

# FOREWORD

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This issue of the *Harvard Environmental Law Review* comes at a time of significant challenge and change for public health and environmental protection in the United States. Challenge, because although we have reduced pollution and improved public health in many ways in the five decades since the country awoke to the need for environmental protection, many risks to public health and our environment remain. These risks are increasingly complex, and demand more innovative approaches and more effective partnerships than ever before. Change, because even only six months after the presidential election of 2016, it is clear that the Trump Administration is taking a very different view of the role of the United States Environmental Protection Agency (“EPA”) than any since the Reagan years. The new administration imagines an EPA greatly diminished in seemingly every aspect of the agency’s work and expertise, and will, unless checked, not only stop progress on challenges such as climate change and toxic chemical use, but also could roll back progress that has been made to improve air and water quality as well as the health and quality of life for millions of Americans.

In this Foreword, we hope to accomplish two goals: (1) identify what we see as some of the key environmental challenges of today and tomorrow that require creative approaches to funding, continued technical innovation, and the active and broadening engagement of individuals, industry stakeholders, government bodies, and the media, and (2) discuss several foundational aspects of EPA’s work that we see seriously threatened by recent actions of the executive and legislative branches.

## I. TODAY’S ENVIRONMENTAL CHALLENGES

In the mid-twentieth century, Americans were literally sick and tired of the black smoke spewing from industrial stacks, rivers so polluted with chemicals that they burned, barrels of hazardous waste leaking contaminants into the drinking water, and air so thick with smog and soot that you couldn’t see across the street. American progress—our Industrial Revolution—significantly impacted the quality of natural resources and, in turn, the health and well-being of the people.

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Throughout the past fifty years, science has provided deepening insight into the real impacts of industrialization and the extent that exposure to pollution affects overall public health on a day-to-day basis. We have also discovered many market-, regulatory-, and incentive-driven mechanisms to reduce the pollution that threatens our environment, as well as clean up the industrial contamination left behind.

The driving force behind this country's success in addressing health risks posed by pollution has been the foundational environmental laws established by the United States Congress. Decades of implementation of those laws by EPA in partnership with states, local communities, and tribes have resulted in significant improvements in environmental quality. Under the Clean Air Act ("CAA"), emissions of the most common air pollutants have been reduced by 70% since 1970.<sup>1</sup> Under the Clean Water Act<sup>2</sup> and the Safe Drinking Water Act,<sup>3</sup> we have invested billions of dollars in water and wastewater infrastructure, established discharge standards that have helped to restore half of the rivers and streams that were contaminated with pollutants, and set ninety primary health standards for contaminants of greatest threat to drinking water quality, which 90% of our public water systems meet 90% of the time.<sup>4</sup> Under the Superfund Law,<sup>5</sup> we are making steady progress on the enormous task of cleaning up contaminated sites and bringing them back to safe use, while we implement the Resource Conservation and Recovery Act to track and ensure proper management of waste from the cradle to the grave.<sup>6</sup>

In short, much of the visible pollution that sparked the environmental movement has been significantly reduced, and systems are in place to more effectively prevent the continued degradation of our natural resources and the resultant threats to human health. But that doesn't mean it's time to slow down. Advances in science and technology tell us that, where pollution is concerned, what you can't see *can* hurt you. For example, emissions of methane and volatile organic compounds from oil and gas development are now contributing to high ozone levels and adverse health impacts in nearby communities. Pesticide residues in our food, chemicals in consumer products, and poor indoor air quality in our homes, schools, daycare centers, and workplaces, pose risks, particularly to children and pregnant women. And, indeed, in this country's environmental justice communities, pollution often remains painfully visible. In parts of Louisiana and Texas, for example, clusters of chemical plants and refin-

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1. Clean Air Act, 42 U.S.C. §§ 7401–7515 (2012). See EPA, OUR NATION'S AIR: STATUS AND TRENDS THROUGH 2015 (2016), <https://perma.cc/Z6S5-34NN>.
  2. Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).
  3. Safe Drinking Water Act, 42 U.S.C. §§ 300f–300j-27 (2012).
  4. See generally EPA, SAFE WATER ACTION PLAN (2016), <https://perma.cc/JQ3U-KEMJ>.
  5. Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675 (2012).
  6. Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6908a (2012).

eries too often have visible emissions that are a fact of life for people living in adjacent housing developments.<sup>7</sup>

As senior officials in the EPA during President Obama's two terms, we experienced first-hand how federal laws like the CAA have been, and continue to be, effective tools to identify and reduce dangerous exposures to pollutants and drive investments in new monitoring and operational technologies that offer cost-effective opportunities to achieve greater public health protections. But we have also observed, as the Articles in this issue of the *Harvard Environmental Law Review* illustrate, that significant challenges remain in our efforts to protect public health and the environment, especially in environmental justice communities where high percentages of low-income and minority residents have borne the brunt of environmental degradation for years.<sup>8</sup> And the science is clear that climate change, fueled by man-made carbon pollution, is perhaps the most serious and existential environmental threat to modern society.

The progress made in the last fifty years provides a strong foundation on which to build as we continue to sensibly and effectively regulate both traditional pollutants and greenhouse gases. No one could reasonably expect public support in the United States for turning the clock back to the days without clear federal standards to ensure industries, wherever they are located, use basic pollution control practices and technology. But we also cannot expect to make significant progress in addressing today's complex challenges without thinking far beyond pollution control strategies. Today's challenges include keeping our children safe in their own homes in the face of diffuse and pervasive risks like lead in paint, dust, and water;<sup>9</sup> monitoring and reducing harmful indoor air quality in our homes, schools, and day care centers;<sup>10</sup> leveraging private investment in our aging water infrastructure to meet the \$685 billion in needed investment over the next twenty years;<sup>11</sup> enhancing efforts to provide safe drinking water to shrinking cities and rural communities, and responding to emerging contaminants like perfluorinated compounds and cyanotoxins;<sup>12</sup> finding a path forward to set new primary drinking water standards, and reducing

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7. EPA initiated a rulemaking in President Obama's second term to review the emissions standards for petroleum refineries that would have addressed this issue. See Press Release, EPA, EPA Proposes Updates to Emissions Standards for Refineries to Protect Nearby Neighborhoods/Proposed Steps Will Protect Health and Improve Air Quality (May 15, 2014), <https://perma.cc/T8CZ-UXLD>. As of October 2016, EPA has granted reconsideration of the proposed rule and is taking comments on specific issues. National Emissions Standards for Hazardous Air Pollutant Emissions: Petroleum Refinery Sector, 81 Fed. Reg. 71,661 (Oct. 18, 2016), <https://perma.cc/VPW8-KYZG>.
  8. See Emily A. Benfer, *Contaminated Childhood: How the United States Failed to Prevent the Chronic Lead Poisoning of Low-Income Children and Communities of Color in Federally Assisted Housing*, 41 HARV. ENVTL. L. REV. 493 (2017).
  9. *Id.* at 499–502.
  10. EPA, *Indoor Air Quality (IAQ)* (Jan. 26, 2017), <https://perma.cc/LD7R-JCPX>.
  11. See generally SAFE WATER ACTION PLAN *supra* note 4, at 2–6.
  12. See *id.* at 15–17.

nutrient pollution from agriculture and other non-point sources currently not regulated by the federal government;<sup>13</sup> and adapting to a changing climate while ensuring the continuation of a reliable and affordable energy system that will not only serve our energy needs, but also be clean enough to be healthy and safe for our children and our planet.<sup>14</sup>

The significant steps EPA has taken to reduce traditional pollutants and tackle climate change demonstrate both the strength and the strains of implementing decades-old statutes to address scientifically complex, long-term, far-reaching twenty-first century environmental challenges. Many of the remaining threats to public health, including climate change, test established statutory, bureaucratic, and political boundaries. They demand a level of engagement and leadership across federal, state, and local agencies, communities, business owners and investors, and—in the case of climate—international counterparts.

They also demand the use of every tool in the toolbox. Over the course of many presidencies, EPA has increasingly relied on voluntary partnership programs, grants, investments in research and public education, as well as data transparency, to supplement regulatory tools. These efforts empower businesses to tout their environmental performance and encourage citizens to become active in shaping their own future through the investments they make, the products they purchase, and their transportation, housing, employment, and energy choices. The increasing ability of individuals to influence how the businesses of this country do, or don't, protect our public health offers opportunities to expand voluntary efforts that recognize, reward, and incentivize cleaner and more efficient technologies, products, and practices.

All these efforts, both regulatory and non-regulatory, require sound science and solid data that are available, accessible, and digestible to experts, the business and investor community, and consumers who can use their purchasing power to make more informed choices. That's why today, sound science and solid data remain critical features of any path forward. Inexpensive technologies now allow citizens to monitor the quality of their local air and waterbodies, which means that they can actively engage in the gathering of localized data. These and other exciting new opportunities mean that the public can better understand what their communities are being exposed to and advocate for enhanced local, state, and federal action.

So while we are proud of how much EPA has achieved, contamination of our air, water, and land continue to put the health of too many Americans at risk. Now is not the time to roll back the regulatory and voluntary programs that led to that success. Rather, the path to better public health is continuing to

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13. These sources contribute to the 55% of the nation's rivers and stream miles that no longer support healthy populations of aquatic life. See EPA, NATIONAL RIVERS AND STREAMS ASSESSMENT 2008–2009, A COLLABORATIVE SURVEY (2016), <https://perma.cc/PC69-7UMY>.

14. See Jody Freeman, *The Uncomfortable Convergence of Energy and Environmental Law*, 41 HARV. ENVTL. L. REV. 339 (2017).

involve the widest range of participants, using as many traditional and innovative approaches as possible, and doubling down on research to generate the information needed to support sound public policy.

## II. ENVIRONMENTAL PROTECTIONS UNDER THREAT

EPA under President Obama undertook a number of significant actions: we provided American families with cleaner air, water, and land; we increased our attention to areas unfairly burdened with pollution and public health risks; and we took the first significant steps forward as a nation to address and adapt to climate change. Now it is becoming increasingly clear that EPA is facing an all-out attack on the standards and programs that have successfully delivered such tremendous progress. Indeed, the agency itself is threatened.<sup>15</sup> The Trump Administration is embracing the outdated and unfounded view that there is an inherent conflict between economic growth and environmental protection; has an overly simplistic understanding of the federal-state relationship with respect to environmental protection; is subordinating science in favor of delivering on politically expedient campaign rhetoric; exhibits a lack of transparency, public process, and respect for the courts; and is misreading the needs, wishes, and expectations of American families who consider clean air, water, and land to be a core value of this country and a right of all. We will look at three aspects of this threat to EPA's effectiveness: science, legal authority, and transparency and engagement in policy-making.

### *A. Science*

When it comes to protecting clean air, clean water, and healthy land, the federal government plays an essential, irreplaceable role. EPA's effectiveness, legitimacy, and substantial technical expertise derive in large part from the clear, objective, peer-reviewed science EPA brings to bear. Sound science and solid data adhering to the highest ethical standards and accepted peer-review practices are fundamental to sound environmental policy. Under its enabling statutes, it is EPA's responsibility to identify public health impacts of certain pollutants and the technical, engineering, and operational opportunities to reasonably reduce that pollution. It is also the agency's responsibility to follow accepted peer-review procedures and to provide the scientific and technical information on which the work is based to the public.<sup>16</sup> Sound science is essential to understanding the extent and the causes of air and water pollution, risks from chemical exposure, and many other potential environmental health threats. It is also essential to the development of innovative technologies and

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15. Bill to Terminate the Environmental Protection Agency, H.R. 861, 115th Cong. (2017).

16. See generally EPA, PEER REVIEW HANDBOOK (4th ed. 2015), <https://perma.cc/A2S5-KL3Z>.

operational practices that have moved American industry forward with substantial reductions in emissions while maintaining robust economic growth. EPA has contributed immeasurably to the science around environmental threats and public health protections. Its own work in scientific research and analysis, its support of academics and research organizations, and its delivery of scientific information in ways that are accessible to the public are essential to the development of responsible public policy. For example, EPA produces *The Climate Indicators Report*<sup>17</sup> each year to make the impacts of climate change clear and understandable to the general public, and EPA led an effort across the U.S. Global Change Research Program to deliver a report entitled *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*<sup>18</sup> to help people understand the risks climate change poses to their families' health and wellbeing. State, local, and tribal governments, as well as myriad other users (e.g. teachers, the media, medical professionals, businesses of all kinds), rely on the scientific information provided by EPA and other federal agencies.

EPA science has been under attack in recent years in order to undermine or delay regulations intended to protect public health and the environment. Without continued research into the health effects of exposure to particulate matter, for example, or chemicals in food and consumer products, there can be no basis for further regulation. With the change of administration, those attacks are becoming more vigorous, and have a higher chance of success.

Two important bills are currently under consideration in Congress. The first would limit EPA's ability to use some of the best-quality science available, including studies that inform EPA's national ambient air quality standards.<sup>19</sup> If passed, this bill would discredit years of groundbreaking work by Harvard University and the American Cancer Society on the health impacts associated with exposure to particulate matter,<sup>20</sup> studies that were under relentless attack during our years at EPA. These studies not only underpin EPA's recent update of the national health standards for particulate matter,<sup>21</sup> they also are central to EPA's analysis of costs and benefits for several important recent air pollution rules,

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17. See, e.g., EPA, CLIMATE CHANGE INDICATORS IN THE UNITED STATES (2016), <https://perma.cc/98PU-6AGP>.
  18. U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT (2016), <https://perma.cc/U3VB-TKCH>.
  19. Honest and Open New EPA Science Treatment Act of 2017, H.R. 1430, 115th Cong. (2017), <https://perma.cc/ACN8-UH8V>.
  20. See Douglas W. Dockery et al., *An Association Between Air Pollution and Mortality in Six U.S. Cities*, 320 NEW ENG. J. MED. 24 (1993); C. Arden Pope III et al., *Particulate Air Pollution as a Predictor of Mortality in a Prospective Study of U.S. Adults*, 151 AM. J. RESPIRATORY & CRITICAL CARE MED. 669 (1995).
  21. *Particulate Matter (PM) Standards—Documents from Review Completed in 2012*, EPA (2012), <https://perma.cc/HKK5-BQWC>.

including the Mercury and Air Toxics Standards (“MATS”)<sup>22</sup> and the Clean Power Plan (“CPP”).<sup>23</sup> The bill is not about advancing scientific integrity; it is a blatant attempt to deny access to crucial studies that both demonstrate the need, and provide the support, for these important health protections.

The second bill would change EPA’s Science Advisory Board’s<sup>24</sup> peer review process to unfairly limit participation by qualified scientific experts, slant the balance towards industry interests, and create a significant disincentive for researchers to partner with EPA.<sup>25</sup> This bill, if passed, would significantly weaken EPA’s credibility and ability to protect public health.

Other efforts are also underway that could undermine EPA science. The EPA Administrator recently removed five members of the Board of Scientific Counselors, a federal advisory committee that provides advice and recommendations to the Office of Research and Development on technical and management issues related to its research programs.<sup>26</sup> An agency spokesperson cited the Administrator’s interest in increasing the number of industry representatives on the Board.<sup>27</sup> And President Trump’s proposed budget numbers speak more loudly than words: science has no place in the Trump EPA. This budget would cut EPA by nearly a third, reduce state grants by 45%, eliminate more than fifty EPA programs—including all voluntary programs and *anything* related to climate change—and slash EPA’s science office budget by 48%.<sup>28</sup> A cut of this magnitude would, among other things, impede the agency’s capacity to provide the science that underpins the development of regulatory standards and protections required by Congress, delay site-specific assessments used for cleaning up

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22. See Supplemental Finding That It Is Appropriate and Necessary to Regulate Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,240 (Apr. 25, 2016).
  23. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).
  24. The Science Advisory Board is a Federal Advisory Committee that reviews the quality and relevance of the scientific and technical information being used by EPA or proposed as the basis for agency regulations, reviews EPA research programs and plans, provides science advice as requested by the EPA Administrator, and advises the agency on broad scientific matters. See *About the Science Advisory Board (SAB) and the SAB Staff Office*, EPA (2016), <https://perma.cc/2REJ-SFAV>.
  25. EPA Science Advisory Board Reform Act of 2017, H.R. 1431, 115th Cong. (2017), <https://perma.cc/G327-9MWV>.
  26. Juliet Eilperin & Brady Dennis, *EPA Dismisses Half of Key Board’s Scientific Advisors; Interior Suspends More Than 200 Advisory Panels*, WASH. POST (May 8, 2017), <https://perma.cc/4FAG-H66F>.
  27. *Id.*
  28. ENVTL. PROT. NETWORK, ANALYSIS OF TRUMP ADMINISTRATION PROPOSALS FOR FY2018 BUDGET FOR THE ENVIRONMENTAL PROTECTION AGENCY 4–6 (2017), <https://perma.cc/G6PN-SSTJ>.

hazardous waste sites, and reduce the agency's ability to fund and leverage outside research done by labs and universities across the country.<sup>29</sup>

Also troubling is EPA's decision to remove from the public website information related to climate science and the actions taken by the agency over the past decades to understand, mitigate, and adapt to climate change. EPA has consistently made available the regulatory history of different policies on its website even when administrations changed hands and shifted direction. This information belongs to the people, and people should have easy access to it. And it cannot be considered an unfortunate coincidence that the website was scrubbed the night before hundreds of thousands of Americans attended climate marches across the country on April 29, 2017. Certainly not when basic climate science is being publicly questioned by the EPA Administrator himself.<sup>30</sup>

Lastly, the Administration's decision to withdraw the Information Collection Request ("ICR") limits the efficacy of future policy.<sup>31</sup> Issued in 2016, the ICR provided a means for EPA to acquire data and information about certain existing oil and gas production activities. Contrary to the Administration's claims, however, the ICR would not impose an unreasonable economic burden. The ICR had been through a rigorous process, with several opportunities for public comment and review by the Office of Management and Budget ("OMB"), to ensure it did not duplicate existing reporting programs and would only impose a minimal economic burden, especially on small businesses. The data that would have been collected under the ICR could have ultimately supported a variety of policy options, including a decision that regulation is unnecessary or premature. Not collecting the information at all is a much faster way to get to that policy outcome, but one that reflects a lack of interest in making decisions based on the honest consideration of facts.

### B. *Respect for Legal Authorities*

Those who disfavor regulation frequently refer to federal agencies as unelected, and therefore unaccountable, bureaucrats. They claim these bureaucrats overreach and extend their authority far beyond what Congress originally intended in order to achieve their policy objectives at the expense of, and without recourse by, business and the taxpayer. The fact is that federal agencies are held strictly accountable through our robust system of legal review.<sup>32</sup> It would

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29. *Id.* at 36.

30. Geoff Brumfiel, *EPA Chief Scott Pruitt Questions Basic Facts About Climate Change*, NAT. PUB. RADIO (Mar. 9, 2017), <https://perma.cc/B2CL-CQCA>.

31. Press Release, EPA, *EPA Withdraws Information Request for the Oil and Gas Industry* (Mar. 2, 2017), <https://perma.cc/7PTK-D4YC>.

32. Arguably, court review of the actions of these unelected bureaucrats is a more effective check than the modern-day electoral system is at holding elected officials accountable.



not advance EPA's public health mission to issue regulations that exceed the agency's authority or disregard required legal processes, because successful legal challenges will only delay delivery of public health protection and frustrate all stakeholders. Nor would it serve industry, which time and again articulates a desire for regulatory certainty in order to facilitate investment decisions.<sup>33</sup> All of EPA's significant rules, and most of the more minor ones as well, are subject to legal challenge; that system of accountability is alive and well. Moreover, EPA's record of positive outcome in the courts supports the conclusion that EPA during the Obama Administration was mindful of acting within its legal authorities.<sup>34</sup>

While there is no question that EPA must not act beyond its legal authority, there is a flip side of that coin: EPA must in fact fulfill its legal responsibilities under its enabling statutes.<sup>35</sup> Actions and statements from the Trump Administration raise concern that EPA may not, in the future, carry out those responsibilities. These signals come from the proposed budget for EPA, from several Executive Orders and from statements from the White House and the EPA Administrator.

For example, President Trump has repeatedly articulated concerns that regulations in general stifle economic growth and that environmental regulations in particular kill both jobs and the economy. One of the President's first Executive Orders, the Presidential Executive Order on Reducing Regulation and Controlling Regulatory Costs, requires that (1) every agency explore opportunities to eliminate regulations, (2) every new rulemaking must be accompanied by the elimination of two existing rulemakings, and (3) the cost of any new rule be offset by the cost saved by the rules to be eliminated.<sup>36</sup> While it is advisable to periodically review regulations to ensure they continue to be both

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33. Brief of Amicus Curiae Dominion Resources, Inc. in Support of Respondent at 3, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. filed Apr. 1, 2016).

34. In the twenty-four decisions in 2015 and 2016 issued by the Court of Appeals for the D.C. Circuit on challenges to air quality rules, EPA received favorable outcomes in nineteen of those cases, largely favorable outcomes in three mixed decisions, and lost only twice. The outcome didn't vary based on whether the judges were appointed by Republican or Democratic presidents, or whether the challenge was brought by industry or environmental advocates. That is hardly the record of an agency with no regard for its legal authorities.

35. Most federal environmental laws require EPA to develop regulations under specific circumstances. For example, under the CAA, once the Administrator has determined that an air pollutant, such as greenhouse gases, "may reasonably be anticipated to endanger the public health or welfare," it triggers an obligation to set standards for emissions of that pollutant from motor vehicles. 42 U.S.C. § 7521(a)(1) (2012).

36. Executive Order, Reducing Regulation and Controlling Regulatory Costs (Jan. 30, 2017), <https://perma.cc/76AU-33GD>. There are some notable exceptions to the requirements in the Executive Order which have been clarified through OMB guidance. DOMINIC J. MANCINI, OFFICE OF MGMT. & BUDGET, MEMORANDUM: IMPLEMENTING EXECUTIVE ORDER 13,771, TITLED "REDUCING REGULATION AND CONTROLLING REGULATORY COSTS" (Apr. 5, 2017).

necessary and effective, the two-for-one directive is the epitome of arbitrariness. Why not one-for-one, or five-for-one? And it is notable that nowhere in the Executive Order does the word “benefits” appear. The Order simply speaks to costs of rulemakings and ignores the tremendous public health benefits associated with EPA rulemakings, including reductions in premature deaths, asthma, heart attacks, hospital visits, lost school and work days, etc.<sup>37</sup> This Executive Order could result in the elimination of two rules with significant public health benefits just to offset costs associated with a new rule that provides much lower benefits at higher cost. As a practical matter, it could also result in EPA not going forward with a regulation that is required by law because it cannot identify two rules to eliminate and sufficient offsetting costs.<sup>38</sup>

In addition, in the release of EPA’s budget and other actions, the new EPA Administrator indicated that he and the President intend to “reset” the federal-state relationship by providing greater latitude for states to take the lead in implementing federal statutes.<sup>39</sup> It’s important to note, however, that most of the major environmental programs are EPA’s responsibility to implement and where states have “primacy,” it is still EPA’s job to oversee state implementation to ensure that minimum federal requirements are met. EPA works hard to ensure a strong partnership between EPA, states, local communities, and tribes. This system of shared responsibilities is especially important when interstate pollution is involved.<sup>40</sup> And the technical expertise residing in EPA labs across the country offers critical support to states that are facing drinking water threats like those that shut down the drinking water systems in Toledo, Ohio and Corpus Christie, Texas, or when responding to emergencies from tanker truck accidents or pipeline breaks. The budget also indicates an intent to redirect EPA’s enforcement efforts away from the programs that are delegated to the states, such as the CAA’s National Ambient Air Quality Standard (“NAAQS”) program. This would certainly mean less enforcement, less pollution reduction, and less public health protection. And we note again that the President’s budget proposes a 45% cut in state funding, a level far below what state envi-

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37. See, e.g., EPA, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT FROM 1990 TO 2020 (Mar. 2011), <https://perma.cc/6NB7-HLCH>.

38. Although the April 5 guidance from OMB allows statutorily required rules to go forward, their costs will have to be offset. As a practical matter, this will likely delay or substantively impact the way EPA promulgates those required rules. This will almost certainly hold up important rulemakings at the expense of public health protection.

39. See, e.g., Letter from Scott Pruitt, Adm’r, EPA to Matt Bevin, Governor of Ky. (Mar. 30, 2017), <https://perma.cc/9WSE-525L> (“The days of coercive federalism are over.”).

40. The budget analysis prepared by the Environmental Protection Network points out that EPA provides technical and legal expertise in complex enforcement matters that state and local agencies are not able to develop or maintain and, because of its national scope, can discern trends and problem areas across industry sectors, and can investigate and take action across state lines. See ENVTL. PROT. NETWORK, *supra* note 28, at 11–14.

ronmental leaders find adequate to ensure the delivery of important public health protections.<sup>41</sup>

Basic work to protect air, water, and land that can only be done at the federal level also suffers under the proposed budget. For example, the proposed budget would reduce funding to EPA's vehicle testing and certification programs—like those used to discover the facts behind the Volkswagen scandal—to be instead fully funded by industry. What isn't noted in the proposed budget is that this plan would require congressional action for the fees to go to EPA rather than to the Treasury, and EPA would need time for regulatory changes and implementation. None of this is likely to be accomplished in time for the FY2018 budget year. Decisions by EPA in the past few months to withdraw, delay, or reconsider rules, or to relook at legal positions taken in pending challenges to EPA rules that are final and already in effect, are further evidence that these protections may be rolled back.<sup>42</sup>

President Trump's Executive Order on Energy Independence<sup>43</sup> is the latest articulation of the Administration's intent to reverse course on environmental protection. At first glance, the Order slams the brakes on federal efforts to reduce emissions of greenhouse gases that contribute to climate change, but its impact would be far broader. Rollbacks of regulations on carbon and methane pollution and projects on climate resilience and adaptation, if successful, will inevitably affect the quality of our air and water, directly impacting public health.<sup>44</sup>

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41. Minnesota Commissioner John Lync Stine stated in a letter on behalf of the Environmental Council of the States ("ECOS") that:

[R]obust [State Tribal and Assistance Grants ("STAG")] are essential to implementation of environmental programs delegated to states. Further, state-EPA collaboration and partnership, and shared governance, are essential to protecting human health and the environment. ECOS today makes the state environmental agency position clear again—cuts to STAG categorical grants, or to EPA programs operated by states, will have profound impacts on states' ability to implement the core environmental programs as expected by our citizens.

Letter from John Lync Stine, President, Env'tl. Council of the States, to Mick Mulvaney, Dir., Office of Mgmt. & Budget, and Scott Pruitt, Adm'r, EPA (Mar. 1, 2017), <https://perma.cc/E6BL-9PZZ>.

42. Since the beginning of the new administration, EPA has announced that it is reconsidering or reviewing the following rules: Waters of the United States, the 2016 Oil and Gas New Source Performance Standards, the 2015 Ozone NAAQS, the MATS Supplemental Finding, the Effluent Limitations Guidance, the CPP, the Carbon Standards for New Power Plants, the Phase 2 Heavy Duty Truck Greenhouse Gas Standards, the Startup/Shutdown/Malfunction Rule, and the Risk Management Program Amendments. It has withdrawn the Oil and Gas Information Collection Request and several proposals related to the CPP.
43. Executive Order, Promoting Energy Independence and Economic Growth (Mar. 28, 2017), <https://perma.cc/YL3K-PR4X>.
44. It is worth emphasizing that the Executive Order does not mention "health" or "public health" at all. *See id.*

In fact, this Executive Order does nothing to advance this country's energy independence, nor does it prevent the long-term success of clean energy in this country. The clean energy train has left the station and it will not turn back. The average cost of wind went down 61% between 2009 and 2015, and solar dropped 82%.<sup>45</sup> And in the United States today, 2.5 million Americans work in clean energy,<sup>46</sup> another 1.9 million in energy efficiency, and the solar industry now predicts a 15% increase in solar jobs this year alone.<sup>47</sup> In fact, there is every reason to believe that the United States will meet our Paris goal to reduce greenhouse gas emissions 26% below 2005 levels by 2025—even if the federal government takes a pass.

With this in mind, it is very difficult to see the EPA Administrator's statements about returning EPA to its "core work" as anything other than disingenuous.<sup>48</sup>

### *C. Transparency and Engagement*

In 1983, William Ruckelshaus issued his famous "Fishbowl Memo," in which he articulated a vision for EPA's commitment to transparency. In that memo to EPA staff, he stated:

EPA will provide, in all its programs, for the fullest possible public participation in decision-making. This requires not only that EPA employees remain open and accessible to those representing all points of view, but also that EPA employees responsible for decisions take affirmative steps to seek out the views of those who will be affected by the decisions. EPA will not accord privileged status to any special interest group, nor will it accept any recommendation without careful examination.<sup>49</sup>

There's no better way to say it, and EPA has worked hard to adhere to Administrator Ruckelshaus's directive through both Republican and Democratic administrations. During the Obama Administration, EPA formed and fully staffed an Office of Engagement, and enhanced its environmental justice efforts with significant commitment to place-based work in partnership with other federal agencies. Both political leadership and career staff were expected to fol-

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45. CLEAN ENERGY CANADA, TRACKING THE ENERGY REVOLUTION (2016), <https://perma.cc/46H4-BFNF>.

46. E2, CLEAN JOBS AMERICA (2016), <https://perma.cc/X6K3-6D5N>.

47. U.S. DEP'T OF ENERGY, U.S. ENERGY AND EMPLOYMENT REPORT (2017), <https://perma.cc/U8EF-SVSC>.

48. Press Release, EPA, EPA Launches Back-to-Basics Agenda at Pennsylvania Coal Mine (Apr. 13, 2017).

49. William D. Ruckelshaus, Adm'r, EPA, Memorandum, Contacts with Persons Outside the Agency (May 19, 1983), <https://perma.cc/P5FH-AGPF>.

low the commitment to transparency both inside and outside the agency. And our efforts to aggressively seek input from a wide range of stakeholders weren't check-the-box exercises. We recognized that EPA was not the expert on every topic. A wide range of differing viewpoints, different analyses, and ideas from voices not often heard in federal rulemaking helps develop policies that are less burdensome, more effective, and more likely to achieve the intended public health protections.

The Obama EPA's commitment to transparency and engagement is apparent in each of its major rulemakings. Indeed, the CPP<sup>50</sup> is the superhero posterchild for extreme transparency. EPA staff attended hundreds of meetings and read thousands of pages of comments submitted by every variety of stakeholder. We traveled to more than forty states to meet with representatives of industry, state and local government, community and public health groups, and members of the public. We received 4.3 million comments and our consideration of the input we received led to numerous improvements in the final CPP.

Similarly, the development and finalization of the MATS Rule<sup>51</sup> required extensive communication and collaboration with the Department of Energy, the Federal Energy Regulatory Commission, independent system operators and regional transmission operators, the Department of Justice, the Department of Agriculture, states, local communities and tribes, and utility owners and associations, to ensure that operational changes or equipment upgrades could be appropriately planned and completed without threatening energy reliability or affordability.<sup>52</sup>

The Clean Water Rule<sup>53</sup> benefitted from extensive engagement with farmers, ranchers, municipalities, rural communities, tribes, hunters and fishers, and other stakeholders. Outreach included dozens of meetings in states across the region. And as part of the preparation of a report advising EPA of concerns and suggested enhancements in the rulemaking process, we held a series of open community meetings with local leaders and interested parties across the country sponsored by EPA's Local Government Advisory Committee.

While these enhanced outreach efforts did not insulate these or other rules from criticism and litigation, that was never the intent. No major rule finalized by EPA is ever expected to avoid court scrutiny, a fact that has kept EPA on its toes. But these efforts result in stronger rules and open up opportunities for the

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50. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).
  51. Supplemental Finding That It Is Appropriate and Necessary to Regulate Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,240 (Apr. 25, 2016), <https://perma.cc/3MRX-Z6PW>.
  52. See Jody Freeman, *The Uncomfortable Convergence of Energy and Environmental Law*, 41 HARV. ENVTL. L. REV. 401, 463–466 (2017).
  53. Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,054 (June 29, 2015).

agency to build more productive relationships with sister federal agencies and stakeholders that enhance our ability to avoid unintended consequences and do our jobs effectively. And these efforts provide assurance to both the people we serve and the regulated community that EPA is serious about achieving its mission in the smartest way possible.

To enhance transparency and communicate science more effectively, EPA took a number of important actions during the last eight years, including but not limited to: adopting a rigorous science integrity policy and data transparency plan;<sup>54</sup> stepping up efforts to enhance the availability of our scientific data through programs like ChemView, which allows internet access to a huge amount of data on chemical hazards and exposure;<sup>55</sup> gathering and communicating data on the range of public health impacts related to climate change to help people understand the impacts of a changing climate;<sup>56</sup> developing new technology to quickly screen potential endocrine disruptors and sharing that information with the public to help inform manufacturers, formulators, and retailers of chemicals and products of potential health hazards;<sup>57</sup> working with the National Aeronautics and Space Administration (“NASA”) and the National Oceanic and Atmospheric Administration (“NOAA”) to develop monitoring technologies to track harmful algal blooms to avoid another city like Toledo from having to shut down due to cyanotoxin contamination of their drinking water;<sup>58</sup> starting up the Safer Choice Program to help consumers identify household products that were free of known hazardous chemicals;<sup>59</sup> developing interactive platforms for cities and towns wishing to consider and seek support for climate adaptation;<sup>60</sup> working with states and the regulated community to institutionalize electronic filing of reportable data to make compliance less burdensome for industry and make data more accessible and usable for regulators, industry, and the public;<sup>61</sup> and developing and evaluating new moni-

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54. EPA, SCIENTIFIC INTEGRITY POLICY (2012), <https://perma.cc/8MTB-V9NT>.
  55. *Assessing and Managing Chemicals Under TSCA*, EPA (Feb. 23, 2017), <https://perma.cc/PJ9U-BG5B>.
  56. *See Climate Change Impacts*, EPA (Jan. 13, 2017), <https://perma.cc/U8KA-T66G>.
  57. *See generally* EPA, ENDOCRINE DISRUPTOR SCREENING PROGRAM COMPREHENSIVE MANAGEMENT PLAN (2014), <https://perma.cc/V7CE-QC7C>.
  58. *See* Press Release, EPA, NASA, NOAA, and the United States Geological Survey Creating Early Warning System to Detect Harmful Algal Blooms (Apr. 7, 2015), <https://perma.cc/9C7V-PQRE>. *See also* Blake A. Schaeffer et al., *Agencies Collaborate, Develop a Cyanobacteria Assessment Network*, EOS (Nov. 10, 2015), <https://perma.cc/GYT9-DWCS>.
  59. *See Learn About the Safer Choice Label*, EPA (Apr. 6, 2017), <https://perma.cc/7Y4H-JWJU>.
  60. The Climate Change Adaptation Resource Center features case studies on the adaptation strategies of municipal, state, and tribal communities around the country. *See Climate Change Adaptation Resource Center (ARC-X)*, EPA (Mar. 14, 2017), <https://perma.cc/7PN2-PU8P>.
  61. *See, e.g.*, National Pollutant Discharge Elimination System Electronic Reporting Rule, 80 Fed. Reg. 64,063 (Oct. 22, 2015).

toring technologies for use by citizen scientists interested in air and water quality in local communities.<sup>62</sup>

A commitment to transparency and engagement also encompasses EPA's work in environmental justice and its voluntary programs. Environmental health threats affect all Americans. It cannot be ignored, however, that certain communities shoulder a greater burden of pollution and environmental degradation than others. Numerous studies reveal that low-income, predominantly minority and poor rural communities experience higher levels of pollution and are closer to facilities like landfills and refineries than more affluent communities.<sup>63</sup> These communities generally have fewer resources and less resilience to deal with these burdens. Adverse health outcomes result, with associated impacts on quality of life and economic opportunity.<sup>64</sup> In President Obama's first term, Administrator Lisa Jackson listed as one of her seven priorities "working for environmental justice," acknowledging in explicit terms the unequal health burdens borne by many minority and low-income communities in America, and enabling the EPA staff to focus resources on environmental justice issues and community-level, place-based efforts. This led to the development of Plan EJ 2014<sup>65</sup> and, with continued emphasis into President Obama's second term, Plan EJ 2020.<sup>66</sup> Though by no means sufficient, through the delivered projects and products of these two plans and other agency actions, EPA has made tremendous progress in our biggest goal—institutionalizing considerations of environmental justice into the fabric of EPA decision-making.

Voluntary partnership programs complement regulatory actions and incentivize innovation and market-based environmental protection in myriad ways. They are responsible for advances in technology and increased adoption of new technologies, as well as opportunities for market growth and international leadership for American companies. Further, they facilitate friendly competition among companies to meet their environmental goals and enable employee engagement in defining and establishing green policies and reducing their corporate environmental footprint. EPA provides important support for these voluntary efforts by hosting conferences, providing technical resources, connecting companies with one another, and recognizing exemplary voluntary actions and actors. These programs make a difference on the ground and in the air. Through voluntary energy and climate programs in 2010 alone, for example, EPA's partners reduced over 345 million metric tons of greenhouse gases—

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62. See *Air Sensor Toolbox for Citizen Scientists, Researchers and Developers*, EPA (Apr. 6, 2017), <https://perma.cc/XUB2-5ADQ>.

63. For an overview of relevant environmental justice literature, see Jean D. Brender et al., *Residential Proximity to Environmental Hazards and Adverse Health Outcomes*, 101 AM. J. PUB. HEALTH S1, S37 (2011).

64. *Id.*

65. EPA, PLAN EJ 2014 (2011), <https://perma.cc/XRR5-TPDJ>.

66. EPA, EJ 2020 ACTION AGENDA (2016), <https://perma.cc/8HH6-2DHF>.

equivalent to the emissions from 81 million vehicles—saving consumers and businesses about \$21 billion.<sup>67</sup>

Threats to transparency and engagement are beginning to take shape in early announcements and actions. In addition to the changes to the EPA website mentioned above, opportunities to interact with local communities to support climate adaptation, green infrastructure and other sound local strategies, were eliminated. These actions, combined with the President's proposed budget for 2018 (which virtually eliminates all of EPA's voluntary programs as well as its Offices of Engagement and Environmental Justice), signals that EPA will not be investing in community engagement or supporting long-term partnerships that encourage voluntary pollution reductions.

### LOOKING FORWARD

Actions taken so far by the Trump Administration and the current Congress make clear their intent to minimize EPA's role and undermine the three principles that have been the foundation of EPA's work: sound science, respect for the law, and transparency. In fact, it appears today that all the progress we have made over the past forty-five years on clean air, clean water, safe and healthy land, and, most recently, climate change, is at risk. Through specific actions to reconsider standards, defund programs, systemically dismantle the agency's ability to conduct sound science, and deny public access to information on health and environmental risks and how to reduce those risks, the Trump Administration is unabashedly seeking to tear down the environmental enterprise that we rely on to protect our children and our planet from pollution.

Despite the tremendous risks facing EPA, we cannot think that all is lost. At times like this, we must once again look to states and local communities and America's responsible and forward-looking businesses to be the laboratories of innovation as they have been in the past. The environmental movement started at the grassroots level. That's how it worked and that's what still drives progress in this country. What happens at the state and local levels, and in businesses large and small, matters. We can still make good things happen as long we stay committed and active in our communities.

But we must also stay vigilant, vocal, and active when it comes to what is happening in Washington, D.C. We cannot let anti-science bills fly under the radar—they must be stopped. We cannot allow this Administration to defund or dismantle public health protections and public health agencies, or make scientific data unavailable to the public whose tax dollars paid for it. The challenges don't disappear just because the public information does. We must make clear that clean air and water and healthy communities are our core values.

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67. *Voluntary Energy and Climate Programs*, EPA (2017), <https://perma.cc/U4QF-6LP4>; *What EPA Is Doing About Climate Change*, EPA (2017), <https://perma.cc/JY22-AWZV>.



Right now, the President's budget is just a proposal and the anti-science bills are still under consideration—we must make our voices heard. Hundreds of thousands of people marched in April 2017 to protect sound science and in support of climate action, pushing back on federal efforts that threaten our children's health and could rob them of their future. Citizens across the United States are getting active again. Our democracy is waking up. And right now, cities, towns, and states are stepping up—as they always do when the federal government steps aside. Clean energy is working for this country because industry, states, and local governments recognize that it is the best economic choice. No executive order will change that.

A great deal of time, hard work, and lawsuits stand in the way of the Trump Administration's rollbacks of EPA rules. The Obama EPA built a strong case for action on clean air, clean water, and climate change. We based our rules on sound science and law and embraced public engagement and transparency. We followed the process envisioned in our democracy and laid out in the law. We did things right and our rules are solid. If we continue to make our voices heard, it's difficult to imagine this Administration effectively undoing that legacy.

