
STEWART’S PARADOXES OF LIBERTY,
INTEGRITY, AND FRATERNITY:
SOBERING LESSONS FROM COVID-19
FOR ENVIRONMENTAL LAW

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INTRODUCTION

In the fall of 1977, Professor Richard Stewart was my (Richard Lazarus’s) environmental law professor at Harvard Law School. I was a second-year law student. Forty-three years later, in the fall of 2020, this essay’s co-author (Libby Dimenstein) was enrolled in my environmental law class at Harvard Law School. She is similarly a second-year law student at Harvard Law School.

Like most law students of my era, I was intimidated in Stewart’s class. After all, he was “the professor” and his academic and professional credentials were quite extraordinary. A few months earlier, Professor Stewart had established himself as one of the nation’s leading environmental law scholars by performing the law

* Professor of Law, Harvard Law School. I rarely co-author scholarship, and much of this essay remains in my voice. I invited Ms. Dimenstein to be a co-author because the research memorandum she prepared in support of this article was so exemplary that a footnote acknowledgement of student research assistance failed to capture the extent of her contribution. I would like to thank Gabe Doble, Harvard Law School Class of 2020, for his excellent research assistance and Melinda Eakin for her extraordinary copy editing skills.

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professor's equivalent of hockey's "hat trick"—in hockey, scoring three goals in a single game and in the academy, publishing three significant law review articles essentially simultaneously. Apart from a co-authored book review,¹ Stewart had not previously published any legal scholarship relating to environmental law. Yet in the spring of 1977, Stewart simultaneously published three major environmental law review articles in three different symposia that crisscrossed the country: (1) *Paradoxes of Liberty, Integrity and Fraternity: The Collective Nature of Environmental Quality and Judicial Review of Administrative Action* for a symposium held at Lewis & Clark University School of Law on "Environmental Regulation and Individual Liberty";² (2) *The Development of Administrative and Quasi-Constitutional Law in Judicial Review of Environmental Decisionmaking: Lessons from the Clean Air Act*, in a symposium at the University of Iowa School of Law on "Environmental Decisionmaking";³ and (3) *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementations of National Environmental Policy*, as part of a symposium on "Federalism" at Yale Law School.⁴

Each article offers its own treasure trove of erudition and scholarly insight. Their common denominator is a focus on administrative law and the role of judicial review. That is unsurprising, given both that Stewart had only two years earlier published his still-seminal

¹ See Marc J. Roberts & Richard B. Stewart, Book Review, 88 HARV. L. REV. 1644 (1975) (reviewing WILLIAM F. BAXTER, *PEOPLE OR PENGUINS: THE CASE FOR OPTIMAL POLLUTION* (1974) & BRUCE A. ACKERMAN ET AL., *THE UNCERTAIN SEARCH FOR ENVIRONMENTAL QUALITY* (1974)).

² Richard B. Stewart, *Paradoxes of Liberty, Integrity and Fraternity: The Collective Nature of Environmental Quality and Judicial Review of Administrative Action*, 7 ENV'T L. 463 (1977). For more about the symposium, see Editorial Comment, *Environmental Regulation and Individual Liberty*, 7 ENV'T L. ix (1977), <https://www.jstor.org/stable/pdf/43265443.pdf?refreqid=excelsior%3A48a3c254b7cec50d2eadd3fde80876c7>.

³ Richard B. Stewart, *The Development of Administrative and Quasi-Constitutional Law in Judicial Review of Environmental Decisionmaking: Lessons from the Clean Air Act*, 62 IOWA L. REV. 713 (1977). For more about the symposium, see David Sive, *Foreword: Roles and Rules in Environmental Decisionmaking*, 62 IOWA L. REV. 637 (1977).

⁴ Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196 (1977). For more about the symposium, see Foreword, *Federalism*, 86 YALE L.J. 1018 (1977).

article on *The Reformation of American Administrative Law* in the June 1975 issue of the *Harvard Law Review*,⁵ and that environmental law was itself then playing an outsized role in the reformation process that Stewart was describing.⁶ While nominally focusing on different topics within environmental law, Stewart identified in all three articles how the collective and spillover nature of environmental interests presented particular challenges to the nation's lawmaking institutions—both state and federal, and to all three branches within each—and he proffered that the courts could constructively address these challenges to environmental lawmaking by applying heightened standards of judicial review.

My favorite of these pieces is *Paradoxes of Liberty, Integrity, and Fraternity* because Stewart challenged the very premise of the symposium in which he was participating. The symposium sponsors at the Lewis & Clark School of Law had framed the topic as “Environmental Regulation and Individual Liberty.” According to Stewart, however, environmental lawmaking was not best understood as a dual conflict between liberty and regulation. The actual conflict, he explained, was far more complicated and intractable.

Environmental lawmaking, Stewart argued, is better understood as raising a series of “profound, paradoxical conflicts” among the central values of “liberty, integrity, and fraternity.”⁷ Not only are all three values “at war with the others,” but “[e]ven more paradoxically[,] each is at war with itself—liberty with liberty, integrity with integrity, fraternity with fraternity.”⁸ All of these conflicts derive from the collective nature of environmental goods and ills. According to Stewart, environmental law does generate the kinds of conflicts between liberty and regulation the framers of the Lewis & Clark symposium anticipated. For example, while environmental integrity can be maintained by heavy regulation on economic activity, complete integrity can “only be achieved through perfect paralysis,” which would cause economic pain and unduly curtail liberty.⁹

⁵ See Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667 (1975).

⁶ See RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 114 (2004).

⁷ Stewart, *supra* note 2, at 468.

⁸ *Id.*

⁹ *Id.* at 470.

But environmental lawmaking also creates conflicts within individual values embedded in many of our nation's lawmaking institutions. The value of fraternity underlies the federal government's deference to states, but fraternity also requires collective decision-making. These fraternal values are hard to maintain given the ways in which environmental pollution is defined by spillover effects and enormous scientific and technical complexity. Pollution's spillover effects call for a national approach in defiance of the fraternal preference for state and local solutions, and environmental law's complexity inevitably elevates lawmaking by an elite bureaucracy over collective decision-making.¹⁰ The value of fraternity also implies that the "benefits of environmental quality and the burdens of securing it" should be "shared equally by those who enjoy or suffer the collective goods or bads in question."¹¹ But systemic inequality has prevented this ideal from becoming a reality, and environmental injustices leave those least able to cope with the largest environmental misfortunes. The complicated, conflicting values Stewart described have consequently made environmental lawmaking hard, promoting controversy and distrust.

Stewart's analysis is no less insightful today than it was on the day of its publication, more than four decades ago. Nor is it any less relevant, given its anticipation of the very lawmaking struggles that have undermined the nation's ability to mount an effective response to COVID-19. COVID-19's relevance to environmental law is itself no surprise. The threat of a global pandemic has long been described as one of the heightened risks presented by both climate change and increased human-animal contact stemming from habitat destruction,¹² the latter of which has been identified as the most likely trigger for COVID-19's initial appearance in humans.¹³ What has instead been most surprising—and disappointing—is that while the

¹⁰ See *id.* at 471, 473.

¹¹ *Id.* at 468.

¹² See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY — CONTRIBUTION OF WORKING GROUP II TO THE FOURTH ASSESSMENT REPORT 403 (2007); see also David Quammen, *The Next Pandemic: Why It Will Come from Wildlife*, YALE ENV'T 360 (Oct. 4, 2012), https://e360.yale.edu/features/quammen_the_next_pandemic_will_come_from_wildlife.

¹³ See *COVID-19 and Animals*, CTRS. FOR DISEASE CONTROL AND PREVENTION (CDC) (Dec. 23, 2020), <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html>.

lawmaking challenges Stewart described are not new, our nation has nonetheless performed so stunningly poorly in addressing them. There is nothing abstract about the cost of our poor performance; it has resulted in the loss of hundreds of thousands of lives, hundreds of thousands of serious illnesses, and trillions of dollars in economic losses, each of which could have been avoided with a more effective response.¹⁴

It is far too soon to tell when the COVID-19 pandemic will end, even now with accelerated approval of promising vaccines. But it is not too soon to learn from our recent failings. The purpose of this Article is to do just that, with a focus on the lessons from COVID-19 for environmental law and how they relate to the lawmaking challenges first identified by Stewart in 1977. This essay focuses on just three of the many lessons to be learned from COVID-19. First, a failing economy thwarts environmental progress. Second, strong federal leadership is necessary to achieve difficult environmental goals. Third, environmental justice must precede robust environmental protection. These takeaways are unfortunately more sobering than reassuring. Yet, if we can learn those lessons, there are at least rays of hope, especially now in the new year with the ending of the Trump administration and the arrival of the Biden administration.

I. ECONOMIC COLLAPSE IS DISASTROUS FOR ENVIRONMENTAL PROTECTION

In the first few weeks of the global pandemic racing across the globe and shutting down the world's economy in the spring of 2020, some commentators mistakenly suggested that there was an "environmental protection" silver lining to COVID-19. After all, dramatically decreased economic activity means less environmental degradation. Mining activity would drop. Fossil fuel combustion would decrease because industrial and business demand for electricity would crater. Vehicle miles traveled would plummet as most everyone stayed shuttered in their homes. Trains and planes would

¹⁴ See David Leonhardt, *The Unique U.S. Failure to Control the Virus*, N.Y. TIMES (Aug. 6, 2020), <https://www.nytimes.com/2020/08/06/us/united-states-failure-coronavirus.html?action=click&module=Top%20Stories&pgtype=Homepage>; David M. Cutler & Lawrence H. Summers, *The COVID-19 Pandemic and the \$16 Trillion Virus*, 324 JAMA 1495, 1496 (2020).

similarly stop burning so much fuel because people would stop traveling all over the country and world for meetings that they would quickly discover could often easily be accomplished using online platforms. The upshot would be cleaner air, cleaner water, less destruction of fragile ecosystems, and a desperately needed drop in greenhouse gas emissions.

Here is what one leading environmental law professor wrote to other environmental law professors on a listserv in mid-March 2020, just as everyone was settling into their home versions of bunkers:

One of the lessons that we will likely take from the COVID-19 pandemic is how profoundly it has reduced GHG emissions. None of us want to live the rest of our lives confined to our homes but if this experience teaches us how to live more simply and to engage with each other more effectively using remote platforms that might offer a bit of a silver lining.¹⁵

In late March, NBC News broadcast the story *Coronavirus Shutdowns Have Unintended Climate Benefits: Cleaner Air, Clearer Water*.¹⁶ In early April, a *Washington Post* headline seemingly celebrated that *In India, Life Under Coronavirus Brings Blue Skies and Clean Air*.¹⁷ On Earth Day, April 22, a *Forbes* magazine article carried the headline *Silver Lining of Pandemic Shows It's Possible to Solve Climate Change*,¹⁸ and an NBC affiliate in San Francisco broadcast a story on the *Coronavirus Pandemic Silver Lining*:

¹⁵ Email from environmental law professor to envlawprofessors-bounce@lists.uoregon.edu (Mar. 18, 2020 12:56) (on file with author). Because this blog post appeared on an academic listserv for environmental law professors, and accordingly those participating could fairly assume their postings were off the record and not subject to publication, the posting is reproduced in the text above only with the express permission of the professor who posted it.

¹⁶ Denise Chow, *Coronavirus Shutdowns Have Unintended Climate Benefits: Cleaner Air, Clearer Water*, NBC NEWS (Mar. 31, 2020), <https://www.nbcnews.com/science/environment/coronavirus-shutdowns-have-unintended-climate-benefits-n1161921>.

¹⁷ Joanna Slater, *In India, Life Under Coronavirus Brings Blue Skies and Clean Air*, WASH. POST (Apr. 11, 2020), https://www.washingtonpost.com/world/asia_pacific/india-coronavirus-delhi-clean-air-pollution/2020/04/10/ac23dd1e-783e-11ea-a311-adb1344719a9_story.html.

¹⁸ Victoria Rochard, *Silver Lining Of Pandemic Shows It's Possible To Solve Climate Change*, FORBES (Apr. 22, 2020), <https://www.forbes.com/sites/sap/2020/04/22/environmental-benefit-covid-19/?sh=38bd010028c2>.

*Cleaner Air in the Bay Area.*¹⁹ The Forbes article reported that atmospheric concentrations of nitrogen dioxide over cities in Europe and Asia were 40 percent lower than in 2019, and the Himalayas were visible to some parts of India for the first time in three decades.²⁰

There were, moreover, some early signs that the economic shutdown was in fact causing a dramatic lowering of greenhouse gas emissions. As the pandemic hit China in January and February, that nation's carbon dioxide emissions reportedly decreased 25 percent year-over-year.²¹ Worldwide demand for coal plummeted eight percent in the first quarter of 2019; demand for oil decreased during that same time period by five percent; and global road transport activity fell by 50 percent.²² By early April 2020, daily global CO₂ emissions had decreased by an estimated 17 percent compared to mean levels one year before.²³ One scientist noted in May 2020 that the pandemic "is likely to lead to the largest cut in emissions since World War II."²⁴ Some commentators suggested that the worldwide response to the pandemic was reason for hope that global action could similarly address the threat of climate change: "We've done what needed to be done to save many hundreds of thousands, possibly millions of lives The pandemic has proven that this change is possible."²⁵

No less quickly, however, it became clear that it would be politically disastrous for environmentalists to tout any such silver lining to the global pandemic. It had already proven frustratingly

¹⁹ Melissa Colorado, *Coronavirus Pandemic Silver Lining: Cleaner Air in the Bay Area*, NBC BAY AREA (Apr. 22, 2020), <https://www.nbcbayarea.com/news/local/coronavirus-pandemic-silver-lining-cleaner-air-in-the-bay-area/2277586/>.

²⁰ See Rochard, *supra* note 18.

²¹ See Chow, *supra* note 16.

²² See INT'L ENERGY AGENCY, GLOBAL ENERGY REVIEW 2020: THE IMPACTS OF THE COVID-19 CRISIS ON GLOBAL ENERGY DEMAND AND CO₂ EMISSIONS 3 (2020).

²³ See Corinne Le Quéré et al., *Temporary Reduction in Daily Global CO₂ Emissions During the COVID-19 Forced Confinement*, 10 NATURE CLIMATE CHANGE 647, 647 (2020).

²⁴ *Expert Reaction to New Analysis of the Impact of COVID-19 on Carbon Emissions*, SCI. MEDIA CTR. (May 2020), <https://www.sciencemediacentre.org/expert-reaction-to-new-analysis-of-the-impact-of-covid-19-on-carbon-emissions/>.

²⁵ Rochard, *supra* note 18.

difficult to persuade the American people that they should care enough about climate change to vote for political candidates who were committed to addressing the issue. The last thing environmentalists should do is imply that addressing compelling issues like climate change requires devastation of the nation's and the world's economy, massive unemployment, disruption of important human milestones and events like graduations, weddings, funerals, and recreational sports, or the loss of hundreds of thousands of lives.

Indeed, for just that reason, it did not take long for conservative commentators and politicians opposed to tougher environmental protection, especially restrictions on greenhouse gas emissions, to draw just such a connection.²⁶ There was nothing subtle about the identical editorial headlines published on April 26, 2020 and May 16, 2020 by *The Washington Examiner* and *The New York Post*: *If You Like the Pandemic, You're Going to Love the Green New Deal*.²⁷ The editorials contended that the backers of the Green New Deal were "basically calling for exactly the kind of economic shut-down the nation is now experiencing—only on an even larger scale."²⁸ The Green New Deal would "essentially ban airplanes altogether" and "gasoline cars too."²⁹ "The loss of freedoms under the [Green New Deal] would also surpass those lost under social

²⁶ See, e.g., *Coronavirus Lockdown Is a Taste of the "Green New Deal"*, INST. FOR ENERGY RSCH. (Apr. 1, 2020), <https://www.instituteforenergyresearch.org/the-grid/coronavirus-lockdown-is-a-taste-of-the-green-new-deal/>; Editorial, *If You Like the Locked-Down US Economy, You'll Love the Green New Deal*, N.Y. POST (May 16, 2020), <https://nypost.com/2020/05/16/if-you-like-the-locked-down-us-economy-youll-love-green-new-deal/> [hereinafter *N.Y. Post Editorial*]; Editorial, *If You Like the Pandemic Lockdown, You're Going to Love the 'Green New Deal'*, WASH. EXAM'R (Apr. 26, 2020), <https://www.washingtonexaminer.com/opinion/editorials/if-you-like-the-pandemic-lockdown-youre-going-to-love-the-green-new-deal> [hereinafter *Washington Examiner Editorial*]; Paul Driessen, *The Green New Deal Dress Rehearsal*, HEARTLAND INST. (June 8, 2020), <https://www.heartland.org/news-opinion/news/the-green-new-deal-dress-rehearsal>; Lisa Friedman, *G.O.P. Coronavirus Message: Economic Crisis Is a Green New Deal Preview*, N.Y. TIMES (May 7, 2020), <https://www.nytimes.com/2020/05/07/climate/coronavirus-republicans-climate-change.html>.

²⁷ See *N.Y. Post Editorial*, *supra* note 26; *Washington Examiner Editorial*, *supra* note 26.

²⁸ *N.Y. Post Editorial*, *supra* note 26; *Washington Examiner Editorial*, *supra* note 26.

²⁹ *N.Y. Post Editorial*, *supra* note 26; see also *Washington Examiner Editorial*, *supra* note 26.

distancing, as bureaucrats dictated how you lived, ate, traveled and worked.”³⁰

Based on similar reasoning, the Trump administration used the pandemic to argue that reopening the economy required relaxing environmental protection requirements. In March 2020, an EPA memorandum signaled that the agency would decline to enforce compliance with routine monitoring and reporting of pollution or penalties for violations as long as polluters could attribute the violations to COVID-19.³¹ The agency cited worker shortages, travel restrictions, and social distancing guidelines as reasons polluters may be unable to meet reporting obligations, pollution limitations, hazardous waste management requirements, and safe drinking water requirements.³² Some states followed suit, weakening environmental requirements and enforcement in response to the pandemic.³³

In mid-May, citing the skyrocketing rise in unemployment across the country, which had shot up from 3.5 percent in February to 13.3 percent,³⁴ President Trump issued an executive order directing agencies to “address this economic emergency by rescinding, modifying, waiving, or providing exemptions from regulations and

³⁰ *N.Y. Post Editorial*, *supra* note 26; *see also Washington Examiner Editorial*, *supra* note 26.

³¹ *See* Memorandum from Susan Parker Bodine, Assistant Adm’r for Enf’t & Compliance Assurance, EPA, to All Governmental and Private Sector Partners (Mar. 26, 2020), <https://www.epa.gov/sites/production/files/2020-03/documents/oecamemooncovid19implications.pdf> [hereinafter EPA Memorandum]; *see also, e.g.*, Oliver Milman & Emily Holden, *Trump Administration Allows Companies to Break Pollution Laws During Coronavirus Pandemic*, *GUARDIAN* (Mar. 27, 2020), <https://www.theguardian.com/environment/2020/mar/27/trump-pollution-laws-epa-allows-companies-pollute-without-penalty-during-coronavirus>.

³² EPA Memorandum, *supra* note 31, at 1–2.

³³ *See* Ellen Knickmeyer et al., *Thousands Allowed to Bypass Environmental Rules in Pandemic*, *AP NEWS* (Aug. 24, 2020), <https://apnews.com/article/3bf753f9036e7d88f4746b1a36c1ddc4>; *see also, e.g.*, Press Release, Colo. Dep’t of Pub. Health & Env’t, State of Colorado Announces Suspension of Vehicle Emissions Testing Requirements (Mar. 25, 2020), <https://covid19.colorado.gov/press-release/state-colorado-announces-suspension-vehicle-emissions-testing-requirements>; Memorandum from Mont. Dep’t of Env’t Quality Solid Waste Program, *DEQ Solid Waste Program (SWP) COVID-10 Interim Workplan* (Mar. 24, 2020), https://deq.mt.gov/Portals/112/Updates/2020-03-24_SWPInterimWorkPlan.pdf.

³⁴ *Labor Force Statistics from the Current Population Survey*, U.S. BUREAU OF LAB. STAT., <https://data.bls.gov/timeseries/LNS14000000> (last visited Feb. 24, 2021).

other requirements that may inhibit economic recovery.”³⁵ The order directed agencies to use emergency authorities to facilitate economic development and to “identify” and “temporarily or permanently rescind, modify, waive, or exempt persons or entities” from “regulatory standards that may inhibit economic recovery.”³⁶ The President followed up with another executive order on June 4.³⁷ This one similarly directed agencies to “take all appropriate steps to use their lawful emergency authorities and other authorities to respond to the national emergency and to facilitate the Nation’s economic recovery.”³⁸ The President wrote: “Unnecessary regulatory delays will deny our citizens opportunities for jobs and economic security, keeping millions of Americans out of work and hindering our economic recovery from the national emergency.”³⁹ The order specifically directed the Secretary of Transportation to expedite highway and other infrastructure projects, the Secretary of the Army to expedite civil works projects within the purview of the Army Corps of Engineers, and the Secretaries of Defense, Interior, and Agriculture to expedite infrastructure, energy, and natural resources projects on federal lands.⁴⁰ It directed all agencies to take advantage of any statutory exemptions and exceptions in the National Environmental Policy Act, Endangered Species Act, and Clean Water Act, and any other laws relating to “infrastructure, energy, environmental, or natural resources matters.”⁴¹ And, on July 15, the President announced a complete overhaul of the federal regulations implementing the National Environmental Policy Act, which, by dramatically reducing that Act’s procedural planning requirements, promised to expedite completion of infrastructure projects, notwithstanding their potentially devastating adverse environmental impacts.⁴²

³⁵ Exec. Order No. 13,924, 85 Fed. Reg. 31,353 (May 19, 2020).

³⁶ *Id.*

³⁷ See Exec. Order No. 13,927, 85 Fed. Reg. 35,165 (June 4, 2020).

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ See *id.*

⁴¹ *Id.*

⁴² See Remarks by President Trump on the Rebuilding of America’s Infrastructure: Faster, Better, Stronger, Atlanta, Georgia (July 15, 2020), <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-rebuilding-americas-infrastructure-faster-better-stronger-atlanta-ga/>; see also Juliet Eilperin & Felicia Sonmez, *Trump Scales Back Landmark Environmental Law, Saying It Will Help Restart the Economy*, WASH. POST (July 15, 2020),

In short, a central lesson of COVID-19 is that it offers no silver lining for environmental protection. Just the opposite. It presents a cautionary tale. For environmental law to be sustainable over the longer term, it will need to be combined with measures that make clear how environmental protections are part of, rather than contradictory to, a viable economy. Otherwise, economic concerns will be used, tragically, as an excuse to override environmental protections—to the ultimate detriment of both the economy and the environment.

II. STRONG, AGGRESSIVE NATIONAL LEADERSHIP IS NECESSARY FOR ENVIRONMENTAL PROTECTION

Since the beginning of the COVID-19 pandemic, the United States has fared worse than most of its peers. Many commentators blame this state of affairs on poor national leadership.⁴³ As America has learned, weak federal leadership also contributes to the country's failure to address climate change and other pressing environmental problems.

In modern environmental law's formative years during the late 1960s and the 1970s, the major lawmaking focus was on the national government rather than on the states. A few states, like California, were well ahead of the rest of the nation in adopting strong environmental protection laws,⁴⁴ but the consensus among environmentalists was that enduring natural resource conservation measures and pollution control restrictions would need to be top-down rather than bottom-up. In both his 1977 *Iowa Law Review* and *Yale Law Journal* publications, Professor Stewart described the classic arguments in favor of such a national emphasis. He focused on pollution's spillover potential—how air and water pollution do not stop at state borders—as well as the need to avoid a “race to the bottom,” in which states would potentially compete for the jobs and tax receipts generated by business activity by offering increasingly relaxed

<https://www.washingtonpost.com/climate-environment/2020/07/15/trump-nepa-climate-change/>.

⁴³ See, e.g., Ed Yong, *How the Pandemic Defeated America*, ATLANTIC (Aug. 4, 2020, 1:12 PM), <https://www.theatlantic.com/magazine/archive/2020/09/coronavirus-american-failure/614191/>.

⁴⁴ See LAZARUS, *supra* note 6, at 91–92.

environmental requirements to industrial facilities that moved within their borders.⁴⁵

Left unstated was the other, harsher—and for that reason, quieter—ground for the national preference: distrust of states. The environmental movement of the late 1960s and early 1970s was strongly influenced by the civil rights movement. The two movements' essential demographics differed in significant respects, with the mainstream environmental movement dominated by majority white populations rather than by persons of color.⁴⁶ But many of those who came to the environmental movement had been active in the civil rights movement, and they borrowed much of its rhetoric and tactics. It is no happenstance that names of organizations like the Natural Resources Defense Council, Environmental Defense Fund, and Sierra Club Legal Defense Fund (now Earthjustice) were reminiscent of Charles Hamilton Houston's and Thurgood Marshall's NAACP Legal Defense Fund. Environmentalists borrowed the tactics of the highly successful leaders of the civil rights movement of the 1950s and 1960s, ranging from civil disobedience and nationwide peaceful protests to litigation.⁴⁷

One legacy of the civil rights movement was distrust of states' commitment to civil rights and the political rhetoric of "states' rights." For civil rights leaders, states' rights referred to the claim that those who fought on the side of the South during the Civil War were not fighting to maintain the institution of slavery, but merely to preserve the autonomy of state sovereignty. States' rights similarly embraced the Jim Crow laws that, for decades after the Civil War, perpetuated racial segregation and deprived Black Americans of the basic rights of citizenship, including the ability to seek gainful

⁴⁵ See Stewart, *Pyramids of Sacrifice?*, *supra* note 4, at 1212 ("Given the mobility of industry and commerce, any individual state or community may rationally decline unilaterally to adopt high environmental standards . . . for fear that the resulting environmental gains will be more than offset by movement of capital to other areas with lower standards."); Stewart, *The Development of Administrative and Quasi-Constitutional Law*, *supra* note 3, at 747 ("In the absence of a [national] nondegradation requirement, 'clean' states might compete with one another for new development, leading to a 'commons' dilemma in which each state permits more degradation than it would prefer . . .").

⁴⁶ This lack of diversity is still a problem within the mainstream environmental movement and environmental academia. See, e.g., DORCETA E. TAYLOR, *THE STATE OF DIVERSITY IN ENVIRONMENTAL ORGANIZATIONS* 2 (2014).

⁴⁷ See LAZARUS, *supra* note 6, at 92.

employment, own a home, educate one's children, and even to vote.⁴⁸

Within environmental law, initial skepticism of states' rights has faded since the 1970s, and states' rights themes in environmental law have enjoyed a resurgence in popularity.⁴⁹ Two reasons explain this shift. The first is that it quickly became apparent during the 1970s that the federal government needed to partner with the states to achieve the ambitious environmental protection goals being established by national legislation.⁵⁰ The federal government did not possess the resources or local knowledge necessary to implement and enforce the new laws in communities across the country. Nor could the federal government constitutionally command the states to take certain actions to administer national laws; the Tenth Amendment bars such conscription of states.⁵¹ State and local governments would necessarily play a critically important role in the administration of environmental law. The relationship would also ultimately need to be largely cooperative to succeed, characterized

⁴⁸ See MICHAEL J. KLARMAN, FROM JIM CROW TO CIVIL RIGHTS—THE SUPREME COURT AND THE STRUGGLE FOR RACIAL EQUALITY 398–99 (2004) (describing the segregationist “States’ Rights Party”); Christopher W. Schmidt, *Beyond Backlash: Conservatism and the Civil Rights Movement*, 56 AM. J. LEGAL HIST. 179, 182 (2016) (explaining that southern segregationists used states’ rights arguments to justify and defend their positions); Joy Milligan, *Subsidizing Segregation*, 104 VA. L. REV. 847, 854 (2018) (describing how educational segregation endured after *Brown v. Board of Education* because southern states insisted on federal deference to state prerogatives).

⁴⁹ See Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the “Race-To-The-Bottom” Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210, 1228 (1992).

⁵⁰ See Stewart, *supra* note 4, at 1201 (“The inadequacy of federal resources in comparison to the magnitude of environmental problems inevitably results in federal dependence on state and local authorities.”); see also Leroy C. Paddock, *The Federal and State Roles in Environmental Enforcement: A Proposal for a More Effective and More Efficient Relationship*, 14 HARV. ENV’T L. REV. 7, 25 (1990) (explaining how, in the 1980s, the federal government gave more environmental enforcement and policymaking power to the states because of “federal budgetary limitations” and “administrative difficulty”).

⁵¹ See Gary Lawson & Robert Schapiro, *The Tenth Amendment*, NAT’L CONST. CTR., <https://constitutioncenter.org/interactive-constitution/interpretation/amendment-x/interps/129> (last visited Mar. 1, 2021).

by the federal government offering carrots to the states rather than threatening them with sticks.⁵²

The second reason was the demise of national leadership on environmental issues and the concomitant rise of state leadership. Congress played a dominant lawmaking role during the 1970s and 1980s but, with very few exceptions, has effectively ceded leadership to the states on environmental issues since its passage of the Clean Air Act of 1990.⁵³ Messaging on environmental issues from the federal government's executive branch over the past thirty years can fairly be described as chaotic. What one presidential administration would accomplish, the next would seem to spend most of its time undoing. This regulatory whiplash has persisted now for decades: from the Clinton administration to the Bush administration,⁵⁴ the Bush administration to the Obama administration,⁵⁵ and the Obama administration to the Trump administration.⁵⁶ It has been dizzying.

⁵² See LAZARUS, *supra* note 6, at 203–06; see also *New York v. United States*, 505 U.S. 142, 142, 144–45 (1992) (striking down as in violation of the Tenth Amendment the “Take Title” provision of the federal Low-Level Radioactive Waste Policy Amendments Act of 1985, which unconstitutionally coerced state lawmaking by compelling a state to acquire title to radioactive waste if the state failed to participate in a federal program designed to address the hazards presented by such waste); *Printz v. United States*, 521 U.S. 898, 898 (1997) (striking down a provision of federal firearms safety law that violated the Tenth Amendment by requiring state agencies to perform specific federal duties).

⁵³ See Richard J. Lazarus, *Congressional Descent: The Demise of Deliberative Democracy in Environmental Law*, 94 GEO. L.J. 619, 628–29 (2006) (describing how, following two decades of a burst of legislative enactments, Congress has passed almost no new major environmental laws since 1990).

⁵⁴ Compare Leif Fredrickson et al., *History of US Presidential Assaults on Modern Environmental Health Protection*, 108 AM. J. PUB. HEALTH S95, S98 (2018) (“Clinton’s victory launched another round of ambitious environmental agenda setting . . .”), with *id.* (“In office, Bush’s challenge to the EPA . . . rel[ied] on delaying decisions and undermining science . . .”).

⁵⁵ See Suzanne Goldenberg, *Obama Reverses Bush Policies on Emissions Controls*, GUARDIAN (Jan. 26, 2009), <https://www.theguardian.com/world/2009/jan/26/obama-white-house-emissions-states> (listing Bush Administration environmental policies that President Obama reversed).

⁵⁶ See Nadja Popovich, Livia Albeck-Ripka & Kendra Pierre-Louis, *The Trump Administration Is Reversing More than 100 Environmental Rules. Here’s the Full List.*, N.Y. TIMES (Nov. 10, 2020), <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks-list.html> (listing environmental rollbacks under the Trump Administration).

Unable to rely on a consistent message from the national government, environmentalists have increasingly looked to the more politically progressive states to provide leadership and to fill the widening gaps left by the absence of national leadership. Many states have in turn filled that leadership vacuum, with California playing an outsized role.⁵⁷ That is why so many environmental organizations have in recent years justifiably focused their efforts on defending California's authority to enact tough environmental protection laws. They have defended California's authority to regulate greenhouse gas emissions from new motor vehicles,⁵⁸ to link its cap and trade greenhouse gas emissions program with Quebec and Ontario,⁵⁹ and to adopt a low-carbon fuel standard, notwithstanding its potential interstate and extraterritorial impacts.⁶⁰ To an extent that would likely have surprised the framers of national environmental legislation in the 1970s, the most creative and important action in recent years for environmental lawmaking has occurred in the states.⁶¹

⁵⁷ See Sam Ricketts, Rita Clifton, Lola Oduyeru & Bill Holland, *States Are Laying a Road Map for Climate Leadership*, CTR. FOR AM. PROGRESS (Apr. 30, 2020, 8:00 AM), <https://www.americanprogress.org/issues/green/reports/2020/04/30/484163/states-laying-road-map-climate-leadership/> ("In 2006, California became the first state in the nation to adopt a comprehensive, economy-wide climate program"). For example, Washington Governor Jay Inslee issued an Executive Order creating a Carbon Emissions Reduction Taskforce to design an emissions reduction program for the state. See Wash. Exec. Order No. 14-04, Washington Carbon Pollution Reduction and Clean Energy Action (Apr. 29, 2014), https://www.governor.wa.gov/sites/default/files/exe_order/eo_14-04.pdf. The Massachusetts legislature passed the Global Warming Solutions Act, requiring an eighty percent reduction from 1990 GHG emissions by 2050. See Global Warming Solutions Act, ch. 298, 2008 Mass. Acts 1154.

⁵⁸ See Brief of State and Local Government Petitioners and Public Interest Petitioners at 1, *Union of Concerned Scientists v. Nat'l Highway Traffic Safety Admin.*, No. 19-1230 (D.C. Cir. June 29, 2020).

⁵⁹ See *United States v. California*, No. 2:19-cv-02142, 2020 WL 4043034, at *14 (E.D. Cal. July 17, 2020) (rejecting federal preemption challenge to California's cap and trade emission program).

⁶⁰ See *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070, 1071 (9th Cir. 2013).

⁶¹ See Vicki Arroyo, Kathryn A. Zyla, Gabe Pacyniak & Melissa Deas, *State Innovation on Climate Change: Reducing Emissions from Key Sectors While Preparing for a "New Normal,"* 10 HARV. L. & POL'Y REV. 385, 385 (2016); see also Vicki Arroyo, *State and Local Climate Leadership in the Trumpocene*, 11 CARBON & CLIMATE REV. 303, 303 (2017).

A central lesson of COVID-19, however, is that certain kinds of problems depend on national leadership in order to be addressed effectively.⁶² During 2020, the country bore tragic witness to the cost, in terms of both human lives and livelihoods, of the absence of such leadership. No one state could prevent the virus's spread absent cooperation from neighboring states. Like air and water pollution, COVID-19 has no respect for state borders. The least protective state affects the public health and the economy of all, which is why during the summer, so many states responded by establishing restrictions for out-of-state visitors that, notwithstanding their strict terms, remain more aspirational than susceptible to strict enforcement.⁶³

To be sure, state and local governments played a necessary and indispensable role in addressing the global pandemic within their borders. California, Illinois, New York, Ohio, and Maryland quickly issued shelter-in-place orders, and other states followed suit.⁶⁴ States also closed schools and businesses and prohibited mass gatherings.⁶⁵ But no state by itself possessed the legal authority, the fiscal resources, or the market leverage sufficient to secure in the spring and summer of 2020 enough medical supplies for its residents, let alone to undertake the extensive scientific research necessary to address the pandemic.

⁶² See Dan Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570, 571 (1996) (challenging those who advocate in favor of decentralization of environmental law and arguing that what is instead required is “a multitier regulatory structure that tracks the complexity and diversity of environmental problems”).

⁶³ See J. David Goodman, *N.Y. Will Impose Quarantine on Visitors from States with Big Outbreaks*, N.Y. TIMES (June 24, 2020), <https://www.nytimes.com/2020/06/24/nyregion/ny-coronavirus-states-quarantine.html>; see also Karen Schwartz, *Thinking of Traveling in the U.S.? These States Have Travel Restrictions*, N.Y. TIMES (July 7, 2020), <https://www.nytimes.com/2020/07/10/travel/state-travel-restrictions.html>.

⁶⁴ See, e.g., Dan Balz, *As Washington Stumbled, Governors Stepped to the Forefront*, WASH. POST (May 3, 2020), <https://www.washingtonpost.com/graphics/2020/politics/power-to-states-and-governors-during-coronavirus/>; Jiachuan Wu et al., *Stay-at-Home Orders Across the Country*, NBC NEWS (Apr. 29, 2020), <https://www.nbcnews.com/health/health-news/here-are-stay-home-orders-across-country-n1168736>.

⁶⁵ For a fairly comprehensive list, see *2020 State and Local Government Responses to COVID-19*, STATESIDE (June 16, 2020), <https://www.state-side.com/blog/2020-state-and-local-government-responses-covid-19>.

COVID-19 exposed the limitations of federalism and the cost of failed national leadership. At no time was this more evident than in the spring of 2020, when the national government announced to the states that they were on their own to secure desperately needed, scarce medical supplies.⁶⁶ At the peak of the crisis, states faced a massive shortage of ventilators, tests, and personal protective equipment.⁶⁷

Perversely, the states were forced to compete against each other in the marketplace for those critically needed resources. High demand and low supply created a bidding war among the states for necessary medical equipment, raising prices in the process.⁶⁸ Meanwhile, despite requests from governors and members of Congress, President Trump waited until the end of March to invoke his emergency powers under the Defense Production Act to direct private companies to manufacture emergency equipment.⁶⁹ The Trump administration insisted that the primary responsibility for procuring equipment lay with the states.⁷⁰

⁶⁶ Jonathan Martin, *Trump to Governors on Ventilators: 'Try Getting it Yourself'*, N.Y. TIMES (Mar. 16, 2020), <https://www.nytimes.com/2020/03/16/us/politics/trump-coronavirus-respirators.html>; Anita Kumar & Gavin Bade, *States Still Baffled Over How to Get Coronavirus Supplies from Trump*, POLITICO (Apr. 13, 2020, 4:30 AM), <https://www.politico.com/news/2020/04/13/states-baffled-coronavirus-supplies-trump-179199>.

⁶⁷ See, e.g., Megan L. Ranney et al., *Critical Supply Shortages—The Need for Ventilators and Personal Protective Equipment During the Covid-19 Pandemic*, 382 NEW ENG. J. MED. e41(1), e41(1) (2020).

⁶⁸ See, e.g., *Competition Among State, Local Governments Creates Bidding War for Medical Equipment*, ABC NEWS (Apr. 3, 2020), <https://abcnews.go.com/US/competition-state-local-governments-creates-bidding-war-medical/story?id=69961539>; Andrew Soergel, *States Competing in 'Global Jungle' for PPE*, U.S. NEWS (Apr. 7, 2020), <https://www.usnews.com/news/best-states/articles/2020-04-07/states-compete-in-global-jungle-for-personal-protective-equipment-amid-coronavirus>; Kathryn Watson, *Trump Says States Need to "Work Out" Competing Bids for Medical Equipment for Themselves*, CBS NEWS (Apr. 3, 2020), <https://www.cbsnews.com/news/trump-states-bids-medical-equipment-ventilators-supplies/>.

⁶⁹ See, e.g., Zolan Kanno-Youngs & Ana Swanson, *Wartime Production Law Has Been Used Routinely, But Not with Coronavirus*, N.Y. TIMES (Mar. 31, 2020), <https://www.nytimes.com/2020/03/31/us/politics/coronavirus-defense-production-act.html>.

⁷⁰ See, e.g., *Competition Among State, Local Governments Creates Bidding War for Medical Equipment*, *supra* note 68; Juliette Kayyem, *Trump Leaves States to Fend for Themselves*, ATLANTIC (Mar. 17, 2020),

The absence of national guidance regarding COVID-19 testing was especially crippling. In the spring of 2020, their economies severely battered, the states sought to implement phased reopenings, in an effort to put people back to work and revive failing businesses.⁷¹ The states then struggled during the summer months to reopen their schools for in-person instruction rather than rely on remote learning—an especially elusive undertaking for younger children.⁷² But as summer ended and fall began, the absence of any national commitment to ensure speedy and reliable testing resources nationwide hobbled individual states' efforts, first to open businesses and offices and then to open schools.⁷³

Finally, state and local governments similarly struggled in the final month of 2020 to administer vaccines while COVID-19 infection rates and hospitalizations surged across the country. Absent effective national leadership, the states were able to provide only a small fraction—shy of 15 percent—of the twenty million vaccinations that the federal government had proudly predicted would be administered nationwide by the end of December.⁷⁴ The stumbling block here again was the lack of effective national, state, and local governmental coordination. The vaccines were physically available, but, notwithstanding the obvious public health emergency, there was a lack of logistical planning required to get the vaccines from

<https://www.theatlantic.com/ideas/archive/2020/03/america-has-never-had-50-state-disaster-before/608155/>; Watson, *supra* note 68.

⁷¹ *Summary of Public Health Criteria in Reopening Plans*, NAT'L GOVERNORS ASS'N, <https://www.nga.org/coronavirus-reopening-plans/> (last visited Apr. 10, 2021).

⁷² Gabby Birenbaum & James Bikales, *Here's Your State's Plan for Reopening Schools*, HILL (July 20, 2020, 11:37 AM), <https://thehill.com/homenews/state-watch/508105-heres-your-states-plan-for-reopening-schools>.

⁷³ See Erin Cox, *There's No National Testing Strategy for Coronavirus. These States Banded Together to Make One*, WASH. POST (Aug. 4, 2020), https://www.washingtonpost.com/coronavirus/coronavirus-state-testing-compact/2020/08/04/8b73bed8-d66f-11ea-9c3b-dfc394c03988_story.html?hpid=hp_hp-top-table-main_virustesting-110pm%3Ahomepage%2Fstory-ans (describing how Virginia, Louisiana, Massachusetts, Michigan, Ohio, and Maryland are creating a purchasing compact to gain access to adequate testing resources at lower cost from private industry).

⁷⁴ See Rebecca Robbins, Frances Robies & Tim Arango, *Here's Why Distribution of the Vaccine is Taking Longer than Expected*, N.Y. TIMES (Dec. 31, 2020), <https://www.nytimes.com/2020/12/31/health/vaccine-distribution-delays.html?action=click&module=Top%20Stories&pgtype=Homepage>.

manufacturer warehouses to the medical facilities where they could be administered to twenty million people.⁷⁵

More simply stated, COVID-19 teaches that cooperative federalism does not simply refer, as many environmentalists long assumed, only to the need for the *states* to cooperate. Cooperative federalism equally depends on *federal* cooperation: it's a two-way street. And while state and local governments are critically important, there are leadership roles that only the federal government can effectively inhabit. Unfortunately, during the COVID-19 crisis, the federal government not only failed to cooperate with the states, it attacked them. Isolated by the actions and inaction of the President, even the most committed and hard-working state governments could not forestall a global pandemic. And, lacking federal government leadership, they were unable to ensure that the American people were able to receive vaccines when they first became available.

The lesson for environmental law is clear. National leadership is essential for environmental issues like climate change that—like COVID-19—defy state and national borders and outstrip the resources and legal authority of any one state to redress. In recent years, states have demonstrated the positive role they can play to fill the gaps left when the federal government steps aside. But this past year makes plain the states cannot do it by themselves, let alone when opposed by the national government. Fortunately, the Biden-Harris administration has acted decisively to coordinate with states in the fight against both COVID-19 and climate change.⁷⁶

III. ENVIRONMENTAL JUSTICE IS NECESSARY FOR ENVIRONMENTAL

⁷⁵ See *Coronavirus in the U.S.: Latest Map and Case Count*, N.Y. TIMES, <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html> (latest COVID-19 statistics nationwide as of December 31, 2020); *id.* (describing how and why vaccination rates are far slower than expected).

⁷⁶ See *e.g.*, Exec. Order No. 13,999, 86 Fed. Reg. 7211 (Jan. 21, 2021) (directing the Secretary of Labor to coordinate with states to ensure that workers receive adequate protection from COVID-19); Exec. Order No. 14,001, 86 Fed. Reg. 7,219 (Jan. 26, 2021) (ordering the federal government to make available to states, localities, and tribes “supplies necessary for responding to the [COVID-19] pandemic”); Exec. Order No. 14,009, 86 Fed. Reg. 7619 (Jan. 27, 2021) (Executive Order on Tackling the Climate Crisis at Home and Abroad) (issuing a range of directives to address the climate crisis, a number of which call for state, local, and tribal consultation and engagement).

PROTECTION

Professor Stewart's early scholarship barely—and even then, only incidentally—touched on issues related to environmental justice.⁷⁷ But that is not surprising. During the 1970s, environmental law scholarship rarely discussed environmental justice. It would take more than a decade for the issue to become part of the environmental law discourse, which, of course, is itself symptomatic of the problem, because environmental injustices have always existed.

It was not until 1987 that environmentalists and environmental lawmakers were jarred by accusations that they were ignoring the “environmental racism” within environmental law. That is when the Rev. Dr. Benjamin Chavis coined the term as he was preparing to present to the National Press Club in Washington, D.C. a report on how toxic waste sites were located disproportionately in communities of color: “[I] was trying to figure out how [I] could adequately describe what was going on. It came to me—*environmental racism*.”⁷⁸ It took another several years before “environmental justice” entered the legal lexicon and academic scholarship.⁷⁹ Only in the wake of Rev. Dr. Chavis's claim did environmental regulators, public interest organizations, and academics begin to appreciate both how high levels of pollution were disproportionately occurring in communities of color and low-income communities and how environmental laws that promised to address that pollution had perversely led to even higher concentrations of toxics in those same communities.⁸⁰

Nonetheless, environmental justice has never become a first-order issue in environmental law. Every year, members of Congress

⁷⁷ See Stewart, *supra* note 4, at 1238, 1250, 1264.

⁷⁸ Richard J. Lazarus, “*Environmental Racism! That's What It Is*,” 2000 U. ILL. L. REV. 255, 257, 257 n.17 (2000).

⁷⁹ The first National People of Color Environmental Leadership Conference was held in Washington, D.C. in October 1991, at which the delegates drafted and adopted seventeen “Principles of Environmental Justice.” *Principles of Environmental Justice*, FIRST NAT'L PEOPLE OF COLOR ENV'T LEADERSHIP SUMMIT (Oct. 27, 1991), <https://www.ejnet.org/ej/principles.html>; see also Keith Schneider, *Minorities Join to Fight Polluting Neighborhoods*, N.Y. TIMES, Oct. 25, 1991, at A20.

⁸⁰ See Sheila Foster, *Rac(ial) Matters: The Question for Environmental Justice*, 20 ECOLOGY L.Q. 721, 722 & n.6 (1993); Richard J. Lazarus, *Pursuing “Environmental Justice”: The Distributional Effects of Environmental Protection*, 87 NW. U. L. REV. 787, 790 nn.12–13 (1993); Carita Shanklin, Comment, *Pathfinder: Environmental Justice*, 24 ECOLOGY L.Q. 333, 335 (1997).

introduce an environmental justice bill, and every year, Congress declines to enact any legislation to address the issue.⁸¹ While EPA and several states have committed to the issue episodically and achieved significant success in discrete settings,⁸² that commitment has never been persistent and deep. Only when the nation's newspapers headline massive disasters like the one in Flint, Michigan, where chemicals added by the government to treat drinking water instead contaminated the drinking water of Flint's largely Black population by releasing lead from aging pipes, is public consciousness raised about environmental injustices, and even then, only ephemerally.⁸³

COVID-19 has made clear that environmental justice cannot just be a secondary objective of environmental law. It must be front and center. Environmental law cannot persist absent a core, overriding commitment to environmental justice any more than—as described in the first COVID-19 lesson discussed above—environmental law can survive amid a failing economy.

The pandemic has placed into stark relief what happens in a public health crisis absent such a social justice commitment. Black and Native American people have been hospitalized for COVID at a rate five times that of non-Hispanic whites, and Latinx people at a rate four times that of non-Hispanic whites.⁸⁴ Black Americans are

⁸¹ See, e.g., Environmental Justice Act of 2019, S. 2236, 116th Cong. (2019) (introduced by Senator Corey Booker); Press Release, Cory Booker, U.S. Senator, Booker Reintroduces Sweeping Environmental Justice Bill (July 24, 2019), <https://www.booker.senate.gov/news/press/booker-reintroduces-sweeping-environmental-justice-bill>.

⁸² See, e.g., EPA, ENVIRONMENTAL JUSTICE PROGRESS REPORT FISCAL YEAR 2015–2016, at 5 (2016).

⁸³ See Monica Davey & Mitch Smith, *What Went Wrong in Flint*, N.Y. TIMES (Mar. 4, 2016), <https://www.nytimes.com/interactive/2016/03/04/us/04flint-mistakes.html>; see also Editorial, *How Government Officials Failed the People of Flint, Michigan*, WASH. POST (Jan. 20, 2016), https://www.washingtonpost.com/opinions/how-government-officials-failed-the-people-of-flint-mich/2016/01/20/82a1b5f8-bdf6-11e5-9443-7074c3645405_story.html.

⁸⁴ See Richard A. Opiel, Jr., et al., *The Fullest Look Yet at the Racial Inequality of Coronavirus*, N.Y. TIMES (July 5, 2020), <https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african-americans-cdc-data.html>; *Coronavirus Disease 2019 (COVID-19): Racial & Ethnic Minority Groups*, CDC (June 25, 2020), <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>; *Covid-19 Racial and Ethnic Health Disparities: Disparities in COVID-19 – Associated Hospitalizations*, CDC (last updated Dec. 10, 2020), <https://www.cdc.gov/coronavirus/2019-ncov/community/health->

much more likely to die from the disease than white Americans, sometimes making up a majority of COVID deaths in states where they constitute a minority of the population.⁸⁵ In New York City, the rate of survival from the virus was significantly lower in those public hospitals that served the city's poor than in Manhattan's well-resourced private medical centers.⁸⁶ And because Black Americans are less likely than white Americans to have a financial safety net, they suffer more from health emergencies and periods of unemployment.⁸⁷

COVID-19 shone a harsh spotlight on existing inequalities, and those same inequalities in turn increased the pandemic's severity. In the absence of an adequate social safety net, many people could not afford to stay home from work even when they became sick.⁸⁸ But of course, once they came into work, the likelihood of viral spread increased significantly.⁸⁹ Similarly, the exceedingly high cost of health care makes it difficult for poor people to regularly attend to their health or to seek treatment, which makes all illnesses more serious. High housing costs and racially discriminatory housing practices cause the poor and persons of color to live in crowded

equity/racial-ethnic-disparities/disparities-hospitalization.html (presenting age-adjusted COVID-19-associated hospitalization rates by ethnicity and race from March 1, 2020 to December 5, 2020).

⁸⁵ See Rashawn Ray, *Why Are Blacks Dying at Higher Rates from COVID-19?*, BROOKINGS (Apr. 9, 2020), <https://www.brookings.edu/blog/fixgov/2020/04/09/why-are-blacks-dying-at-higher-rates-from-covid-19/>.

⁸⁶ See Brian M. Rosenthal, Joseph Goldstein, Sharon Otterman & Sheri Fink, *Why Surviving the Virus Might Come Down to Which Hospital Admits You*, N.Y. TIMES (July 1, 2020), <https://www.nytimes.com/2020/07/01/nyregion/Coronavirus-hospitals.html>.

⁸⁷ See Lauren Aratani & Dominic Rushe, *African Americans Bear the Brunt of Covid-19's Economic Impact*, GUARDIAN (Apr. 28, 2020), <https://www.theguardian.com/us-news/2020/apr/28/african-americans-unemployment-covid-19-economic-impact>.

⁸⁸ Jennifer Valentino-DeVries, Denise Lu & Gabriel J.X. Dance, *Location Data Says It All: Staying at Home During Coronavirus Is a Luxury*, N.Y. TIMES (Apr. 3, 2020), <https://www.nytimes.com/interactive/2020/04/03/us/coronavirus-stay-home-rich-poor.html>.

⁸⁹ See Apoorva Mandavilli, *The C.D.C. Needs to Set Air Guidelines Now for Workplaces, Scientists Say*, N.Y. TIMES (Feb. 17, 2021), <https://www.nytimes.com/2021/02/17/health/the-cdc-needs-to-set-air-guidelines-now-for-workplaces-scientists-say.html>.

environments, further accelerating the virus's spread.⁹⁰ Perhaps most pertinent to environmental law, people living in areas with high levels of air pollution were more vulnerable to dying from COVID-19, as their respiratory systems were more likely to already be compromised.⁹¹

As the coronavirus first surged in the spring of 2020, it did not take long for the connection between environmental justice and the virus to emerge; the disproportionate environmental harm regularly suffered by communities of color and the poor mirrored the disproportionate harm the virus caused those same communities.⁹² Just as social injustice intensifies health disasters, so too does it intensify environmental problems.⁹³ Hurricane Katrina was so deadly in part because New Orleans contained a high number of people living in poverty and suffering from homelessness who lacked access to cars with which to evacuate the city.⁹⁴ Climate change is more likely to cause food insecurity for people who are already low-income.⁹⁵

⁹⁰ See Ray, *supra* note 85.

⁹¹ See Kathleen Brosemer et al., Perspective, *The Energy Crises Revealed by COVID: Intersections of Indignity, Inequity, and Health*, 68 ENERGY RSCH. & SOC. SCI. 101661, at 3 (2020).

⁹² See Lisa Friedman & Zoë Schlanger, *Race, Pollution and the Coronavirus*, N.Y. TIMES (Apr. 8, 2020), <https://www.nytimes.com/2020/04/08/climate/coronavirus-pollution-race.html>; see also Lisa Friedman & Julia Rosen, *The Environmental Justice Wake-Up Call*, N.Y. TIMES (June 17, 2020), <https://www.nytimes.com/2020/06/17/climate/climate-environmental-justice.html>; Linda Villarosa, *Pollution is Killing Black Americans. This Community Fought Back.*, N.Y. TIMES MAG. (July 28, 2020), <https://www.nytimes.com/2020/07/28/magazine/pollution-philadelphia-black-americans.html>.

⁹³ For a discussion of how inequality exacerbates climate change, see, e.g., SUSAN R. HOLMBERG, *BOILING POINTS: THE INEXTRICABLE LINKS BETWEEN INEQUALITY AND CLIMATE CHANGE* (2017); S. Nazrul Islam, *Inequality and Environmental Sustainability* (Dep't of Econ. & Soc. Affs., Working Paper No. 145, 2015).

⁹⁴ See Daniel A. Farber, *Disaster Law and Inequality*, 25 LAW & INEQ. 297, 302–03 (2007).

⁹⁵ See Paolo Agnolucci et al., *Impacts of Rising Temperatures and Farm Management Practices on Global Yields of 18 Crops*, 1 NATURE FOOD 562, 562 (2020) (“Countries where increasing temperature causes the most negative impacts [on crop yields] are typically the most food insecure . . .”); CHASE SOVA, KIMBERLY FLOWERS & CHRISTIAN MAN, CTR. FOR STRATEGIC & INT’L STUD., *CLIMATE CHANGE AND FOOD SECURITY: A TEST OF U.S. LEADERSHIP IN A FRAGILE WORLD 2* (2019), https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/191015_Flowers_ClimateChangeFood_WEB.pdf (explaining how in poorer

Furthermore, socioeconomic and racial inequality within and between countries causes mistrust and social discontent, which could make it more difficult for countries to take collective action and pass progressive climate change legislation.⁹⁶

The connection between the terrible health and financial injustices associated with COVID-19 and environmental injustices caused by toxic pollution, sea-level rise, and global warming provides this third and final lesson. Going forward, environmental law policymakers, academics, and environmental protection advocates in the public interest community must make social justice a first-order priority.

CONCLUSION

As advertised at the outset, the lessons of COVID-19 for environmental law are sobering. As hard as the virus has proven for our nation to address, the problem of climate change is orders of magnitude harder still. For COVID-19, cause and effect are immediate over time and space, so lawmakers can readily appreciate the consequences of their action—and inaction—in a time frame that still offers the opportunity to adopt measures needed to address the risk.

The virus is not subtle. Absent immediate actions to limit its spread, people can become seriously ill and die within weeks. It takes no deep thinking to grasp how the failure to take certain preventive steps has immediate, horrible consequences. The virus is also potentially eradicable. In late August 2020, when the first draft of this article was submitted, there was no approved vaccine to treat COVID-19. In the winter of 2021, just as the final version of the article was due, vaccines had been approved, and several million doses were being administered across the nation even if, as described,⁹⁷ at a much slower pace than promised.

For environmental issues like climate change, cause and effect are, in contrast, notoriously difficult to ascertain because they are so

areas like sub-Saharan Africa, agriculture, which will be particularly affected by climate change, employs up to eighty percent of the population).

⁹⁶ See U.N. DEV. PROGRAM, HUMAN DEVELOPMENT REPORT 2019, at 18 (2019); Larry Elliott, *Inequality Makes Climate Crisis Much Harder to Tackle*, GUARDIAN (Jan. 26, 2020), <https://www.theguardian.com/business/2020/jan/26/inequality-climate-crisis-harder-tackle-poor-sacrifice-davos>.

⁹⁷ See Robbins, Robies & Arango, *supra* note 74.

spread out over space and time. The relevant spatial horizons are not defined by a few miles, but instead span the globe. Increased greenhouse gas emissions anywhere on the planet can have devastating consequences anywhere else, no matter how many tens of thousands of miles away. The temporal horizons are even more unbounded. Actions can have climate consequences that are not realized merely in two weeks, as with the virus, but decades or a century later.⁹⁸

That is why climate change has well earned its “super wicked” moniker.⁹⁹ It is exceedingly hard for any government, lawmaker, or individual person to appreciate how their actions today may have catastrophic climate consequences for people who live far away and decades or hundreds of years in the future. And given that disconnect, it is harder still to get the governments of the world to pass the necessary laws or to get individual people across the globe to change their behavior, especially when, absent such a global effort, any one nation’s increase in greenhouse gas emissions can easily offset another nation’s decrease.¹⁰⁰ Nor, of course, is there any promise of the equivalent of a vaccine to stop climate change. One would have to change planets.

The only basis for optimism is that we can now learn these three lessons of COVID-19. We can appreciate the need for economic viability and take advantage of the massive rebuilding of the nation’s economy made necessary by the virus to be smarter about climate change. A group of scientists are already promoting a “Green Stimulus” to Congress to boost the economy while laying the groundwork for a sustainable future.¹⁰¹ Their open letter offers a “policy menu” for creating green jobs, investing in sustainability,

⁹⁸ See Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1161–79 (2009).

⁹⁹ See *id.* at 1159. The first reference to climate change as a super wicked problem can be found at Kelly Levin, Steven Bernstein, Benjamin Cashore & Graeme Auld, *Playing It Forward: Path Dependency, Progressive Incrementalism, and the “Super Wicked” Problem of Global Climate Change* 8–10 (July 7, 2007) (unpublished manuscript), <http://environment.yale.edu/uploads/publications/2007levinbernsteincashoreauldWicked-Problems.pdf>.

¹⁰⁰ See Lazarus, *supra* note 98, at 1179–87.

¹⁰¹ See Johanna Bozuwa et al., *A Green Stimulus to Rebuild Our Economy: An Open Letter and Call to Action to Members of Congress*, MEDIUM (Mar. 22, 2020), https://medium.com/@green_stimulus_now/a-green-stimulus-to-rebuild-our-economy-1e7030a1d9ee.

transitioning off of fossil fuels, expanding public and employee ownership, and slashing carbon emissions.¹⁰² The letter asks for \$2 trillion in stimulus money, to “be automatically renewed annually at 4% of GDP per year (roughly \$850 billion) until the economy is fully decarbonized and the unemployment rate is below 3.5%.”¹⁰³

To address climate change, we must restore the kind of national leadership that was missing during the COVID-19 crisis. Fortunately, the Biden-Harris commitment to addressing climate change is deeper and broader than that of any prior presidential administration. That is clear from the identity of President Biden’s initial appointments to positions of authority within the administration¹⁰⁴ and his recent climate-focused executive actions.¹⁰⁵ But a competent president and executive branch officials all dedicated to addressing the climate crisis can only get us so far, especially with a Congress whose priorities frequently reflect short-term goals. Our regulatory institutions need reforming. We must minimize the risk of executive branch agency politicization and the rejection of scientific expertise that characterized the Trump administration. The executive branch will never be completely insulated from politics: The President is, after all, an elected official and the chief executive. Yet we can still protect the judgment of scientists such that presidential decision-making can be evaluated based on its consistency with logic and sound research.¹⁰⁶

¹⁰² *See id.*

¹⁰³ *Id.*

¹⁰⁴ *See* Lisa Friedman, *Biden Introduces His Climate Team*, N.Y. TIMES (Dec. 22, 2020), <https://www.nytimes.com/2020/12/19/climate/biden-climate-team.html>; *see also* Press Release, EPA, EPA Welcomes Members of the Biden-Harris Leadership Team (Jan. 21, 2021), <https://www.epa.gov/newsreleases/epa-welcomes-members-biden-harris-leadership-team>.

¹⁰⁵ *See* Press Release, The White House, Paris Climate Agreement (Jan. 20, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/> (rejoining the Paris Agreement); *see also* Exec. Order No. 14,008, 86 Fed. Reg. 7,619 (2021) (Executive Order on Tackling the Climate Crisis at Home and Abroad) (issuing a range of directives to address the climate crisis, including establishing a National Climate Task Force, prohibiting federal subsidies to fossil fuel development, pausing oil and gas leasing on federal lands, and conserving at least thirty percent of federal lands and waters by 2030).

¹⁰⁶ For a host of recommendations for making institutional reforms within the executive branch to insulate agency career experts from political pressures derived from short-term economic concerns, *see* Lazarus, *supra* note 98, at 1212–31.

For environmental justice to finally become a first-order concern within environmental law, legislation at both the federal and state level is required. Here again, the new Biden-Harris administration is plainly more committed than any prior administration to addressing longstanding environmental injustice, seemingly by an order of magnitude.¹⁰⁷ Yet, as impressive as that commitment is, here too the efforts of a single administration's appointees and career personnel who care about the issue are too slender a reed on which to rely for the kind of enduring reform needed to address environmental injustices. Legislation will need to address both the setting of environmental protection standards and the enforcement of those standards. Otherwise, past will continue to be prologue, and persons of color, the poor, and other especially vulnerable communities will continue to suffer disproportionately. Environmental law can no longer tolerate passive complicity with injustice.

Unsurprisingly, none of these three lessons is easy to learn. For the reasons explained by Professor Stewart decades ago, environmental lawmaking is too fraught with conflict to ever be easy. We must nevertheless hope that the enormous losses of life and livelihood caused by COVID-19, and especially those losses caused by our government's failure to contain the virus, will provide our nation with the impetus, finally, to learn them.

¹⁰⁷ See Juliet Eilperin, Dino Grandoni & Brady Dennis, *With Historic Picks, Biden Puts Environmental Justice Front and Center*, WASH. POST (Dec. 17, 2020, 7:28 PM), <https://www.washingtonpost.com/climate-environment/2020/12/17/deb-haaland-interior-secretary-biden/>; Exec. Order No. 14,008, 86 Fed. Reg. 7,619 (2021) (Executive Order on Tackling the Climate Crisis at Home and Abroad) (inter alia, establishing a White House Environmental Justice Interagency Council and a White House Environmental Justice Advisory Council and directing the Attorney General to consider establishing an Office of Environmental Justice within the Department of Justice); Juliet Eilperin, Brady Dennis & Darryl Fears, *Biden to Place Environmental Justice at Center of Sweeping Climate Plan*, WASH. POST (Jan. 27, 2021, 12:51 PM), <https://www.washingtonpost.com/climate-environment/2021/01/26/biden-environmental-justice-climate/>.

