victims for the losses they have sustained as a result of climate change.¹⁴⁶

3. Connecting Payment with Compensation: An Adjudicative Framework

Compensation through the PFACC Fund should involve a three-phase process: (i) attribution, (ii) taxation and compensation scheduling, and (iii) claims adjudication.

In Phase I, EPA would make an “attribution determination,” concluding that certain harms—such as coastal erosion in a given area, damage caused by severe storms of increased frequency or force, or drought—are caused in whole or in part due to climate change. This phase is the most similar to the sorts of determinations EPA already makes in determining whether under the CAA certain air pollutants pose a danger to the public or whether certain waterways fall within its CWA jurisdiction.¹⁴⁷

In Phase II, EPA would establish compensation schedules that determine what sorts of damages will be accounted for and how much will be paid for each type of damage; it would then estimate the total damages likely to be paid and apply a per-ton tax to carbon emissions by covered emitters to generate that amount. This would allow EPA to limit compensation to the most concrete sort of damages (rather than, say, the mere fact that people may have to pay higher electric bills due to increased air conditioning usage).¹⁴⁸ Making these determinations would require the development of new competencies at EPA, but it is not a new task for government generally. After all, workers compensation programs routinely generate such schedules for workplace injuries,¹⁴⁹ and unemployment compensation

146. Although longer in duration and broader in scope, the PFACC Fund program would also be consistent with prior federal assumption of control over compensation where the event involves matters (like terrorism) or actors (like airlines) that seem larger than one particular state; the best example of this is the 9/11 Victims Compensation Fund. Air Transportation Safety and System Stabilization Act, tit. IV (“September 11th Victim Compensation Fund of 2001”), Pub. L. No. 107–42, 115 Stat. 230 (2001).

147. See, e.g., Definition of “Waters of the United States” Under the Clean Water Act, 79 Fed. Reg. 22,188 (Apr. 21, 2014) (proposed rule defining “waters of the United States” as used in the CWA by making a scientific determination that certain streams and waterways fall within the EPA’s jurisdiction under the CWA); 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) (concluding that greenhouse gases did endanger the public health and welfare).

148. Cf. Farber, *supra* note 16, at 1609-13 (suggesting that compensation should only be awarded for the most directly measurable of damages).

149. See JOHN C. P. GOLDBERG, ANTHONY J. SEBOK, & BENJAMIN C. ZIPURSKY, TORT LAW: RESPONSIBILITIES AND REDRESS 260 (2012).

taxes paid by employers are fairly routinely conditioned on the extent of the damage they cause (i.e., the number of their former employees that claim unemployment).¹⁵⁰

Finally, in Phase III, EPA would accept and adjudicate claims from victims of damages “attributed” to climate change for compensation according to the established schedule. As with most government adjudication systems, this process would likely involve an initial approval or denial of the claim, followed by the opportunity to challenge that determination at a hearing if necessary.¹⁵¹ The EPA already has the framework in place to handle those challenges, given its employment of Administrative Law Judges (ALJs) pursuant to the Administrative Procedure Act (APA) to preside over enforcement actions brought by the EPA under a plethora of environmental statutes and an Environmental Appeals Board to review ALJ decisions.¹⁵²

B. *The PFACC Fund Is Preferable to State Tort Law*

Whereas it seems clear that the CAA currently does not preempt state tort law,¹⁵³ a compensation scheme of the sort proposed here clearly would.¹⁵⁴ Accordingly, the Constitution likely requires that it provide a “reasonable alternative remedy.”¹⁵⁵ This Section argues that the PFACC

150. See, e.g., MASS. EXEC. OFFICE OF LABOR & WORKFORCE DEV. & DEP’T OF UNEMPLOYMENT ASSISTANCE, THE EMPLOYER’S GUIDE TO UNEMPLOYMENT INSURANCE 31 (last visited Dec. 15, 2014), available at <http://www.mass.gov/lwd/docs/dua/business/employer-handbook.pdf> (describing Massachusetts’ experience rating system, which rewards employers who generate fewer claimants).

151. See, e.g., *Disability Determination Process*, SOC. SEC. ADMIN. (last visited Dec. 15, 2014), <http://www.ssa.gov/disability/determination.htm> (describing the process by which the Social Security Administration processes disability benefits claims).

152. See ENVIL. PROT. AGENCY, A CITIZEN’S GUIDE TO EPA’S ENVIRONMENTAL APPEALS BOARD 13 (2013), available at [http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/8f612ee7fc725edd852570760071cb8e/26e637699cb1cc1685257b50004044f6/\\$FILE/Citizens%20Guide%20January%202013.pdf](http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/8f612ee7fc725edd852570760071cb8e/26e637699cb1cc1685257b50004044f6/$FILE/Citizens%20Guide%20January%202013.pdf).

153. See *supra* Section I.B.

154. See *Geier v. Am. Honda Motor Co.*, 529 U.S. 861, 886 (2000) (concluding that state law claims against Honda for failure to include a passenger side airbag was preempted because it would frustrate the purpose of federal regulation, which sought to allow manufacturers to choose between a variety of safety devices); *English v. General Elec. Co.*, 496 U.S. 72, 78–79 (1990) (concluding that state law is preempted where Congress legislates so comprehensively as to suggest a desire for “the Federal Government to occupy [the field] exclusively”).

155. *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 94 (1980) (Marshall J., concurring) (citing *Duke Power Co. v. Carolina Env’tl. Study Group*, 438 U.S. 59 (1978); *Ingraham v. Wright*, 430 U.S. 651 (1977); *N. Y. Cent. R.R. Co. v. White*, 243 U.S. 188 (1917)) (“[O]ur cases demonstrate that there are limits on governmental authority to abolish ‘core’ common-

Fund would provide not only a “reasonable alternative,” but a preferable one for two reasons: because, unlike state tort law, (1) it takes advantage of the scientific expertise of the EPA and (2) it appropriately balances the interests of victims and industry.

1. EPA Has the Necessary Scientific Expertise

Unlike judges,¹⁵⁶ the EPA is in a position to meaningfully evaluate climate science models and their relative strengths and weaknesses. More than half of its 17,000 employees are scientists, engineers and policy analysts;¹⁵⁷ it operates environmental science laboratories across the country;¹⁵⁸ it routinely makes scientific and engineering determinations concerning pressing environmental issues;¹⁵⁹ and it will devote nearly ten percent (or \$764 million) of its annual budget in 2015 to science and technology focused activities.¹⁶⁰ Indeed, the Supreme Court itself has recognized that the EPA is an expert agency “surely better equipped to [evaluate climate science] than individual district judges issuing ad hoc, case-by-case injunctions.”¹⁶¹ It is for precisely this reason that courts, including the Supreme Court, defer to reasonable agency interpretations of their authorizing statutes in the first place.¹⁶² If any governmental actor is capable of determining what damage can be attributed to climate change and administering compensation for that damage it is the EPA. A major advantage of the plan proposed here is that it puts that responsibility squarely in the EPA’s hands.

law rights . . . at least without a compelling showing of necessity or a provision for a reasonable alternative remedy.”).

156. See Judges Are not Climate Scientists, *supra* Section II.B(3).

157. *How Many People Work for the EPA?*, ENVIL PROT. AGENCY, <http://publicaccess.support.portal.com/link/portal/23002/23012/Article/17588/How-many-people-work-for-the-EPA> (last modified Sept. 30, 2014).

158. *Id.*

159. See, e.g., Definition of “Waters of the United States” Under the Clean Water Act, 79 Fed. Reg. 22,188 (Apr. 21, 2014) (proposed rule defining “waters of the United States” as used in the CWA by making a scientific determination that certain streams and waterways fall within the EPA’s jurisdiction under the CWA); Endangerment and Cause of Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (codified at 40 C.F.R. ch. 1 (2014)) (concluding that greenhouse gases did endanger the public health and welfare).

160. ENVIL PROT. AGENCY, FY 2015 BUDGET IN BRIEF 10 (2014), available at <http://www2.epa.gov/planandbudget/fy2015> (then follow “FY 2015 EPA Budget in Brief” hyperlink).

161. *Am. Elec. Power v. Connecticut*, 131 S. Ct. 2527, 2539 (2011).

162. *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

2. Appropriately Balancing Victim and Industry Interests

In many ways this proposal provides many of the same advantages that accompanied the enactment of workplace compensation statutes: victims would be relieved of the burden of proving causation, which would be pre-determined by the EPA; victims would receive compensation through a process that is fair, but much simpler than litigation and far more likely to result in payment; and industry would receive a fair and consistent process capable of providing them with prospective and clear rules, so that they can predict future liability and incorporate it into their business plan.¹⁶³ Moreover, one centralized actor, applying one single set of rules, in a consistent fashion—not fifty state judicial systems and fifty state legislatures—would make the determinations, allowing plaintiffs and defendants to avoid vexing multiforum litigation and its accompanying expenses.¹⁶⁴ By requiring the development of new schedules for each “attribution determination,” the PFACC Fund program would also avoid one of the major problems currently facing workers’ compensation programs today: that the payment schedules are not updated frequently enough.¹⁶⁵

Of course, victims might not get as much as they could have convinced a sympathetic jury to award them, but most plaintiffs would likely prefer the certainty of some compensation over the expense and frustration of litigation that might never make it to a jury in the first place.¹⁶⁶ Similarly, defendants might have been able to avoid liability altogether in the courtroom, but likely prefer to know for certain what they will be required to pay instead of risking being found liable in one or many of fifty different jurisdictions for widely varying amounts (not to mention the legal fees associated with defending against lawsuits in each of those jurisdictions).¹⁶⁷ Hence, a centrally administered, scientifically sound system of apportioning responsibility and distributing compensation for damages associated with climate change is in the best interests of all parties and ultimately society as a whole.

163. Cf. GOLDBERG, SEBOK, & ZIPURSKY, *supra* note 149, at 260-61. Moreover, if they believe the EPA incorrectly determines that an event is *not* causally connected to climate change or is not paying attention to climate change related damages affecting them, they can petition the EPA for regulatory action. See *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497 (2007).

164. See *supra* Section II.B(1).

165. See GOLDBERG, SEBOK, & ZIPURSKY, *supra* note 149, at 261.

166. Cf. *id.* at 259-61.

167. *Id.* It is, admittedly, unlikely that a defendant would be subject to suit in all fifty states. Some may only be subject to suit in one, but many will fall under the jurisdiction of several state court systems.

CONCLUSION

Of course, federal legislators are susceptible to powerful political interests, too.¹⁶⁸ And, for the time being, the legislative action that would be necessary to enact the PFACC Fund program seems incredibly unlikely.¹⁶⁹ The purpose of this Note has not been to argue that state tort law cannot or should not be used as a gap-filler in the interim to attain some measure of compensation for victims. Rather, the purpose has been to demonstrate that it *is not* and *cannot be* a substitute for meaningful federal action to compensate victims, and to suggest one possible option for how such a system could be structured. At the end of the day, a global problem that threatens damages on a national and regional scale cannot be addressed by the hodgepodge efforts of fifty state governments. As reluctant as the head cook seems to put on his apron in this instance, there is no other viable alternative.

168. *But see* THE FEDERALIST NO. 10 (James Madison) (arguing that factions will have a more difficult time capturing the federal rather than state legislatures).

169. *See* Drew Desilver, *Congress Still on Track to be Among the Least Productive in Recent History*, PEW RESEARCH CTR (Sept. 23, 2014), <http://www.pewresearch.org/fact-tank/2014/09/23/congress-still-on-track-to-be-among-least-productive-in-recent-history/>.