

**Massachusetts v. EPA: A Pyrrhic Victory for Climate
Change Litigation
An Analysis of the Current State of Climate Change
Litigation and its Path Forward**

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INTRODUCTION

In 1999, a group of citizens and environmental groups filed a petition with the Environmental Protection Agency (“EPA”), asking the EPA to limit climate pollution in the form of greenhouse gases (“GHG”) under the Clean Air Act (“CAA”).¹ The Bush EPA rejected this petition, asserting that greenhouse gases were not “air pollutant[s]” as defined by the statute.² As a result, the EPA had no authority to regulate their emissions.³ In response, Massachusetts and a group of states, cities, and conservation organizations appealed that decision.⁴ Eight years later, in 2007, the Supreme Court reversed the Bush EPA’s rejection, ruling that greenhouse gases “fit well within the Act’s capacious definition of ‘air pollutant.’”⁵ Thus, the EPA had the authority and responsibility to regulate their emission.⁶

On one hand, the ruling in *Massachusetts v. EPA* has proven to be a substantial step forward in the fight against climate change. It has led to the EPA’s promulgation of greenhouse gas discharge limits from both stationary and mobile sources.⁷ Over the next ten years, several performance standards will become fully operative, yielding both environmental and economic benefits

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¹ Ben Levitan, *The Tenth Anniversary of Massachusetts v. EPA*, ENV’T DEF. FUND (Apr. 2, 2017), <http://blogs.edf.org/climate411/2017/04/02/the-tenth-anniversary-of-massachusetts-v-epa/> [https://perma.cc/KMK4-QJ3Y].

² *Id.*

³ *See id.*

⁴ *Id.*

⁵ *Massachusetts v. EPA*, 549 U.S. 497, 500 (2007).

⁶ *Id.*

⁷ Levitan, *supra* note 1.

for the American people.⁸ These benefits include: saving more than a trillion dollars in fuel prices thanks to the Clean Car Standards; a one-billion-ton reduction in carbon pollution due to the Clean Trucks Standards; a potential eleven percent decline in average electric bills owing to the Clean Power Plan; and a 510 thousand-ton reduction in smog-forming pollution under the EPA's methane pollution standards for new fossil fuel facilities.⁹

However, *Massachusetts v. EPA* did not solve our climate change problems. Many climatologists still worry that the steps taken by the EPA, such as the Clean Power Plan, are not enough and will be implemented too slowly to prevent catastrophic damage to our environment.¹⁰ Furthermore, since the executive branch's authority exerts itself in part through administrative agencies, it is no surprise that the EPA's regulatory zeal is directly and significantly influenced by the politics of the President.¹¹

In an effort to deal with the "substantial and unreasonable interference with public rights" caused by greenhouse gas emissions, a group of states, New York City, and several nonprofit land trusts sued four private electric companies and the Tennessee Valley Authority as "the five largest emitters of carbon dioxide in the United States."¹² The plaintiffs asserted that, as contributors to climate change, these major greenhouse gas emitters were "in violation of federal common law of interstate nuisance, or, in the alternative, of state tort law" and sought injunctive relief requiring each defendant "to cap its carbon dioxide emissions and then reduce them by a specified amount for at least a decade."¹³ The Supreme Court in *AEP v. Connecticut*, citing *Massachusetts*, held that the CAA and the EPA actions it authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired powerplants.¹⁴

⁸ *Id.*

⁹ *Id.*

¹⁰ David Biello, *How Far Does Obama's Clean Power Plan Go in Slowing Climate Change?*, SCI. AM. (Aug. 6, 2015), <https://www.scientificamerican.com/article/how-far-does-obama-s-clean-power-plan-go-in-slowing-climate-change/> [<https://perma.cc/3VAD-88FB>].

¹¹ Nadja Popovich et al., *The Trump Administration Is Reversing Nearly 100 Environmental Rules. Here's the Full List.*, N.Y. TIMES (Jan. 20, 2021), <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollback.html?mtrref=www.google.com&assetType=REGIWALL> [<https://perma.cc/5RFD-UL68>].

¹² *Am. Elec. Power Co., Inc. v. Connecticut*, 564 U.S. 410, 418 (2011).

¹³ *Id.* at 418–19.

¹⁴ *Id.* at 424.

In *Massachusetts v. EPA*, the Supreme Court held that the EPA could address greenhouse gas emissions because they are “air pollutants.”¹⁵ It is for that same reason that the Supreme Court in *AEP v. Connecticut* held that federal courts could not.¹⁶ Thus, the holding of *AEP* and the reasoning of *Massachusetts* have dealt a heavy blow to the efforts through litigation to combat the effects of climate change.

Nevertheless, thanks to the efforts of creative plaintiffs’ lawyers, parties affected by global warming are continuing to litigate climate change against polluters.¹⁷ Though defense lawyers derisively describe these efforts as “regulation through litigation,”¹⁸ plaintiffs continue to explore novel avenues to prevent and recoup damages caused by climate change.¹⁹ This Note seeks to address this exploration and determine if there is a feasible path forward for plaintiffs to pursue.

The first part of this Note addresses the debate over climate change, the causes of climate change, and where greenhouse gas emissions come from in an effort to give the discussion weight and to explain why this litigation is so important, even to the landlocked state of Kentucky. Part two discusses the different efforts to combat climate change through both the political and judicial processes. There are a number of suits and causes of action; this Note will try to address the main strands. Finally, the third part will be looking forward, considering potential outcomes for pending litigation, and weighing potential strategies.

I. THE CLIMATE CHANGE DEBATE

While there is certainly political disagreement, nearly all scientists agree—climate change is a major problem.²⁰ Following a business-as-usual model, some estimates show that in the worst

¹⁵ *Massachusetts v. EPA*, 549 U.S. 497, 500 (2007).

¹⁶ *See AEP*, 564 U.S. at 424.

¹⁷ CTR. FOR CLIMATE INTEGRITY, *Climate Liability Litigation*, <https://payupclimatepolluters.org/cases> (last viewed Feb. 23, 2021) [<https://perma.cc/22RG-BMMQ>].

¹⁸ Rick Faulk et al., *The Future of Climate Change Litigation After AEP v. Connecticut*, 8 J.L. ECON. & POLY 233, 233 (2011).

¹⁹ CTR. FOR CLIMATE INTEGRITY, *supra* note 17.

²⁰ *See* NAT’L AERONAUTICS & SPACE ADMIN., *The Effects of Climate Change*, <https://climate.nasa.gov/effects/> (last viewed Feb. 23, 2021) [<https://perma.cc/N8NJ-YMNU>]; *Trump on Climate Change Report: I Don’t Believe it*, BBC (Nov. 26, 2018), <https://www.bbc.com/news/world-us-canada-46351940> [<https://perma.cc/QQR2-2WQV>].

case, sea levels may rise up to two meters by the end of the century, displacing 200 million people.²¹ An exodus of such a degree would be 200 times larger than the refugee crisis driven by the civil war in Syria.²² Even ignoring other detrimental effects of climate change, this presents a nightmare scenario that could very well take place if certain steps aren't taken to combat it.

Much of the political disagreement over climate change, beyond whether or not it is real, is whether or not it is man-made.²³ If we as a society believe that climate change is a natural phenomenon, this limits the potential solutions available to us. If climate change is the product of nature, all we can do is react to the negative impacts that occur. But if climate change is the product of man, we can try to slow or even stop the process of global warming. Therefore, we must discuss what is causing climate change.

A. *The Causes of Climate Change*

In the past 650 thousand years there have been seven cycles of glacial retreat and advance.²⁴ The climate's current trend of warming is significant; however, in that it is unequivocally the product of human activity.²⁵ Starting during the Industrial Revolution, humans began increasingly emitting carbon dioxide ("CO₂") into the atmosphere on levels that had never been seen before.²⁶ Based on ice core data, scientists have determined that for 800 thousand years CO₂ levels never rose above the level of 300 parts per million; today, the level of CO₂ is nearing 420 parts per million.²⁷

²¹ Jonathan Bamber & Michael Oppenheimer, *Climate Change: Sea Level Rise Could Displace Millions of People Within two Generations*, PHYS.ORG (May 21, 2019), <https://phys.org/news/2019-05-climate-sea-displace-millions-people.html> [<https://perma.cc/PHQ8-MJD5>].

²² *See id.*

²³ NAT'L AERONAUTICS & SPACE ADMIN., *Scientific Consensus: Earth's Climate is Warming*, <https://climate.nasa.gov/scientific-consensus/> (last viewed Feb. 23, 2021) [<https://perma.cc/H5ZY-66KE>].

²⁴ NAT'L AERONAUTICS & SPACE ADMIN., *Climate Change: How Do We Know?*, <https://climate.nasa.gov/evidence/> (last viewed Feb. 23, 2021) [<https://perma.cc/Y4B2-LW3F>].

²⁵ *Id.*

²⁶ *See id.*

²⁷ NAT'L AERONAUTICS & SPACE ADMIN., *Carbon Dioxide*, <https://climate.nasa.gov/vital-signs/carbon-dioxide/> (last viewed Feb. 23, 2021) [<https://perma.cc/4D5H-NE6Q>].

A high level of CO₂, and other so-called greenhouse gases, are directly related to the warming of our planet.²⁸ This is because the solar energy that would normally be largely reflected back into space, is reflected back towards the surface, and trapped in the atmosphere by the gases to create a greenhouse-like effect.²⁹ An examination of historical global temperature records provides strong evidence of this fact.³⁰ Before 1950, the global surface temperature had largely followed the continuous rise and fall of solar energy received.³¹ Since 1950, while solar energy has not increased, the global temperature has risen a significant 0.82 degrees Celsius.³²

While 0.82 degrees may seem slight, it severely affects the Earth's climate and ecosystem.³³ The effects of rising CO₂ and the resulting rise in global temperatures can be seen in the oceans, through coral bleaching and ocean acidification.³⁴ The impact is also severe on land, with rising sea levels³⁵ and increasing stressors on pollinators.³⁶ The effects are most dramatic and visible in the Arctic, made evident by shrinking ice sheets.³⁷ The shrinking ice sheet in the Arctic has consequently led to a loss of polar bear habitats.³⁸ Lastly, there have been impacts near the

²⁸ See NAT'L AERONAUTICS & SPACE ADMIN., *The Causes of Climate Change*, <https://climate.nasa.gov/causes/> (last viewed Feb. 23, 2021) [<https://perma.cc/RT8R-HYL7>].

²⁹ *Id.*

³⁰ See *id.*

³¹ *Id.*

³² *Id.*; Willem Roper, *Global Warming Chart – Here's How Temperatures Have Risen Since 1950*, WORLD ECON. F. (Jan. 25, 2021), <https://www.weforum.org/agenda/2021/01/global-warming-chart-average-temperatures-rising/> [<https://perma.cc/684E-DKP2>].

³³ See NAT'L AERONAUTICS & SPACE ADMIN., *supra* note 28.

³⁴ NAT'L OCEANIC & ATMOSPHERIC ADMIN., *How Does Climate Change Affect Coral Reefs?* <https://oceanservice.noaa.gov/facts/coralreef-climate.html>. (last updated Feb. 26, 2021) [<https://perma.cc/6RUS-AA5U>].

³⁵ Levitan, *supra* note 1.

³⁶ Victoria Scaven & Nicole Rafferty, *Physiological Effects of Climate Warming on Flowering Plants and Insect Pollinators and Potential Consequences for Their Interactions*, HHS PUB. ACCESS (Sept. 3, 2013), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3761068/> [<https://perma.cc/R2M2-X68F>].

³⁷ NAT'L AERONAUTICS & SPACE ADMIN., *Arctic Sea Ice Minimum*, <https://climate.nasa.gov/vital-signs/arctic-sea-ice/> (last updated Aug. 19, 2021) [<https://perma.cc/6JHG-KCVV>].

³⁸ WORLD WILDLIFE FUND, *Polar Bear: Icon on Ice*, <https://www.wwf.org.uk/learn/wildlife/polar-bears> (last viewed Feb. 23, 2021) [<https://perma.cc/6YPF-6EXZ>].

equator, with increasing intensity of hurricanes and more frequent heatwaves and droughts.³⁹

Of the forty-eight states in the contiguous United States, Kentucky has been ranked as the ninth most vulnerable state to the effects of climate change.⁴⁰ When narrowing the complex impacts of climate change down to five major categories—extreme heat, drought, wildfires, coastal flooding, and inland flooding—Kentucky is at risk to four, only avoiding coastal flooding.⁴¹ This is illustrated by a number of statistics, including: 33.7 percent of the state population living in elevated wildfire risk areas, a projected 95 percent increase in widespread summer drought from 2000 to 2050, a 14-day projected increase in high wildfire-risk days by 2050, 3.37 percent of the state population being vulnerable to extreme heat, a projected seventy-two dangerous heat days per year by 2050, and an increase in the length of the average mosquito season by twenty-two days since the 1980s.⁴² Nine out of the ten states most vulnerable to climate change are in the south and along with number eight Arkansas, Kentucky is one of only two landlocked states in the top ten.⁴³

B. The Genesis of Green House Gases

To understand what can be done to combat climate change we have to understand where greenhouse gas emissions are coming from. In 2018, the world emitted 36.57 billion tons of CO₂.⁴⁴ Of those 36.57 billion tons, the United States emitted 5.42 billion tons or 15 percent of all CO₂ emissions.⁴⁵ Of all countries, the United States was second only to China, which produced 9.8 billion tons of CO₂, or 27 percent of all CO₂ emissions.⁴⁶ However, the United States more than doubled the third-largest emitter, India, which produced 2.5 billion tons.⁴⁷

³⁹ NAT'L AERONAUTICS & SPACE ADMIN., *supra* note 37.

⁴⁰ SAFEHOME.ORG, *Best & Worst States for Climate Change*, <https://www.safehome.org/climate-change-statistics/> (last updated June 31, 2021) [<https://perma.cc/6ZQN-9H5G>].

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Hannah Ritchie & Max Roser, *CO₂ Emissions*, OUR WORLD IN DATA (2020), <https://ourworldindata.org/co2-emissions> [<https://perma.cc/5Y6N-7WCM>].

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

Within the United States, CO₂ emissions from fossil fuel combustion constituted 75 percent of all domestic GHG emissions.⁴⁸ Of all the energy consumed in the United States, 80 percent came from the burning of fossil fuels—petroleum, natural gas, and coal—while only 20 percent came from nuclear and renewable energy.⁴⁹ Notably in the electric power sector, while coal only accounted for 27 percent of the energy created, it was responsible for 60 percent of the emissions from that industry.⁵⁰ Meanwhile, 40 percent of the electricity generated by the United States was from nuclear or renewable sources—substantially more than coal—but having carbon dioxide emissions which were *de minimis*.⁵¹

As for the emissions of end-use sectors (i.e., how much industries/types of sources produce), commercial sources produced 16 percent of U.S. emissions, residential sources produced 20 percent, industrial 29 percent, and the transportation sector produced 36 percent of all U.S. CO₂ emissions.⁵² Here, it is interesting to compare the emissions produced with the energy consumed. Out of the total energy consumed: commercial sources consumed 18 percent of the energy, residential consumed 22 percent, industrial consumed 33 percent, and the transportation sector consumed 26 percent of the energy.⁵³ As you can see, the transportation industry produces more than its fair share of emissions. This can be explained by investigating the source of energy utilized by each sector and determining whether the sector relied on electricity purchased from the power sector or whether they relied on the burning of fossil fuels to create energy.⁵⁴

When examining the sources through this lens, we see that out of all the energy consumed by the transportation sector, less than 1 percent is purchased from the electric power sector, whereas the industrial sector purchased 29 percent of their energy

⁴⁸ ENERGY INFO. ADMIN., *Energy and the Environment Explained*, <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php> (last viewed Feb. 23, 2021) [<https://perma.cc/WSZ6-457K>].

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

⁵⁴ See ENERGY INFO. ADMIN., *Energy and the Environment Explained*, <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php> (last viewed Feb. 23, 2021) [<https://perma.cc/WSZ6-457K>].

from the electric power sector.⁵⁵ Clearly, the electric power sector's 40 percent reliance on nuclear and renewable energies has had a profound effect on emissions reduction; unsurprisingly, burning fossil fuels is a major source of CO₂.⁵⁶

II. EFFORTS TO COMBAT CLIMATE CHANGE

As climate change is a global problem and the United States produces only 15 percent of all CO₂ emissions,⁵⁷ we need a solution on a global scale not one limited to the United States. The Paris Climate Agreement accomplished just that. It was a first step toward global cooperation in the fight against climate change.⁵⁸ Given the United States' prominence in the global political structure and being the second largest producer of CO₂ with more than double the emissions of the country in third, the United States is in a unique position to aid efforts by acting as a leader and meeting or even exceeding the Paris Agreement.⁵⁹ But it could also seriously hinder efforts by lagging behind, as was the case under former President Donald Trump.⁶⁰ Therefore, even though the United States only produces 15 percent of the world's CO₂ emissions, it is important to analyze the various solutions that the U.S. is uniquely positioned to affect.

A. Political Efforts

America's system of government provides theoretically simple paths to potential climate solutions. These paths run through the political branches, through the President and through Congress. Electing a President who understands the gravity of climate change is likely the easiest avenue towards enacting climate solutions. After all, it is the President who controls both foreign relations and the regulatory zeal of the Environmental

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ Ritchie & Roser, *supra* note 44.

⁵⁸ See U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, *The Paris Agreement*, <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement> (last viewed Feb. 23, 2021) [<https://perma.cc/MEF5-HZL7>].

⁵⁹ See generally Ritchie & Roser, *supra* note 44.

⁶⁰ See *Remarks Announcing United States Withdrawal from the United Nations Framework Convention on Climate Change Paris Agreement*, UNIV. CAL. SANTA BARBA (June 1, 2017), <https://www.presidency.ucsb.edu/documents/remarks-announcing-united-states-withdrawal-from-the-united-nations-framework-convention> [<https://perma.cc/GUR3-KUVC>].

Protection Agency (“EPA”).⁶¹ Control over foreign relations is a powerful driving force towards climate solutions. The Paris Climate Agreement is a perfect example of a cleverly designed treaty, and foreign policy that makes the reduction of greenhouse gas emissions a nonnegotiable.⁶² Additionally, the Executive wields the power to appoint the EPA Administrator.⁶³ Thus, the ideals and goals of whomever sits in the Oval Office translate directly into the EPA Administrator’s policy.⁶⁴

As discussed above, in *Massachusetts v. EPA*, the Supreme Court held that the Clean Air Act gave the EPA the authority to regulate greenhouse gas emissions.⁶⁵ This has been the foundation for major regulations over emissions—including emission standards for motor vehicles—but more stringent and far-reaching standards could be implemented given an environmentally conscious president.⁶⁶

While the path to climate solutions through Article II requires only a favorable result in one nationwide election, the path to climate solutions through Article I would require favorable elections in hundreds of statewide and districtwide elections—even if it could potentially reach stronger solutions than Article II.⁶⁷ With enough votes, Congress could do any number of things to aid in the fight against climate change. Congress could subsidize nuclear or renewable energy sources, amend the Clean Air Act to place a more stringent regulatory scheme on greenhouse gas emissions, or even implement a Carbon Tax, charging emitters for the amount of CO₂ they release into the atmosphere.⁶⁸

The most well-known Congressional effort to combat climate change is the controversial Green New Deal.⁶⁹ Introduced

⁶¹ U.S. CONST. art. II, § 2.

⁶² See U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, *The Paris Agreement*, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> (last viewed Sept. 20, 2021) [<https://perma.cc/3BU8-DKHK>].

⁶³ Popovich et al., *supra* note 11.

⁶⁴ Popovich et al., *supra* note 11.

⁶⁵ *Massachusetts v. EPA*, 549 U.S. 497, 527–28 (2007).

⁶⁶ See generally ENV’T. PROT. AGENCY, *Regulations for Emissions from Vehicles and Engines*, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-onroad-vehicles-and-engines> (last viewed Feb. 23, 2021) [<https://perma.cc/R6NK-9CBG>].

⁶⁷ U.S. CONST. art. I.

⁶⁸ See generally CTR. FOR CLIMATE & ENERGY SOL., *Carbon Tax Basics*, <https://www.c2es.org/content/carbon-tax-basics/> (last viewed Sept. 20, 2021) [<https://perma.cc/N54N-FQR4>].

⁶⁹ Lisa Friedman, *What Is the Green New Deal? A Climate Proposal, Explained*, N.Y. TIMES (Feb. 21, 2019), <https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html> [<https://perma.cc/CT4T-LPUW>].

by Representative Ocasio-Cortez of New York and Senator Markey of Massachusetts, the Green New Deal is a nonbinding resolution which strives to achieve net-zero global emissions by 2050.⁷⁰ It seeks to achieve this goal by: updating and sourcing 100 percent of the nation's electricity from renewable and zero-emissions sources; making energy-efficient upgrades to buildings around the country; investing in high-speed rail and electric vehicles; and working with farmers and ranchers to reduce greenhouse gas emissions in the agricultural sector.⁷¹ The largest criticism of this proposed resolution centers on its cost.⁷² While former President Trump contends that the Green New Deal will cost \$100 trillion, Representative Ocasio-Cortez responds that the resolution would pay for itself through economic growth.⁷³ Furthermore, supporters of the Green New Deal assert that the effects of climate change would be equally expensive down the road.⁷⁴

Whereas the Democrats' Green New Deal seeks to slow climate change through investments and regulation, certain Republican lawmakers seek to reach similar results through deregulation and private-sector innovation.⁷⁵ Wyoming Senator John Barrasso, ranking member of the Senate Committee on Energy and Natural Resources, argues that the best strategy in the fight against climate change is not through a carbon tax, but instead through legislation seeking to encourage technological breakthroughs.⁷⁶ Senator Barrasso asserts that significant emissions goals can be achieved by making it simpler for innovators to build nuclear reactors and helping researchers develop more effective methods of CO₂ recapture and utilization.⁷⁷ Regardless of which path is the best, so far, neither approach has been successful in implementation.

Finally, the Federalist form of government leaves open an additional path to achieving a patchwork of climate solutions.⁷⁸ While this path would certainly be weaker than a unified approach

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ John Barrasso, *Cut Carbon Through Innovation, Not Regulation*, N.Y. TIMES (Dec. 18, 2018), <https://www.nytimes.com/2018/12/18/opinion/climate-carbon-tax-innovation.html> [<https://perma.cc/CW3E-2BKE>].

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ U.S. CONST. amend. X.

at federal level, if an unsympathetic President is elected and the now customary deadlock infects Congress, it could be an enticing one. The states have to worry about preemption due to the Clean Air Act already regulating GHG, but as the Clean Air Act is created with the preservation of the state's right to choose how it achieves the federally imposed climate goals, there is surely room for state regulation of emissions within their borders.⁷⁹ The states have been called the “laboratories of democracy” and deemed a separate source of individual liberties from the federal government and going forward they can also be an important source of climate solutions.⁸⁰ One example of a state-led strategy that has seen some success is the Regional Greenhouse Gas Initiative, a pact of ten states working to reduce utility emissions in the Northeast by focusing on public ownership of the atmosphere.⁸¹

While there are successes on the state level, there are also many states which have more work to do.⁸² Whereas Maryland and Ohio reduced their emissions between 2005 and 2016 by 30 percent and 24 percent respectively, Idaho and Texas increased their emissions over the same time by 16 percent and 9 percent.⁸³ While the states with the largest per capita level of emissions are largely colder and more rural, coal-reliant states such as Kentucky, and its neighbors West Virginia and Indiana, are all among the top ten per capita producers.⁸⁴

While it would be relatively easy for the political branches of the federal and state governments to regulate emissions and reach real solutions, for a large number of reasons they often do not want to. For a number of years now, many state, local, and private actors have encountered real issues related to climate change and have felt that the political branches have failed them in providing adequate remedies. As a result, many entities have turned to the third branch of government, the Judicial branch.

⁷⁹ ENV'T PROT. AGENCY, *Evolution of The Clean Air Act*, <https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act> (last viewed Sept. 6, 2021) [<https://perma.cc/S6KA-E6TF>].

⁸⁰ *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

⁸¹ Leigh Raymond, *Biden's Climate Change Plan is all About Jobs and Justice*, WASH. POST (Jan. 27, 2021), <https://www.washingtonpost.com/politics/2021/01/27/bidens-climate-change-plan-is-all-about-jobs-justice/> [<https://perma.cc/DNY5-GP3Z>].

⁸² U.S. ENERGY INFO. ADMIN., *Energy-Related Carbon Dioxide Emissions by State, 2005-2016* (Feb. 27, 2019), <https://www.eia.gov/environment/emissions/state/analysis/> [<https://perma.cc/G42E-N4UK>].

⁸³ *Id.*

⁸⁴ *Id.*

B. Judicial Efforts

As Justice Marshall famously declared in *Marbury v. Madison*, “[i]t is a settled and invariable principle, that every right, when withheld, must have a remedy, and every injury its proper redress.”⁸⁵ As discussed above, nearing 420 ppm, the level of CO₂ in the atmosphere is higher than it has been in 800 thousand years.⁸⁶ Following a business-as-usual model and tracking four impact areas of climate change—hurricane damages, real estate losses, energy-sector costs, and water costs—it has been estimated that in 2025 climate change will cause \$271 billion of losses (in 2006 dollars) or 1.36 percent of the United States GDP.⁸⁷ In 2019, the United States’s electric power industry had a total revenue of about \$401.7 billion.⁸⁸ These projected losses would negate 67.5 percent of the revenue of the U.S. energy industry. Due to the mind-numbingly large size of the losses and the fact that the United States is not even the largest emitter of greenhouse gases,⁸⁹ it should be clear that it is neither practicable nor equitable to recoup the totality of the damages from US polluters.

Nevertheless, there are a growing number of parties across the United States who will require some degree of financial assistance if their lives going forward are going to bear some resemblance to their lives today. One such party with an imminent, obvious need for financial assistance is the Alaskan village of Kivalina.⁹⁰ Located on the west coast of Alaska, about eighty miles north of the Arctic circle, Kivalina is experiencing the disastrous consequences of climate change. Not only are the fish and wildlife, Kivalina relies on for food, disappearing due to

⁸⁵ *Marbury v. Madison*, 5 U.S. 137, 147 (1803).

⁸⁶ N.A.S.A., *supra* note 20.

⁸⁷ Frank Ackerman & Elizabeth Stanton, *What We’ll Pay if Global Warming Continues Unchecked*, NAT. RES. DEF. COUNCIL (2008), <https://www.nrdc.org/sites/default/files/cost.pdf> [<https://perma.cc/K77F-NNJN>].

⁸⁸ N. Sönnichsen, *U.S. Electric Power Industry’s Revenue 1970-2019*, STATISTA (Nov. 5, 2020), <https://www.statista.com/statistics/190548/revenue-of-the-us-electric-power-industry-since-1970/> [<https://perma.cc/2LBP-UHNR>].

⁸⁹ Samantha Gross, *The United States Can Take Climate Change Seriously While Leading the World in Oil and Gas Production*, BROOKINGS INST. (2020), https://www.brookings.edu/wp-content/uploads/2020/01/Big-Ideas_Gross_Climate.pdf [<https://perma.cc/6TPB-RN94>].

⁹⁰ See Alan Taylor, *The Impact of Climate Change on Kivalina, Alaska*, ATLANTIC (Sept. 18, 2019), <https://www.theatlantic.com/photo/2019/09/photos-impacts-climate-change-kivalina-alaska/598282/> [<https://perma.cc/22HZ-6LUK>].

changes in migration patterns, the village of about 400 people is at a growing risk of washing into the ocean.⁹¹ The cost to relocate Kivalina is estimated, on the upper end, to be about \$400 million or about one million dollars per person, which is clearly out of reach for this tiny fishing village.⁹² While the majority of American communities are not in situations as dire as Kivalina, an increasing number of communities will require greater assistance the longer it takes to implement sweeping climate change prevention measures.⁹³

As for Kentucky, while its ancestral homes are not quite disappearing, as climate change gets worse the state is projected to receive more extreme rainstorms.⁹⁴ Such storms would place substantial strains on Louisville's aging sewer and flood-prevention systems.⁹⁵ In February of 2018, a few days of heavy rain overwhelmed Louisville's sewage system and led to 4 billion gallons of raw sewage to be dumped into the Ohio River and more than 38 million gallons of sewage into the city's neighborhoods, playgrounds, an assisted living facility, and a hospital.⁹⁶ This was after the city had spent more than \$400 million on sewage system improvements.⁹⁷ Even after Louisville completes its planned \$850 million improvements to its sewage system by 2024, the city's sewage system will be unable to handle extreme rainstorms which are increasingly common due to climate change.⁹⁸

Furthermore, Louisville is uniquely at risk due to its location on the Ohio River.⁹⁹ The Commonwealth's most populated city is protected by twenty-nine miles of flood prevention systems.¹⁰⁰ Among the largest in the country, Louisville's flood

⁹¹ *Id.*

⁹² U.S. CLIMATE RESILIENCE TOOLKIT, *Relocating Kivalina* (Jan. 17, 2017), <https://toolkit.climate.gov/case-studies/relocating-kivalina> [<https://perma.cc/888X-EQMB>].

⁹³ CDC, *Coastal Flooding, Climate Change and Your Health*, 3 (2017), <https://www.cdc.gov/climateandhealth/pubs/CoastalFloodingClimateChangeandYourHealth-508.pdf> [<https://perma.cc/DSP7-NZNZ>].

⁹⁴ Ryan Van Velzer, *Kentucky Won't Escape Human-Driven Climate Change, Federal Report Warns*, 89.3 WFPL (Nov. 27, 2018), <https://wfpl.org/kentucky-wont-escape-human-driven-climate-change-federal-report-warns/> [<https://perma.cc/B925-YGJ6>].

⁹⁵ *Id.*

⁹⁶ Ryan Van Velzer, *Recent Storms Overwhelmed Louisville's Sewers—And That's the New Norm*, WFPL (Mar. 29, 2018), <https://wfpl.org/recent-storms-overwhelmed-louisvilles-sewers-and-thats-the-new-norm/> [<https://perma.cc/HLW5-N3A5>].

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ Ryan Van Velzer, *Climate Change Increasing Flood Risks As Louisville's Protection Decays*, 89.3 WFPL (Oct. 19, 2018), <https://wfpl.org/climate-change-increasing-flood-risks-as-louisvilles-protection-decays/> [<https://perma.cc/ZG3B-3ZHH>].

¹⁰⁰ *Id.*

prevention system is also rapidly aging.¹⁰¹ Many portions of the system were built between 1947 and 1956 and still rely on designs and parts from seventy years ago.¹⁰² Half of the city's sixteen pump stations need upgrades to electric equipment, the majority do not have backup generators, and none were designed to handle severe storms.¹⁰³ While the sewer district has outlined a plan to spend \$683 million on repairs and upgrades to the flood protection system, those working on the plan have stated that if an extreme storm were to hit the city before then, "the impacts to Louisville would be worse than what Hurricane Katrina was to New Orleans."¹⁰⁴

While this climate change litigation is not the ultimate solution to the problems that we as humans have brought upon ourselves, it is an avenue for support that many communities may have to turn to as they have nowhere else to look. Clearly there are injuries to countless across the United States that have already occurred and are only going to get worse, how then shall the courts provide these injuries their "proper redress?"¹⁰⁵

1. Abatement of Public Nuisance

The common law doctrine of public nuisance is a broad and arguably vague cause of action rooted in stopping an ongoing injury to the public at large.¹⁰⁶ Defined generally as "an unreasonable interference with a right common to the general public," public nuisances are of continuing or long-lasting nature and interfere with public health, safety, peace, comfort, or convenience.¹⁰⁷ Traditionally, this doctrine covered local nuisances which affected a specific community.¹⁰⁸ These local nuisances included undesirable entities like strip clubs, caches of explosives, malarial mosquito infested ponds, or more banal nuisances such as dust, smoke, or odors, all located in areas which troubled the public

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Marbury*, *supra* note 85 at 147.

¹⁰⁶ Restatement (Second) of Torts §821B (AM. L. INST. 1965).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

at large.¹⁰⁹ In other words, “you had a single source that was causing harm to the public at large and you wanted to stop that.”¹¹⁰

This definition of public nuisance expanded in the 1990s when more than forty states sued tobacco companies to recoup the healthcare costs of their tobacco-using citizens.¹¹¹ After seeing some success recovering the damages caused by tobacco, public interest tort litigation adopted and applied this expanded definition of public nuisance to several societal harms.¹¹² From subprime loans to the opioid epidemic, numerous parties saw large corporations profiting via harm to the general public.¹¹³ In response, plaintiffs sought to have these corporations remedy their wrongs.¹¹⁴

With the looming threat of climate change, many parties sought to remedy their current and future injuries using the expanded doctrine of public nuisance.¹¹⁵ The seminal case of this ongoing climate change litigation is *American Electric Power Co. v. Connecticut*.¹¹⁶ As discussed above, several states sued the five largest CO₂ emitters in the country under federal common law nuisance claims.¹¹⁷ Because the Justices were evenly split four to four (Sotomayor did not take part in consideration) on whether the plaintiffs had standing, they affirmed the lower court’s ruling that standing did exist.¹¹⁸ However, after passing this first hurdle, the plaintiffs were denied relief.¹¹⁹ In a unanimous opinion by Justice Ginsburg, the court held “that the Clean Air Act and the EPA actions it authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired powerplants.”¹²⁰ Because *Massachusetts v. EPA* held that emissions of CO₂ qualify as air pollution regulatable under the Clean Air Act, the Act “spoke directly” to the regulation of CO₂

¹⁰⁹ *Id.*

¹¹⁰ Faulk et al., *supra* note 18.

¹¹¹ Thomas Fennell & Deborah Simmons, *The Rising Tide of Public Nuisance Claims*, JONES DAY (2011), <https://www.jonesday.com/files/Publication/abefc4a2-3776-41f2-9af1-ef122d7c7e5e/Presentation/PublicationAttachment/90e54d1b-16ea-4c20-b6ad-f8b09efea2c/RisingTide.pdf> [<https://perma.cc/YQ3B-8CJE>].

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 410 (2011).

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 420.

¹¹⁹ *Id.* at 424.

¹²⁰ *Id.* at 424.

emissions and thereby displaced the plaintiffs' claims for abatement.¹²¹ This ruling identified two separate hurdles that any federal climate change action would have to contend with: (1) displacement and (2) standing.¹²²

2. *Dealing with Displacement*

The aforementioned Alaskan village of Kivalina frankly cares very little about abatement of greenhouse gas emissions, compared to locating the funding to relocate their village before it falls into the sea.¹²³ Because Kivalina solely sought damages, it was thought that they could potentially represent a workaround of the federal displacement of "any federal common-law right to seek *abatement* of carbon-dioxide emissions."¹²⁴

In *Native Village of Kivalina v. ExxonMobil Corp.*, the district court held that the political question doctrine precluded Kivalina's public nuisance claim and further that Kivalina lacked Article III standing to bring their public nuisance suit.¹²⁵ Upon appeal, the Ninth Circuit Court of Appeals considered neither of those issues and instead, as a preliminary matter, considered whether the Clean Air Act, and the EPA actions that it authorizes, displace Kivalina's claims.¹²⁶

In *Kivalina*, the court discussed the limits of federal common-law public nuisance claims, stating that such claims may only be brought when the courts are "compelled to consider federal questions which cannot be answered from federal statutes alone."¹²⁷ If Congress has addressed the federal question at issue by statute, however, then there is no gap for the federal judiciary to fill.¹²⁸ The Ninth Circuit then quoted *AEP*, which held, "[t]he test for whether congressional legislation excludes the declaration of federal common law is simply whether the statute speaks directly to the question at issue."¹²⁹

¹²¹ *Id.* at 424 (citing *Massachusetts v. EPA*, 549 U.S. 497 (2007)).

¹²² *Id.* at 424.

¹²³ Taylor, *supra* note 90.

¹²⁴ *Am. Elec. Power*, 564 U.S. at 410 (emphasis added).

¹²⁵ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F.Supp.2d 863 at 876–77, 880–82 (N.D. Cal. 2009).

¹²⁶ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012).

¹²⁷ *Id.* at 856 (citing *City of Milwaukee v. Illinois (Milwaukee II)*, 451 U.S. 304, 314 (1981)).

¹²⁸ *Id.* (citing *Milwaukee II*, 451 U.S. at 313–14).

¹²⁹ *Am. Elec. Power Co.*, 564 U.S. at 423.

In applying this test, the Ninth Circuit was unimpressed by Kivalina's efforts to sidestep the displacement doctrine from *AEP v. Connecticut*.¹³⁰ The Ninth Circuit instead followed Supreme Court precedent, which held that the type of remedy asserted is not relevant to the application of the displacement doctrine.¹³¹ Although a lack of federal remedy may be relevant to the displacement analysis, if the field is already subject to comprehensive legislation, then the federal statute occupies the entire field.¹³² Thus, whenever Congress passes legislation which "speaks directly" to the question at issue, Congress displaces said issue.¹³³ As a result, save any major reversal of Supreme Court precedent, a federal common law claim of public nuisance will be ineffective in dealing with greenhouse gas emissions and their resulting injuries.¹³⁴ However, even if plaintiffs were to simply change their cause of action away from public nuisance, there are still numerous jurisprudential doctrines that federal courts may employ to avoid hearing climate change litigation.¹³⁵

3. *Dealing with Standing*

Article III of the United States Constitution limits the jurisdiction of the federal courts, not to any dispute in general, but to "cases" and "controversies."¹³⁶ The doctrine of standing serves to identify which disputes are "appropriately resolved through the judicial process."¹³⁷ The Supreme Court has established three elements which constitute the minimally acceptable level of standing for a federal court to hear a case.¹³⁸

The first element of standing is that the plaintiff must have suffered an "injury in fact."¹³⁹ This means the plaintiff must have

¹³⁰ *Native Vill. of Kivalina*, 696 F.3d at 857.

¹³¹ *Id.* (citing *Exxon Shipping Co. v. Baker*, 554 U.S. 471, 471 (2008); *Middlesex Cnty. Sewerage Auth. v. Nat'l Sea Clammers Ass'n.*, 453 U.S. 1, 4 (1981)).

¹³² *Id.* (citing *Illinois v. City of Milwaukee (Milwaukee I)*, 406 U.S. 91, 103 (1972)); *Milwaukee II*, 451 U.S. at 314, 325).

¹³³ *Id.* at 857–58.

¹³⁴ *See e.g.*, *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560, 573–74 (1992) (explaining that plaintiffs must suffer a legally sufficient injury and cannot raise a general grievance about government action on the basis of taxpayer status).

¹³⁵ *See e.g.*, *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992) (explaining that plaintiffs must suffer a sufficient injury to themselves in order to have a justiciable claim).

¹³⁶ U.S. CONST. art. III, § 2.

¹³⁷ *Whitmore v. Arkansas*, 495 U.S. 149, 155 (1990).

¹³⁸ *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992).

¹³⁹ *Id.*

suffered an invasion of a legally protected interest which is both concrete and particularized and actual or imminent, not conjectural or hypothetical.¹⁴⁰ This element seems easy enough to fulfill for climate change litigation because many communities—like Kivalina—are already facing actual, concrete injuries.¹⁴¹ However, many communities like Louisville, face future injuries that are acute and impossible to predict.¹⁴² An injury caused by a potential future storm is not actual or imminent, but rather conjectural or hypothetical.¹⁴³ Therefore, standing would not apply.¹⁴⁴

The second element of standing is that there must be a causal connection between the injury and the conduct complained of.¹⁴⁵ The injury must be fairly traceable to the challenged action of the defendant and not the result of the independent actions of third parties, who are not before the court.¹⁴⁶ This is an especially troublesome element because it is incredibly difficult to establish a causal connection between a specific climate change injury and a specific greenhouse gas emitter.¹⁴⁷ While we know CO₂ is causing climate change and the defendants who are the leading emitters of CO₂, humans across the globe have been producing increasing levels of CO₂ “since the dawn of the industrial revolution in the eighteenth century.”¹⁴⁸ Even if plaintiffs were to avoid displacement, this places an additional barrier on judicial avenues to relief.

The final element of standing is that it must be “likely,” as opposed to merely “speculative,” that the injury will be redressed by a favorable decision.¹⁴⁹ There is certainly an argument that even if plaintiffs were to succeed in a public nuisance claim seeking abatement, that the abatement would not remedy the injuries caused by global warming because polluters have already dealt too much damage to the environment.¹⁵⁰ However, this line of reasoning does not seem to be particularly strong. For example, in

¹⁴⁰ *Id.*

¹⁴¹ Taylor, *supra* note 90.

¹⁴² Van Velzer, *supra* note 94.

¹⁴³ *Lujan v. Defenders of Wildlife*, 504 U.S. at 560.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Simon v. E. Ky. Welfare Rights Org.*, 426 U.S. 26, 41–42 (1976).

¹⁴⁷ *Native Vill. of Kivalina*, 663 F. Supp. 2d at 880.

¹⁴⁸ *Id.*

¹⁴⁹ *Lujan*, 504 U.S. at 561.

¹⁵⁰ Biello, *supra* note 10.

cases seeking damages, where communities—like Kivalina—need a defined dollar amount to remedy the damage done by climate change, clearly their injury would be redressed by a favorable decision.¹⁵¹ Were this the only element standing in the way of climate change litigation, it would be all too easy to change the prayer for relief from “stop causing this problem” to “pay for the damage caused by this problem.” Unfortunately, it is not, and the standing issue will continue to be a thorn in the side of climate change litigants.

III. MOVING FORWARD

While *EPA v. Massachusetts* was a victory for those fighting against climate change,¹⁵² its ruling has led to over a decade of losses.¹⁵³ Nevertheless, plaintiffs continue to fight using new strategies and causes of action.¹⁵⁴ The long list of losses do not deter these injured parties because, as one defense attorney familiar to the litigation described, they are “trying to get that . . . silver bullet. They only need one, if they win one, they could bring twenty-five or thirty cases . . .”¹⁵⁵ At the moment, many parties believe that a potential “silver bullet” could come from bringing their claims in state courts.¹⁵⁶

A. *Striving for State Court*

Litigating climate change in state court presents several benefits to plaintiffs beyond finding more favorable judges.¹⁵⁷ One such benefit is that state courts are not beholden to Article III

¹⁵¹ *Native Vill. of Kivalina*, 696 F.3d at 869.

¹⁵² *Massachusetts v. EPA*, 549 U.S. 497, 500 (2007).

¹⁵³ See generally *Am. Elec. Power Co., Inc. v. Connecticut*, 564 U.S. 410, 418 (2011); *Native Village of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012); *Clean Air Council v. U.S.*, 362 F. Supp. 3d 237 (E.D. Pa. 2019).

¹⁵⁴ CTR. FOR CLIMATE INTEGRITY, *supra* note 17.

¹⁵⁵ Faulk, et al., *supra* note 18.

¹⁵⁶ Amy Howe, *Justices Divided in Procedural Battle Between Baltimore, Oil Companies in Climate Fight*, SCOTUSBLOG (Jan. 20, 2021, 11:26 AM), <https://www.scotusblog.com/2021/01/argument-analysis-justices-divided-in-procedural-battle-between-baltimore-oil-companies-in-climate-fight/> [<https://perma.cc/W8DW-LEPL>].

¹⁵⁷ Allison Torrence, *Federal Appellate Court Rules that the Clean Air Act Does Not Preempt State Common Law Claims*, JENNER & BLOCK (Aug. 24, 2013), https://environblog.jenner.com/corporate_environmental_/2013/08/federal-appellate-court-rules-that-the-clean-air-act-does-not-preempt-state-common-law-claims.html [<https://perma.cc/8622-Z72Z>].

jurisdiction limitations, as they have their own individual constitutions. These constitutions often lower the standard needed to achieve jurisdiction.¹⁵⁸ As discussed above, standing is often a major thorn in the side of climate change litigation, so keeping lawsuits in state court could be invaluable to plaintiffs.¹⁵⁹

However, as the Supreme Court ruled in *International Paper Co. v. Ouellette*, when a federal statute is intended to dominate a particular field, even state law actions in state courts can be displaced if they “stand as an obstacle” to Congressional intentions.¹⁶⁰ Fortunately, the Court in *International Paper Co.* also recognized that the Clean Water Act has two saving clauses which preserve state law causes of action against in-state sources.¹⁶¹ The Clean Air Act also has saving clauses that are applied in a similar manner.¹⁶² Accordingly, the current goals of twenty different climate change litigation suits are focused on staying in state court.¹⁶³

The foremost case in this fight to stay in state court is the ongoing *BP v. Mayor and City Council of Baltimore*.¹⁶⁴ Filed in Maryland state court, defendants filed for removal under § 1442,¹⁶⁵ the federal officer removal statute.¹⁶⁶ Defendants asserted that § 1442 applied because the actions giving rise to the plaintiff’s suit were taken at the direction of federal officials.¹⁶⁷ The district court disagreed, however, and remanded the case back to the Maryland state court.¹⁶⁸ Normally under § 1447(d), an order to remand is not reviewable, but because defendants specifically cited § 1442(a), it fit within the narrow exception to the rule.¹⁶⁹ After the Fourth Circuit affirmed the remand order, defendants appealed

¹⁵⁸ See *Dobson v. State ex rel., Com’n on Appellate Court Appointments*, 309 P.3d 1289, 1292 (Ariz. 2013) (holding that “[u]nder Arizona’s Constitution, standing is not jurisdictional, but instead is a prudential doctrine. . .”).

¹⁵⁹ Marisa Martin & James Landman, *Standing: Who Can Sue to Protect the Environment*, AM. BAR ASSOC. (Oct. 9, 2020), https://www.americanbar.org/groups/public_education/publications/insights-on-law-and-society/volume-19/insights-vol-19-issue-1/standing-who-can-sue-to-protect-the-environment/ [https://perma.cc/Y3LK-ANR5].

¹⁶⁰ *Int’l Paper Co. v. Ouellette*, 479 U.S. 481, 494 (1987).

¹⁶¹ *Id.* at 498.

¹⁶² Torrence, *supra* note 157.

¹⁶³ Howe, *supra* note 156.

¹⁶⁴ *Id.*

¹⁶⁵ 28 U.S.C. § 1442(a) (2018).

¹⁶⁶ Howe, *supra* note 156.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ 28 U.S.C. § 1447(d) (2018).

once again and certiorari was granted.¹⁷⁰ On January 19, 2021, the eight-Justice court (Alito was recused) heard oral arguments on the case and an opinion is expected by summer 2021.¹⁷¹ While Justices Thomas, Breyer, Kagan, and Sotomayor appeared to be skeptical of the petitioner's arguments, Justices Roberts, Gorsuch, Barrett, and Kavanaugh seemed to lean in the other direction.¹⁷² Nonetheless, *BP v. Mayor and City Council of Baltimore* and nineteen other climate change suits around the nation will be in a holding pattern until the opinion in the summer.¹⁷³

B. Claims of Consumer Protection

One of the more recently developing attempts at the “silver bullet” are claims of consumer protection.¹⁷⁴ These so-called “climate fraud” lawsuits take inspiration from tobacco and opioid litigation and base their claims on state consumer protection statutes.¹⁷⁵ Around nine cases nationwide¹⁷⁶ have asserted, in whole or in part, that various oil companies failed to disclose many business risks of climate change to their shareholders despite evidence that they understood those risks internally.¹⁷⁷ *BP v. Mayor and City Council of Baltimore* asserts this claim among others and, for reasons discussed above, is in a holding pattern along with other similar cases.¹⁷⁸

CONCLUSION

After exploring litigation following *Massachusetts v. EPA*, it is interesting to consider whether *Massachusetts v. EPA* was a victory for those fighting against climate change? It forced the Bush EPA to regulate greenhouse gases as “air pollutants” under the Clean Air Act¹⁷⁹ and various climate protections have been directly attributed to this ruling.¹⁸⁰ On the other hand, can one

¹⁷⁰ Howe, *supra* note 156.

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ CTR. FOR CLIMATE INTEGRITY, *supra* note 17.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

¹⁷⁷ Martin Olszynski et al., *From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability*, 30 GEO. ENV'T L. REV. 1, 25 (2017).

¹⁷⁸ Howe, *supra* note 156.

¹⁷⁹ *Massachusetts v. EPA*, 549 U.S. 497, 497 (2007).

¹⁸⁰ Levitan, *supra* note 1.

seriously argue that the Obama administration would not have created climate protections, such as the Clean Power Plan, without *Massachusetts v. EPA*? While climate change litigation will likely continue for some time, it does appear as if the ruling in *Massachusetts*, along with the ruling in *AEP v. Connecticut*, doomed the litigation from the beginning. By forcing the executive branch to act, the litigants in *Massachusetts* ironically and incidentally nullified all other avenues for redress. As disheartening as it may be, it appears likely that the future of climate protections will be clenched between a perpetually deadlocked Congress and a wildly vacillating Presidency, focused on repealing actions from the previous four to eight years. As Congress and the Presidency look back, and society accelerates towards climate change's consequences, litigants will continue against the odds to search for that silver bullet.