ENVIRONMENTAL LAW INSTITUTE

The Macbeth Report:

Cooperative Federalism in the Modern Era

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The Environmental Law Institute (ELI) makes law work for people, places, and the planet. Since 1969, ELI has played a pivotal role in shaping the fields of environmental law, policy, and management, domestically and abroad. Today, in our fifth decade, we are an internationally recognized, nonpartisan research and education center working to strengthen environmental protection by improving law and governance worldwide.

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THE MACBETH REPORT: COOPERATIVE FEDERALISM IN THE MODERN ERA

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FORWARD

Angus C. Macbeth was one of the great leaders and thinkers in environmental law, a former president of the American College of Environmental Lawyers (ACOEL), and a long-time supporter of the Environmental Law Institute (ELI). When he passed away in 2017, an interest emerged in the ELI community to undertake a project in Angus' honor and memory. As Angus played no small role in the construction of the system of environmental protection as it exists today, and was also relentlessly committed to the pursuit of new ways to deliver environmental quality, we settled on the topic of cooperative federalism. With proposals under consideration at the White House for dramatically reframing the role of the federal government in the environmental arena, such a discussion was both timely and needed. "The Macbeth Dialogues," initiated by ELI in cooperation with the Environmental Council of States, with the support of the Macbeth Family, ACOEL, and others, sought to bring together leading experts to discuss the state-federal relationship in the environmental sphere as it exists today, in hopes of shining a light on law and policy solutions for optimizing the configuration of governmental roles going forward.

Since the beginning of the modern environmental movement, ELI has been present at the inception of far-reaching laws and policies. Today, we are pleased through "The Macbeth Report" to have led an experience-based, respectful dialogue to help inform the emerging vision of 21st-century public health and environmental protections and sustainability considerations.

Many thanks to all of the participants for their support and insights, and especially to Angus for the inspiration of his life's work.

Scott Fulton
President
Environmental Law Institute

A TRIBUTE TO ANGUS MACBETH

In Scaramouche, Raphael Sabatini describes the hero of the novel as having been ". . . born with a gift of laughter and a sense that the world was mad."

The Angus Macbeth I knew for 38 years had one of the best laughs of all time and a keen appreciation for the occasional absurdity of the world in which he lived. After all, how else to describe a man whose life-long professional endeavor was to attempt to explain EPA to Industry, Industry to EPA, and NRDC to everyone—a Sisyphean task that he approached with skill and aplomb and, above all, a boundless supply of mirth.

I met Angus in 1978 as an aspiring lawyer looking for work in Carter-era Washington. I remember almost nothing about which we spoke. What does stand out is a long conversation filled with loud talk, laughter, an endless stream of staff lawyers entering and exiting during my interview to discuss some issue or other (think Court of Requests), and cigar smoke. I am pretty sure I got hired because I demonstrated I could stay with the thread of our conversation regardless of the interruptions and, more importantly, my shared love of cigars. That was, truly the beginning of a beautiful friendship.

I watched and learned from Angus, not just then, but throughout our working lives. I watched him mold a group of really smart, sometimes unruly and quirky lawyers at DOJ into an enormously effective team. He made everyone he touched better.

I was amazed as he cajoled and jawboned his primary client, EPA, into coming around to his way of thinking by the sheer force of his intellect and charm. Angus could quiet the most obstreperous U.S. Attorneys, EPA Appointees, or opposing counsel by asking a few direct, innocent questions and waiting until they either got the lesson or felt the bleeding. In private practice, Angus would pa-

tiently explain to the outraged client that yes, the government was not being logical; sadly, it didn't have to be; however, here was a good path forward. It always worked. Angus combined a big brain, cold, clear-eyed analytical skills, and the integrity to tell clients what they needed rather than what they wanted to hear.

Angus loved complex problems and working with smart people to solve them as much as he hated typos (his biggest condemnation of a piece was that it was "riddled with typos") and slipshod work. He could express convoluted concepts simply and was the master of the one-word answer followed by silence and "the look." Then, he would take over the room as he set out the issues and the answers. He led by his own example and had as little ego as any brilliant lawyer I have ever known. You just didn't want to let him down or do less than your best. He was the gold standard for what a lawyer should be. And for what a colleague should be. And for what a friend should be.

I saw him angry only once, when a group of Louisiana lawyers thought they could pull a fast one on the government. They came to DOJ to complain about what we staff lawyers were doing and, thanks to Angus and Jim Moorman, left with their tails between their legs.

I traveled with him from San Francisco to England to Alaska. We tooled around Bath and the Salisbury plain and met his cousins who owned a bookstore and designed jeweled badges for HRH Prince Phillip. I marveled at how everywhere I went, everyone knew Angus or had an Angus story. He was equally comfortable with CEOs and London taxi drivers. His sartorial splendor was legendary. I did actually accompany him to Hackett's in London, where I saw him buy a new jacket that he wore for 30 years. I think he owned the same shirt for most of the time I knew him. It was never tucked in and the front buttons were on the verge of becoming projectiles.

He had perfected the stage whisper mutter, which he used at the right time and place to effect. He loved to eat good food, drink good wine, and have the occasional drop of harder stuff. He was, after all, a true Scotsman. Once, we both decided to do something about our weight and decided to play squash at the D.C. Y. Truly. Can you imagine? Thank goodness there are no "Access Hollywood" tapes of those somewhat ponderous matches. Think the hippos in Fantasia dancing to the Waltz of the Flowers.

Despite being always on the go and in high demand for his legal skills, Angus always had time for friends. He was at the house with baskets of flowers when Ann and I got married; talked the Woodies store manager into selling him the rocking horse that was part of the seasonal display for Andrew when he was born; composed memorable toasts and through a thousand kindnesses let one know one was valued. And his cooking: fabulous. Dinners at the Macbeths—particularly at Christmas or Thanksgiving—were true creative feasts. I kept a list of the words he used with ease that I had never previously heard. He could actually tell you who Lord Acton was and what he famously said.

He loved being a lawyer. It spoke to his view that the world should be fundamentally fair and that the cause of justice was important. This sense of fairness drove him in his work on the scandal of the incarceration and property seizure that befell Japanese Americans at the hands of their government.

He loved JoAnn and "the boys" beyond measure.

If I had two lifetimes, I couldn't recount every hilarious and touching Angus story I know. I am sure there are hundreds of his friends and colleagues who feel the same. What I know is that the luckiest thing that ever happened to me, professionally at least, was meeting Angus Macbeth. The smartest thing I ever did was to convince him to bring Sam Gutter and join me at Sidley. The second smartest was to hire him to help on GE's biggest environmental problems. That he was my friend is a blessing to me. That he is gone is heart-breaking. Angus is irreplaceable.

Angus was quite simply a wise and good man. His passing leaves a huge hole in the fabric of the lives of his family, those who loved and worked with him, and the history of environmental law. He was one of a kind, and I do not think we shall see his like again.

Angus, *ave atque vale*.

Stephen Ramsey[1]

EXECUTIVE SUMMARY

Policy professionals and the public who care deeply about the success of the United States' environmental protection enterprise recognize that current challenges to the system demand both careful reflection and concerted action. With the U.S. Environmental Protection Agency undergoing the Trump Administration's determined efforts to rescale the federal agency, in part by devolving additional responsibilities to states, what responses will both embrace thoughtful demands for change while ensuring past gains are preserved and progress continues in terms of reducing risks and leveraging opportunities for further improvement? After maturing over several decades, are state environmental agencies now ready for the shifts that they want in program responsibilities? What do they need to ensure success? What roles should EPA continue to play and what functions might the Agency relinquish in a new era that the Environmental Council of the States (ECOS) has named Cooperative Federalism 2.0 (CF2.0)? How might the role of private companies influence these changes? How should proliferating technology and environmental big data shape any reforms going forward? What do skeptical professionals and members of the public need for reassurance about changes at a time when there seems to be more discussion of shrinking government than of protecting the environment, recognizing that the ultimate test of any recalibration will be whether the public has confidence that it will protect human health and the environment and that it in fact achieves the real world outcomes that the American public wants and deserves?

As such questions circulated in the environmental policy sphere, ELI embarked on The Macbeth Dialogues, an endeavor aimed to flesh out some of the policy and operational implications of CF2.0 in the context of what more broadly might be called a new environmentalism.

While the conversation will no doubt continue, this report brings The Macbeth Dialogues to a conclusion. As you will see, we have clearly heard enthusiasm for giving states with demonstrated capabilities greater independence and flexibility in running delegated environmental protection programs, but we have also heard deep concerns about what proposed reforms might portend. Even enthusiasts for greater state primacy in implementing environmental programs firmly recognize that EPA must continue its leading role in developing national standards, conducting scientific research, and governing on issues involving national and interstate interests. As a practical matter, focusing on a few select cooperative federalism reforms rather than wholesale change might be the way to build a firmer bridge that all parties can cross with confidence that something like CF2.0 can help contribute to a more sustainable environmental future.

Scanning the broader context in which federal leaders, state commissioners, and others are advocating changes to federal oversight of states, The Macbeth Dialogues also have explored whether a parallel flexibility in government oversight of private companies with verifiably effective environmental management systems is worth considering. For diverse reasons, companies are adopting their own private environmental governance systems, and in some cases, embracing sustainability ideals that extend beyond legal requirements to address such issues as green infrastructure and buildings, transitioning to lower carbon energy, circular economy approaches, and sustainable transportation. Sophisticated environmental management systems are now widespread. Precision measurement and monitoring systems, big data, satellite and drone technologies, and other developments enabled by the digital revolution are deeply impacting the compliance and risk man-

agement strategies of industries and other regulated entities. Additionally, citizens with access to unprecedented amounts of environmental information and operating in a socially networked world are contributing to a changing environmental system in which new approaches to both public- and private-sector environmental performance are emerging. Indeed, so massive are the coming data flows that government needs to prepare for, and be calibrated to, an era of involuntary data overload. Educating the public as they use this information will be important to the public's meaningful involvement in the process and to forming solutions, and public education in this sphere can be foreseen as a major governmental challenge going forward, along with the need for government to help ensure the suitability of data for different purposes, such as risk screening, risk characterization, noncompliance assessment, and the like.

Fundamentally, we are likely witnessing the emergence of newly conceptualized relationships between EPA and state programs, and between both those governing authorities, the entities they regulate, and the public they serve. Any examination of new ways government roles should be distributed—the key focal point for CF2.0—should be informed by these developments that may be reshaping the nature of government itself. As detailed in this report, The Macbeth Dialogues have elucidated key points and issues in this important evolving discussion.

There are some significant issues that relate to our focus in this report that are nonetheless beyond its scope. While we speak to the importance of sound science and EPA's critical leadership role in this area, we do not address here the various reforms that are under consideration by the Trump Administration that relate to how the Agency does its science work.[2] Rigorous science is the cornerstone of environmental protection, and advancing, supporting, leading, and incorporating state-of-the-art science into public education and public policy is one of government's primary challenges. While there is a strong consensus that science leadership must remain one of EPA's primary roles, there clearly will be further public debate on how that role is performed and whether this Administration's reforms support that role or would leave it compromised.

Also, while this report discusses the importance of budget alignment with any reconfigured roles and more generally the importance of budget support for the environmental protection mission, it does not provide an in depth analysis of the significance of the downward trend in EPA resources over the last half decade, and of the parallel pressure on many states' budgets. It also does not address the major talent drain that EPA has experienced in recent years as a result of a retirements and budget and other pressures. A 21st Century vision of the environment, whatever the federalism architecture, requires a modernized EPA operating at a high capacity—with leading well trained experts supported by state-of-the-art equipment, operations, and management. Further study is needed of whether EPA in its reduced condition is equipped to perform its roles, reconfigured or not, particularly in view of the budget compression that is also occurring at the state level.

This report is organized into the following major sections:

- An introduction to the 2017 CF2.0 vision that was the starting point for The Macbeth Dialogues and a description of the three main activities we have undertaken to further the dialogue:
    1. an initial Chatham House Rules gathering,
    2. 2017 ELI Annual Awards Dinner forums on cooperative federalism, and
    3. a survey of diverse experts.

- An overview of the new context of environmental protection, which is being deeply shaped by such factors as: states' maturation over more than 40 years as co-regulators with the federal EPA; the emergence of an environmental performance ethic within the regulated community; an array of transformative technological developments; the clear but yet-to-be-implemented recognition that the environment most often presents itself as an integrated system; and sundry related factors that make 2018 significantly different from 1970, even if compelling problems continue to demand concerted state and federal actions.
- A summary of The Macbeth Dialogues Survey results.
- A discussion of key areas of conflict in the state/federal relationship.
- A review of some areas for possible consensus.
- ELI's suggestions in seven areas where we believe durable change may be achievable going forward.
- Report Annexes.

INTRODUCTION

When Angus Macbeth passed away in January 2017, ELI joined in honoring the legacy of a great thinker and leader in environmental law, a man who played a signal part in constructing today's environmental protection system. Given Angus' outsized role in helping to create the current system, it was entirely fitting that The Macbeth Dialogues were launched in his honor. This was to be a series of activities aimed at identifying law and policy solutions for optimizing the configuration of state and federal environmental protection roles going forward. As Angus was relentlessly committed to pursuing new ways to deliver environmental quality, The Macbeth Dialogues were conducted in that spirit.

Cooperative Federalism 2.0

As Americans, and perhaps the world, are well aware, the Administration of President Donald Trump has committed to downsizing the federal EPA and devolving additional responsibilities to the states under the banner of "cooperative federalism." Although Trump's appointed EPA Administrator Scott Pruitt resigned in July amid mounting ethics allegations and investigations, the emphasis on cooperative federalism promises to carry forward. Not only is federalism central to the U.S. Constitution, but it is written into the Clean Air Act, Clean Water Act, and other environmental laws EPA administers. It is a core principle of our democracy. But federalism is also dynamic, a dynamism that from time to time leads to a recognized need for rebalancing and reconfiguring federal and state roles as conditions change. Now may be such a time. This is a never-ending conversation, and every generation needs to look freshly at the question of how to optimize the governance formula so that elements align in common purpose, rather than fracture through conflict.

In June 2017, ECOS published a report, *Cooperative Federalism 2.0: Achieving and Maintaining a Clean Environment and Protecting Public Health*, in which the state and territorial environmental agency leaders wrote:

A national conversation is underway as to the best and highest purpose for state and federal environmental regulators from 2017 forward. We are convinced a recalibration of state and federal roles can lead to more effective environmental management at lower cost—that this is a call for a Cooperative Federalism 2.0.

Aspiring to stimulate and advance a national conversation that will more fully flesh out the definition and implications of a recalibrated relationship, the ECOS CF2.0 paper served as a useful starting point for this important endeavor. Both the report and The Macbeth Dialogues are contributing to what ELI, ECOS, and other voices in this conversation hope will be a durable new framework for a federalism that will withstand the buffeting winds of partisan politics and administration changes and, most importantly, will carry the United States further along the road pointed to in the 1969 National Environmental Policy Act that will lead to a "productive and enjoyable harmony" between human beings and their environment.

In its 2017 report, ECOS articulated nine principles for CF2.0. Among these is the emphatic need for EPA to "respect the states' role as the primary implementer of national environmental regulatory

programs. EPA should not review individual state implementation decisions, including enforcement," at least not routinely and without real cause revealed by programmatic audits. But the state and territorial regulators also clearly recognized and welcomed EPA leadership in some areas, such as national standard-setting and scientific research. Although some fear that absent a powerful EPA "gorilla in the closet" industries will begin to pressure and manipulate malleable state regulators, ECOS underscores that state environmental programs exist to provide "the level of environmental and human health protection promised to the American people through our national and state statutes."

Within that overarching framework of Americans' commitment to environmental protection, ECOS entreated all interested parties, including the U.S. Congress and the Administration, to bear in mind a number of important considerations. For example, ensuring "adequate capital and operating resources" must remain a priority. So far, Congress seems to understand this need, rejecting the Trump Administration's fiscal year 2018 proposal to cut the EPA budget by approximately 30 percent, including a $597 million or 45 percent cut in the categorical grants that support state implementation efforts and a concurrent reduction of almost a 24 percent cut to the agency's Office of Enforcement and Compliance Assurance (OECA) programs.[3] ECOS recommends a new architecture consistent with its nine principles and a review of potentially outdated and inefficient past practices and regulations, possibly leading to some being modified or eliminated.

The cornerstone of the ECOS proposal, and the feature that would represent the most fundamental and revolutionary change in government's inner workings, is the recommendation that EPA move decisively away from matter-by-matter review of state decisions (e.g., permit decisions and enforcement outcomes) and rely instead on periodic performance audits.

Predictably, the encompassing changes envisioned by states and territories will be welcomed by some and opposed by others. But neither support nor opposition will be as well-grounded as it might without a thorough vetting of the issues. To borrow from a statement by the American social reformer Frederick Douglass, *if there is no dialogue, there is no progress.* Dialogue inevitably raises new questions demanding thoughtful consideration and responses, the kinds of objective and careful analysis that, as a core principle, ELI believes is necessary when seeking common ground on controversial topics.

Three Macbeth Dialogues Key Events

With the aim of engaging experienced professionals in thoughtful dialogue, ELI undertook three initial activities:

1. The Chatham House Rules Gathering:

On July 18, 2017, we convened experts with diverse backgrounds for an opening round of discussions under the rules that allowed for a candid exchange of ideas. Special efforts were made to include experts with high-level experience in federal government, state government, or both, along with senior industry and NGO experts and academicians. As discussed there, since the 1970s, government and industry have evolved significantly, but the basic mechanics of the environmental accountability system have not fully adapted to these changes. Increasingly, the long-standing "top-

down model" needs to yield to an "environmental protection enterprise" employing "adaptive management" at all government levels and harnessing both private-sector initiative big data dynamics. A summary of the Chatham House gathering is attached in the annex to this report.

2. The 2017 ELI Annual Awards Dinner Forums on Cooperative Federalism

On October 18, 2017, at two programs held before the annual ELI Award Dinner, we invited panelists to explore key issues relevant to cooperative federalism. The ELI-Miriam Hamilton Keare Policy Forum on The New Federalism and Environmental Governance explored how environmental compliance can be assured if less federal enforcement of regulated entities is to become the new norm. In 1983, William Ruckelshaus returned to EPA for a second term as Administrator of an agency recovering from the collapse of its top leadership and famously remarked, "Unless the states have a gorilla in the closet, they can't do their job. And the gorilla is the EPA." Panelists explored whether that statement stills holds true 33 years later. At the 2017 Corporate Forum, panelists discussed the corporate role in today's environmental protection system, exploring such questions as, "Should environmental governance move away from a top-down, law enforcement model to an 'environmental protection enterprise' in which the states and federal government, the private sector, and the public all play key roles?" For a number of observers, public and market forces may be the new "gorillas in the closet," and these emergent forces should influence the shape of the government role going forward.

3. The Macbeth Dialogues Survey

Lastly, over a several month period, ELI conducted The Macbeth Dialogues survey. Initially aimed at the general ELI membership, the ELI Leadership Council, and the ELI Board of Directors, past and present, respondents ultimately also included members of ACOEL, federal and state government officials, business and trade group representatives, private law practitioners, consultants, and members of the nonprofit community. Many participants had more than 30 years' experience in environmental law and policy. Through the survey, this expert community illuminated the major friction points between federal and state regulators, the strengths states bring to environmental programs, misgivings about giving states more flexibility, appropriate EPA roles, and other important issues. Results of the survey are summarized in a later section of this report.

In pursuing each activity, our objective has been to identify policies and approaches that promise to endure. As we hope this report bears out, The Macbeth Dialogues deepened and widened the dialogue evoked by the ECOS CF2.0 paper. We cast our net wide to inform the ELI suggestions for possible durable change provided in the report's concluding section.

AN EMERGING 21ST CENTURY CONTEXT

Have States Come of Age?

During many of the years following EPA's creation in 1970, the Agency's prevailing model for environmental protection was variously characterized as top-down or command-and-control regulation. Observers either complained about or approved of a system in which EPA unyieldingly enforced the increasingly prescriptive mandates set forth in environmental statutes passed by Congress. As EPA kept the pressure on, compelling both states and industry to comply with tightening federal standards, critics complained that EPA's policies took an unduly inflexible and "one-size-fits-all" approach. No one could doubt, however, that the quality of the United States' air, land, and water improved significantly over those decades, and that—as former EPA Administrator Gina McCarthy noted in her January 5, 2017, exit memo—over 46 years, EPA had become "one of the world's most successful protectors of public health and the environment."[4] CF2.0 skeptics fear that contemplated reforms could bring harm to this successful system.

But EPA was not the only successful health and environmental protector to emerge from those years. When ECOS released its CF2.0 vision for "recasting state and federal roles for environmental management and public health protection at lower cost," the Council noted that state environmental agencies had assumed more than 96 percent of programs that the Clean Air Act, Clean Water Act, and other federal environmental laws authorized them to implement. Given that after four decades of operating environmental programs the states now are responsible for implementing most delegable national environmental laws, ECOS President John Linc Stine, the Minnesota Pollution Control Agency Commissioner, declared that the current roles and responsibilities of state and federal regulators "don't sufficiently leverage the maturity and sophistication of state environmental programs, and often don't provide the flexibility necessary to account for unique local ecological, social, and economic conditions."[5]

CF2.0 is not the first time that states and others have suggested fundamental change. In the early 1990s—responding to state complaints about redundancies, excessive reporting requirements, unnecessary EPA interventions, and uneven oversight—EPA initiated the National Environmental Performance Partnership System (NEPPS). The NEPPS sought to improve the federal-state relationship in key areas: setting priorities, deploying resources, and measuring progress. A 1995 NEPPS Agreement included a proposed "differential approach to oversight" that would reward strong state programs with greater flexibility. Results followed. From 1992 to 2007, as state management capacity improved, EPA program delegations rose from 40 to 96 percent.

But after more than 15 years of state and EPA experience with the NEPPS program, in a 2013 review, EPA noted that the differential oversight concept had not been implemented. In the face of insufficient support across agency regional offices to improve and refine it, the proposal was tabled. EPA suggested that the difficulty of developing appropriate benchmark metrics to assess state and regional performance was a primary challenge to the differential oversight idea.[6] Although CF2.0 does not use the term differential oversight, CF2.0 is strongly related in that it recommends that EPA only review individual state implementation decisions when programmatic audits reveal a

need. In 2018, is EPA now ready to support differential oversight? How challenging will the audit concept be?

Besides the maturity and sophistication of state programs mentioned in Commissioner Stine's statement, environmental protection in the 21st century must be considered within an even richer context of dynamic changes that are powerfully influencing environmental behaviors of many and may be reshaping government's role. Consider the following:

- In his 2007 bestseller, *Blessed Unrest*, activist Paul Hawken estimated that worldwide there were more than one million, and possibly over two million, "organizations working toward ecological sustainability and social justice."[7]
- Most major companies have had in place for years now sophisticated compliance management programs that endeavor to monitor for, prevent, and correct noncompliance.
- Reputation risk management has become a powerful new environmental performance driver in the business community. With this as a catalyst, a growing number of corporations have sustainability programs and officers, with objectives that go beyond simply maintaining compliance with environmental requirements. For example, one analysis found that sustainability reporting among S&P companies rose from just 20 percent in 2011 to 82 percent in 2016[8]; and almost one-half, or 48 percent, of Fortune 500 companies have at least one climate change or clean-energy target.[9]
- According to the Bureau of Labor Statistics, in 2016, there were 89,500 environmental scientist and specialist jobs in the United States, with employment in the sector projected to grow 11 percent from 2016 to 2026, faster than the average for all occupations.[10]
- A 2013 posting on the Department of Education's official blog titled, "Colleges and Universities Lead the Way in Sustainability," cited a *Princeton Review* finding that "68 percent of likely college applicants say a college or university's commitment to sustainability would affect their decision to attend."[11]
- A proliferation in low-cost sensor technology is expanding citizen science and the role of citizens in monitoring environmental conditions and vectors. The emergence of web-based community-sharing platforms and blockchain data integration capacity promise to dramatically increase the power of such information in the hands of citizens, businesses, and the government.

Clearly, the demand for environmental protection does not at this point emanate from government regulatory agencies alone but is part of a much wider movement and societal changes that have grown steadily since at least 1970.

Calibrating to Changes in the Private Sector

Related to the broader environmental protection changes in American society and other parts of the world, environmentally sensitive business leaders have for several decades now been increasingly internalizing environmental norms. By the late 1990s, corporate social responsibility (CSR), once derided as an oxymoron, "became almost universally sanctioned and promoted by all constituents in society from governments and corporations to non-governmental organizations and individual consumers."[12] And the environment is prominent among CSR issues the companies hope to address.

A number of factors contributed to this shift. First, aggressive prosecution of environmental violations during the 1980s and 1990s, coupled with a judicial response that meted out serious sanctions in environmental cases, underscored the importance of environment protections and the gravity of environmental neglect. This, along with government-sponsored information and public awareness campaigns in the early days of EPA, began to reshape attitudes about the environment in society at large, including in the private sector.

This evolution was reinforced by some other developments. The passage of the Emergency Planning and Community Right to Know Act (EPCRA) and the establishment of the Toxics Release Inventory (TRI) in the aftermath of the Bhopal, India, catastrophe, brought into sharp relief just how much toxic material was being maintained at and emitted from industrial operations across the country. TRI helped plant managers see emissions as indicators of reputational risk, potential liability, and resource inefficiency, in that enormous amounts of valuable materials were seen as being lost through industrial leakage. These concerns—reinforced by persistent transparency and visibility over time—solidified the commitment within much of the regulated community to compliance and beyond-compliance behaviors.

Also, in the 1990s, EPA began designing initiatives with the aim of demonstrating that, properly structured, voluntary industry programs could produce faster results than command-and-control regulations. EPA's voluntary 1991 33/50 program—setting the goal of reducing environmental releases of 17 high-priority chemicals by 33 percent by the end of 1992 and by 50 percent by the end of 1995—exceeded most expectations. Along with EPA's audit policy (which incentivized companies to create internal compliance management systems), and related initiatives, 33/50 provided additional reinforcement for the shift in thinking that was underway.[13]

Today, self-regulatory measures by private companies are multifaceted. They include examples of credible CSR commitments; company environmental goal-setting and management systems validated by the International Organization for Standardization (ISO) and other certification bodies; the establishment of business sustainability coalitions like the World Business Council for Sustainable Development, the World Environment Center, and Ceres; the creation of sustainability metrics like the G20 Financial Stability Board's Task Force for Climate-Related Financial Disclosures (TCFD); and a variety of other private environmental governance mechanisms. EPA has long encouraged and helped define adequate environmental management systems that are an essential component of effective private governance. A 1997 OECA guidance concluded that, properly designed and executed, such management systems can improve efficiencies and help promote positive environmental outcomes.[14]

Commerce in an interconnected, globalized world is also a contributor. Depending on their products and marketing strategies, companies operating multi-nationally must gear their operations and products to the regulatory demands of their most stringent major market. Consistency in approach can help regularize environmental performance across companies and naturally produces beyond-compliance approaches in jurisdictions with less-stringent requirements.

In a 2014 survey of 300 business executives from companies in every major industry and geographic region, 88 percent said they were explicitly focused on reputation risk as a key business challenge. The executives identified customers as the most important reputational risk stakeholders in a world increasingly influenced by social media and instant global communications. But other key stakehold-

ers they identified were regulators, senior executives, employees, and investors. The survey found that companies were "most confident about managing reputation risk drivers for which they have direct control," including risks related to regulatory compliance.[15] Generally, corporate environmental management systems intend to drive continuous improvement, with the best systems integrating sustainability concepts and goals into mainstream business processes and operations, including compliance management.

This focus on reputation risk management and brand protection and advancement has led many companies to enlarge their focus beyond their own operations to those of their suppliers, in that problems in the supply chain can taint downstream products and services. Supply chain management has become a form of quasi-regulation through which buyers are establishing normative expectations, framing those expectations in purchasing policies and specifications, implementing them through supplier declarations, contracts, and other instruments, and second- and third-party verification, and then monitoring supplier adherence to those expectations, with deselection standing as a potential response to noncompliance. Because the motivator for adherence to buyer demands is market access—the lifeblood of business—supply chain management can be quite powerful in effect.

Relatedly, financial institutions—including lenders, investors and portfolio managers, and insurers—increasingly assess financial and reputational risk in the environmental behaviors of operations that they enable and are more actively setting expectations intended to navigate around those risks. Here again, access to capital and financial arrangements are a potentially powerful performance lever.

These are important new drivers. The question is to what extent they can be relied upon to help shape new thinking about the role of governments and the distribution of roles between levels of government and the private sector. Responding to a question in The Macbeth Dialogues survey about whether government should rely more on emerging environmental performance drivers, such as private environmental governance, participants offered both support and opposition. In answering affirmatively, one proponent referenced the ISO 14000 environmental management standards, the Board of Environmental, Health, and Safety Auditor Certifications' "Performance and Program Standards for the Professional Practice of Environmental, Health and Safety Auditing," and other relevant standards as a sufficient basis for limited inspections, with government resources focusing on bad actors. But other respondents expressed mistrust of businesses' ability to govern themselves and other related qualms and point to the *Deepwater Horizon* spill and automobile emission system tampering cases as support for their skepticism.

In our view, the potential contribution of private environmental governance must be taken seriously, if for no other reason than it can inform where to aim limited and diminishing public governance resources. Just as some state environmental programs may be strong enough to operate independently in most cases, might some companies' environmental and supply chain management programs be seen as a reliable collateral track in driving environmental performance? As we look anew at the question of cooperative federalism, can we consider public-private parallelism as a design consideration? Are there ways to overcome the trust issues that impede greater public acceptance of private-sector leadership in the environmental arena so that this emerging trend can be optimized? What is the government role in reinforcing and liberating this trend?

Harnessing the Digital Revolution

Traditional environmental regulatory enforcement programs and corporate leadership efforts have the power to drive environmental performance. But supplementing those drivers, two other global developments are reshaping environmental compliance and performance: the rise of the knowledge economy and proliferating digital technologies. Spawned by the digital revolution, new sensors, monitors, and other technologies increasingly are enabling a continuous and transparent measurement of environmental conditions at regulated facilities and their outlying vicinity, making unprecedented amounts of data available to the public, regulators, and the regulated, including self-regulators.

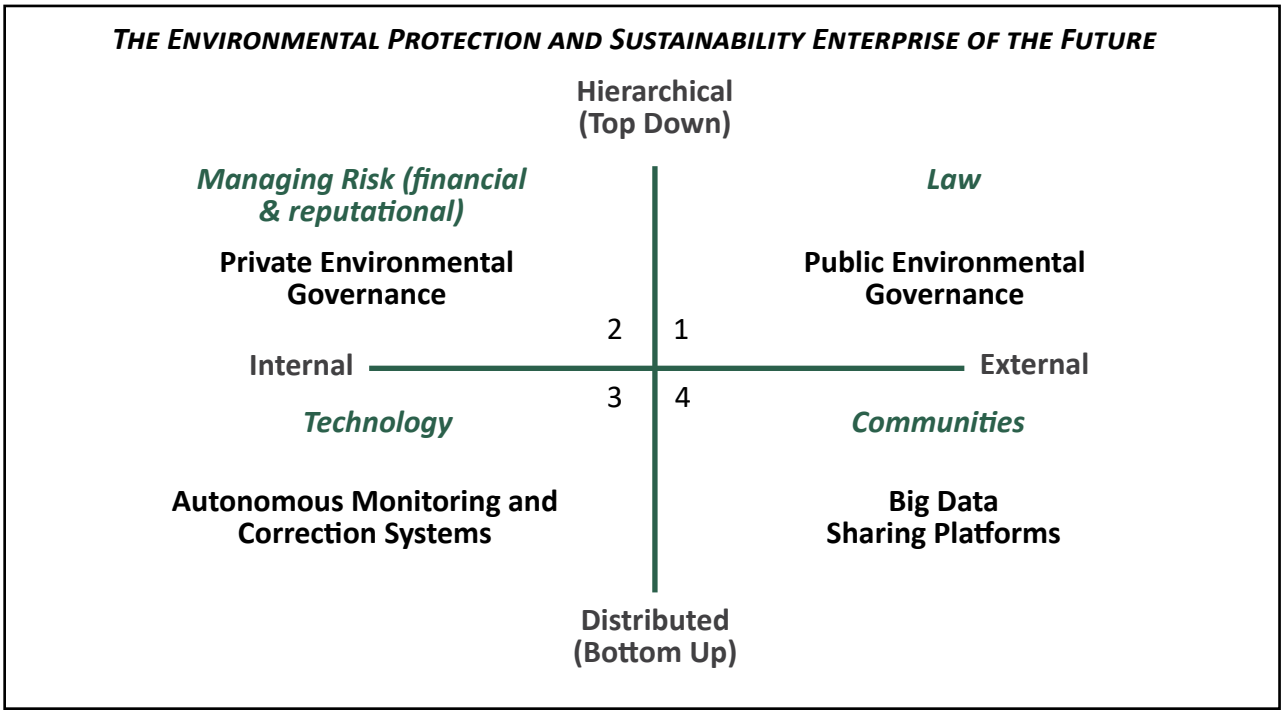
In a 2016 article, federal and state environmental officials explored the potential for new monitoring technologies to transform how environmental programs operate by giving agencies richer and more current compliance information and putting low-cost sensors in citizens' hands. The authors noted that the "revolution in advanced monitoring technologies" raises many questions about, for example, potential uses of the data, such as giving industry tools to track early indicators of compliance problems and supporting integrated exposure and risk assessments.[16]

In recent years, across the United States, a surge in citizens' use of networked mobile devices to collect real-time data about local environmental conditions has created a new source of data-based community pressure. Citizen findings can impact government and private-sector behaviors alike. On their end, governments and companies focused on environmental compliance and beyond-compliance strategies are increasingly harnessing the constant innovation in new technologies that employ artificial intelligence algorithms. Gaining in prominence are digital systems that autonomously monitor environmental performance and ecosystem conditions and then drive swift and, in some cases, automated corrective actions.

The potential scope and power of digitally enabled environmental protection applications are not yet fully recognized or understood, although it has been observed that, "[w]ith current advances, digital technology has the power to support the transition to a circular economy by radically increasing virtualisation, de-materialisation, transparency, and feedback-driven intelligence."[17] Plainly, the future of digitization is vitally important when thinking about the possibilities for system change today. Indeed, E-Enterprise for the Environment—a centerpiece of states' vision for "modernizing the business of environmental protection"—employs various social online platforms and digital applications to reform permitting and other aspects of their relationships with EPA and one another. What, it must be asked, are the real possibilities enabled by rapidly changing technologies for creating a much more efficient, accountable 21st-century system that engages all participants as partners in the environmental protection enterprise?

What Does Integrated Environment Protection Look Like?

The integrated environmental protection approach that is emerging may look something like this.



This diagram's vertical axis reflects that some of the drivers are top-down in operation, while some are bottom-up. The horizontal axis reflects that some drivers are externally induced, while others are internally driven. Each of the quadrants in this diagram attempts to describe both a driver and a system that emerges from that driver.

Working counterclockwise, the driver in Quadrant 1 is law and the resulting system is traditional government action, whether carried out at the national or subnational level. In Quadrant 2, the driver is risk management, and the system is private environmental governance that aims to manage and reduce that risk. In Quadrant 3, the driver is technology, and the system is autonomous monitoring and correction systems. In Quadrant 4, the driver is community engagement—in particular, online communities—and the system is big data-based community platforms for sharing those data and the stories that they tell. As data volume increases, these systems will operate at light speed and can be expected to create a data-rich pressure cooker for corrective response.

These quadrants are, of course, interactive and cross-influential. For example, data-based community pressure can influence both private and public governance behaviors and approaches. Autonomous systems should reduce the need for public or private governance interventions. And effective private governance measures should, in theory, reduce the need for government response.

All of these drivers will likely be important parts of the equation going forward, although their proportionality may shift over time. So, for example, there will always be a government role, but that role may change over time if the other drivers increase in potency.

Quadrants 3 and 4 are the least developed quadrants and are not without challenges. Regarding Quadrant 3, the recent problems with motor vehicle emissions control systems demonstrate that autonomous systems are only as good as the algorithms embedded within them. Is there a government role in ensuring quality control in the software that guides these systems? What is the legal and policy architecture for that?

And Quadrant 4—the idea of environmental big data and community platforms—presents even bigger challenges, ranging from accuracy of the data generated from low-cost sensors, to impacts on privacy, to the potential for data to be mischaracterized or misinterpreted, to the use of data as a tactical weapon for political or market advantage. What is government's role in normalizing this space so that it emerges as a constructive part of the environmental protection enterprise?

Embracing Integrated Environment Protection

In addition to new institutions and technologies reshaping both thinking and actions, our understanding of environmental phenomenon has evolved in ways that challenge the traditional structure and jurisdictional boundaries of environmental programs, again calling for a new environmentalism that unleashes all parties' best strategies to solve existing and emerging environmental problems.

The nub of the matter is that environmental systems and jurisdictional boundaries rarely align neatly; rather, air sheds and watersheds commonly have interstate characteristics and dimensions. Accordingly, a complete approach—one that deals effectively with both upwind/upstream sources and downwind/downstream impacts—requires an effective capacity to bridge across jurisdictions.

As a case in point, in 1991, senior EPA managers endorsed a *Watershed Protection Approach Framework* developed by the Office of Water. The framework was further fleshed out in a 1996 report that described the watershed approach as "a coordinating framework for environmental management that focuses public and private sector efforts to address the highest priority problems within hydrologically-defined geographic areas, taking into consideration both ground and surface water flow."[18]

Perhaps, the best illustration of an effort to implement this framework is the Chesapeake Bay Program, a partnership of federal and state agencies, local governments, nonprofit organizations, and academic institutions focused on the Bay as a watershed. The program was launched in 1983 to curb pollution affecting the Bay's health, pollution that was coming from cars, factories, farmlands, and dozens of other sources located in an approximately 570,000-square-mile airshed and 64,000-square-mile watershed. A related strategy is the ecosystem approach exemplified by the Great Lakes Water Quality Initiative (GLWQI). Like the Chesapeake Bay Program, the GLWQI brings together federal, state, tribal, local, and industry partners in both Canada and the United States "to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem."

While the imperative for airshed and watershed approaches is increasingly self-evident, progress in this direction has been challenging. This is in part because of the media stovepipes (air, water, waste, and so forth) that continue to drive EPA's activity, notwithstanding the multi-media nature of many environmental problems. This has been a rub for EPA from its inception,[19] and a point of study in its own right that we will not undertake here, partly because it is not clear that the stovepipes themselves significantly drive federal-state conflict. Indeed, states often have their own stovepipes

that correspond more or less to the federal ones. This likely makes the entire enterprise less effective than it might be in addressing environmental problems, but does not necessarily make it more fractious in the process.

The other reason for slow progress in fashioning airshed and watershed approaches is, however, at the heart of The Macbeth Dialogues—the fact that state sovereignty and independence can be a complicating factor in fashioning cross-jurisdictional approaches, even in the face of important cross-jurisdictional eco-phenomena. Getting cooperative federalism right should include as an important objective increasing the capacity of the overall enterprise for cross-jurisdictional problem solving.

Are We Now Ready to Realign the Environmental Protection System?

Many believe that the time may have arrived for a total environmental protection strategy that draws upon the whole range of internal and external drivers to achieve optimal solutions. Indeed, this multifaceted "ecosystem of drivers"—as we characterized it in an ELI paper on *The Search for a New Environmental Paradigm*—may be seen as "calling into question whether existing structures and modalities are equipped to contend with, enable, harness, and lead the change that is upon us," or if a new "agile and adaptive development approach" involving public and private partners can better lead us into the environmental future.[20]

This said, it seems clear that government will remain a very important part of the equation, in that the nongovernment drivers can be fragmentary and detached from broader information and policy considerations that should influence outcomes. Greater flexibility for high-performing states, and perhaps for businesses assuming leadership and responsibility, would have to be premised on credible performance metrics to overcome significant skepticism, as already demonstrated by the NEPPS experience. Companies—which seek a level playing field and stable regulatory environment—share in this demand for credible metrics, a demand that likely can only be met by governments.

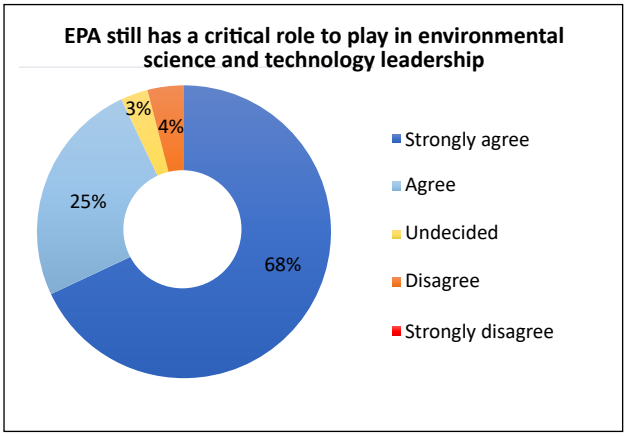
Is now the time to draw from past experience and current realities to shape a better, less costly and contentious environmental protection system? Any discussion of reform cannot be conducted without considering the United States' deeply fractured political climate, including both opposition to certain EPA actions and dismay at attempts to dismantle EPA environmental programs wholesale. Following former EPA Administrator Scott Pruitt's resignation in June, fresh hopes for restoring a commitment to EPA's environmental protection mission may be warranted, but undoubtedly, concerns on both sides will continue to trouble the debate.

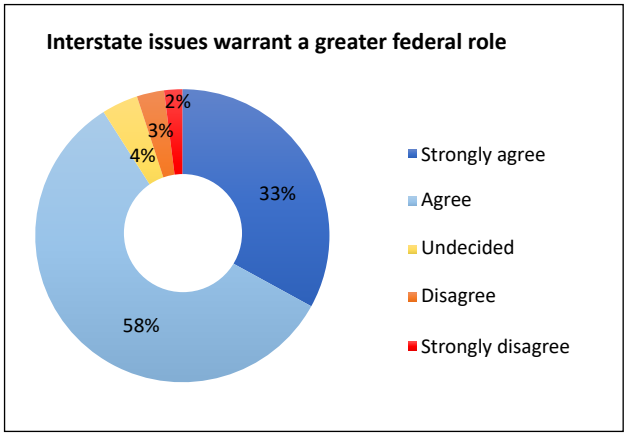
Whatever the future holds—whether it is called CF2.0, the new environmentalism, or some other name—proposals for adjusting federal-state and federal-private-sector relationships cannot ignore the almost 50 years of progress made since 1970 with a federal "gorilla in the closet." But neither can they ignore the many social and technological changes that have occurred over these years, or the growing complexity of problems in our interconnected ecosystems. Such changes raise vital questions about possible new directions as we seek to continue steady forward movement to protect the environmental values now firmly woven into American society.

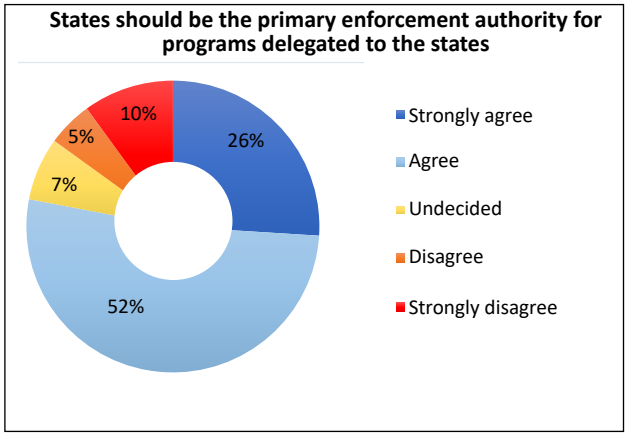
THE MACBETH DIALOGUES SURVEY SUMMARY

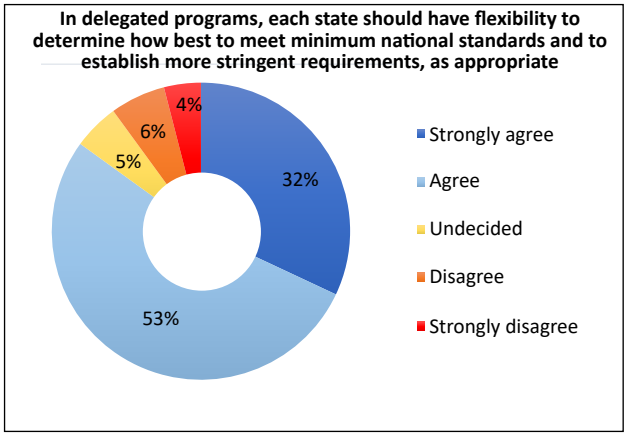
Perceptions matter. As a central part of The Macbeth Dialogues process, ELI conducted an online survey to gauge how environmental law and policy practitioners and stakeholders perceive CF2.0 and related issues. The survey included 12 questions. Some were open-ended and others asked respondents if they agreed with certain statements and the extent to which they agreed or disagreed. Appendix 1 reproduces these survey questions and provides summaries of the responses received. Five additional questions collected information about respondents' backgrounds and expertise.

Responses to multiple parts of one survey question revealed strong support for an EPA leadership role in environmental science and technology as well as in interstate matters, and strong support for flexibility for states in meeting minimum national standards and setting more stringent standards as well as in enforcing delegated programs, as reflected by the graphs below.

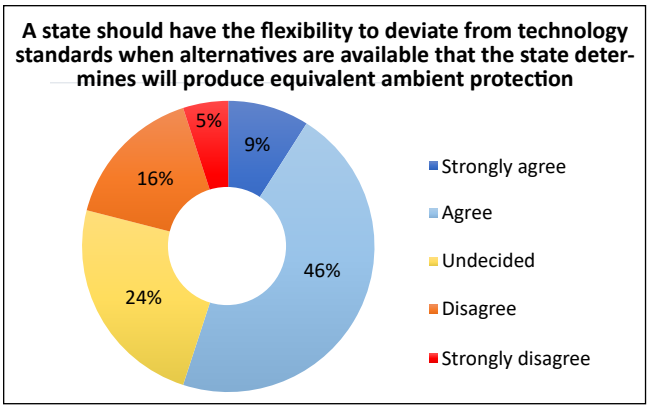


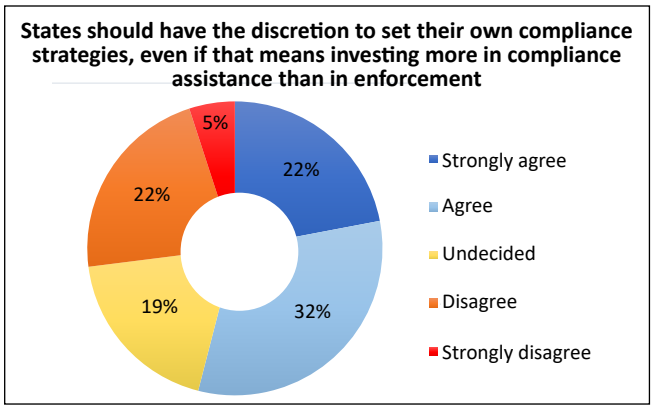


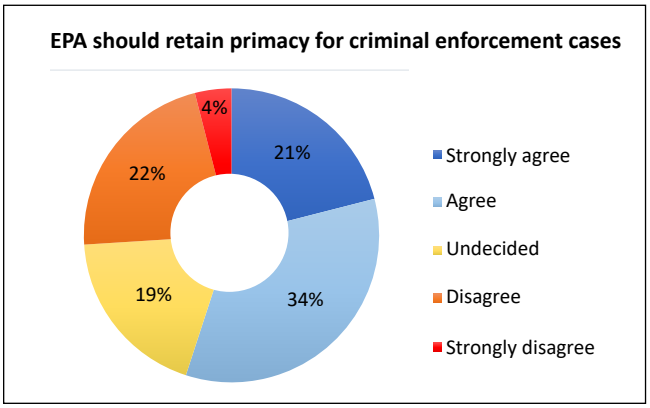


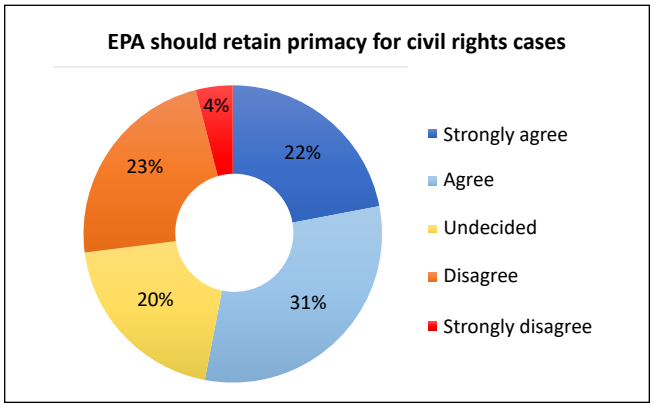


Respondents were more evenly split on state discretion to depart from national technology standards and compliance strategies as well as on primacy for criminal enforcement and civil rights cases.

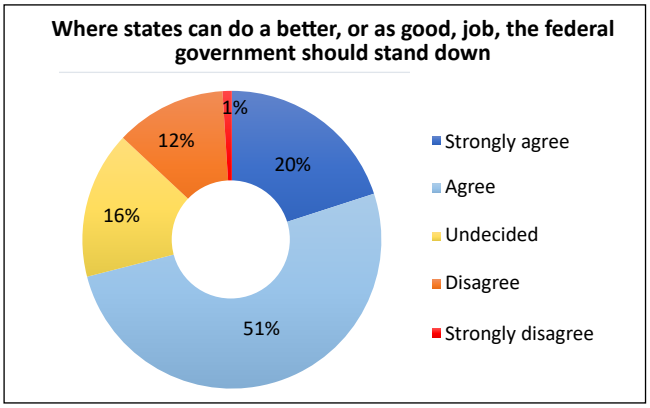


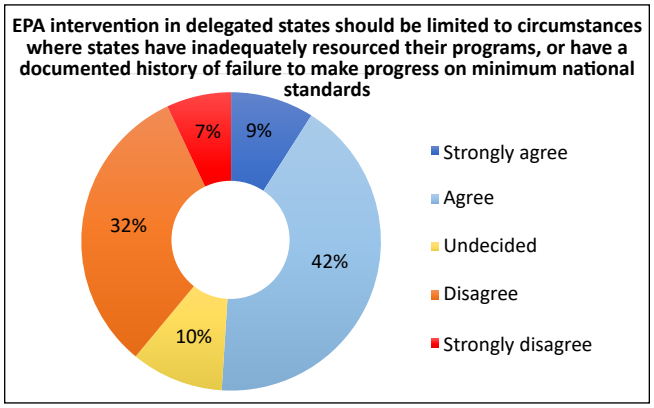






Perhaps, the greatest lesson from the survey responses came from two sub-questions that attempted to remove from the equation the influence of confidence or trust in state programs' capacities and integrity. Over 70 percent of respondents felt that the federal government should stand down where states can do a better, or as good, a job. Over 50 percent of respondents, with another 10 percent undecided, felt that EPA intervention in delegated states should be limited to circumstances where failure has been documented or inadequate resources have been provided by the state.





Clearly, support for greater deference to state regulators will depend on their ability to effectively do the job, a caveat articulated in the ECOS CF2.0 principles. The ECOS vision includes as an essential ingredient: the idea that EPA should periodically and routinely audit the adequacy of state programs designed to implement national standards. The survey also found broad support for EPA continuing to play a strong or even greater role in some areas, such as environmental science and technology leadership and interstate issues. This all points to the conclusion that cooperative federalism does not mean taking EPA out of the picture, nor is it advanced by crippling the agency.

Key Drivers of Conflict

In his political science classic, *Agendas, Alternatives, and Public Policies*, researcher John Kingdon noted: "Getting people to see new problems, or to see old problems in one way rather than another, is a major conceptual and political accomplishment."[21] In effect, The Macbeth Dialogues is an attempt to understand the problems as perceived by state regulators, federal officials, and a variety of other experts who have had close-up experience with the environmental system. We hope that by better defining the problems observed in today's discordant system we can better define possible solutions.

In that spirit, a number of the ELI survey questions focused on clarifying important problem areas, including the first question: *What is the most significant point of friction in the state-federal environmental regulatory relationship as it exists today?* Overall, the survey responses revealed nine key drivers of conflict, as discussed below.

1. Legislative Gridlock

Conflicts occur at all levels. In Congress, the political gridlock of recent decades makes updating the United States' environmental legal infrastructure seemingly impossible, leaving existing laws and their implementing regulations in place and, with them, some key sources of conflict. As one observer noted, states have specific and unique environmental interests that are not always adequately addressed by federal regulation. Another observed: not all states can implement federal laws in the same manner.

Critics cite the inflexibility of how some federal laws operate. Under the Clean Air Act's National Ambient Air Quality Standards (NAAQS) program, to comply with statutorily determined time frames, EPA has repeatedly issued revised standards when many states have not yet attained existing standards. After issuing a 2008 ozone NAAQS update even though the 1997 ozone standard had not been met, EPA was sued when the Agency proposed revoking the 1997 ozone standard. When EPA completed an ozone NAAQS review in 2015, tightening the standard from 75 parts per billion (ppb) to 70 ppb, it prompted a slew of bills in the 114th Congress to modify EPA's NAAQS authority or to prohibit or delay the Agency's proposed strengthening of the ozone standard. In the 115th Congress, on July 18, 2017, the U.S. House of Representatives passed H.R. 806, which proposes delaying designation of ozone nonattainment areas until 2025 and requiring future reviews of the NAAQS every 10 years instead of every five, among other provisions. H.R. 806 and other House-passed Clean Air Act bills await U.S. Senate action. In short, as the clock winds down on the 115th Congress, none of the foregoing measures has yet made it into law.

One analysis of the Clean Air Act New Source Review (NSR) permitting program acknowledged the program's important health and environmental benefits but also concluded that it has become "a significant impediment to the growth and modernization of the U.S. manufacturing sector."[22] To eliminate the NSR program's uncertainty and unpredictability and thereby encourage the expansion of existing manufacturing plants and the construction of new ones, the analysts noted that a fundamental reform, beyond administrative changes, would be to revise the statute, replacing the NSR program for major manufacturing facilities with emissions fees for each NSR pollutant. But any discussion in Congress of such a proposal would certainly face formidable barriers of mistrust and the likely logjam that characterizes today's legislative politics.

Today's gridlock was preceded by two decades, from 1970 to 1990, in which Congress passed, and presidents signed into law, a remarkable series of environmental statutes, creating today's national environmental legal framework. But following passage of the 1990 Clean Air Act Amendments, no major environmental statute was passed until June 2016, when the Frank R. Lautenberg Chemical Safety for the 21st Century Act Amending the Toxic Substances Control Act became law. Revisions to TSCA were the first since the law was enacted in 1976, four decades earlier.

Given the unlikelihood that Congress can agree on reforms to existing laws, much less on the passage of new laws, such as climate change legislation, the current legal structure can be seen as a largely unchangeable piece of the puzzle that for the time being will constrain what can be achieved going forward, whether in terms of explicitly authorizing additional flexibility or driving further environmental gains.

2. State Involvement in Federal Rulemaking

If current statutory provisions are the status quo for the foreseeable future, EPA rulemakings based on those laws become all the more important for states and other state-level stakeholders. The first principle articulated in the ECOS CF2.0 paper declares that EPA should continue to lead in setting and adopting national minimum public health and environmental standards. But states must be engaged "as key partners," bringing first-hand knowledge of their issues and stakeholders. Survey respondents broadly supported the states' role as key partners, with some observers emphasizing the need for greater consultation with states on implementation issues in the course of developing national standards.

Survey respondents cited various reasons for engaging states more closely in federal rulemaking. Some states complain that EPA rules are not grounded in practical experience to the extent that they could or should be, and that federal programs often reflect a lack of appreciation of state issues and problems. Although most agree that health standards should be universal, greater state involvement in the standard-setting process should help ensure that EPA recognizes unique local challenges, such as certain locales' high levels of naturally occurring arsenic in groundwater. Some observers argue that litigation rather than rulemaking has become a tool for setting national policy, and that this tends to cut states out of the policymaking process.

In general, states believe that, as co-regulators and primary implementers of federally delegated programs, they should have a special voice in the EPA rulemaking process and not be treated like any other stakeholder. For their part, EPA officials frequently respond that states do not appreciate the limits of the agency's statutory discretion. But states are sometimes on the receiving end of

what they see as expansionist federal encroachment on states' discretion, as some interpret the Trump Administration's proposal to loosen stricter auto exhaust standards adopted by California and 12 other states and to revoke California's authority to set its own car regulations. From a different perspective, 11 states sued to halt EPA's controversial Waters of the United States Rule, which they saw as regulatory overreach—a fight that is making its way through federal courts. In 2017, ECOS adopted a resolution asserting that states "must be allowed to exercise their discretion to regulate pollutants within their borders and to develop standards as or more stringent than federal regulations." And the National Governors Association expressed a similar view in a 2018 testimony on federalism that defines "principles of state-federal relations," writing: "Unless constitutionally prohibited, federal action should not set preemptive ceilings but rather provide a floor for additional state action."[23] Disputes over floor and ceiling levels, of course, are practically inevitable. This said, companies making products or performing services with strong interstate dimensions, such as those operating in the transportation sector, favor if not depend upon national uniformity, and resist a patchwork of state regulation. In any case, within this rather complex set of dynamics, the question is whether there should be a process to recognize a special role and presence for the states in the federal policy development process.

3. Enforcement Conflicts

Differences over enforcement responses are a significant—some would argue the *primary*—source of conflicts involving EPA, states, and regulated entities. "Laws without enforcement are just good advice," as Abraham Lincoln remarked, but disagreements can arise over the appropriate enforcement response to violators. Is compliance assistance at times preferable to aggressive enforcement? Should disputes over penalty amounts lead to a federal override? In summarizing the sentiment of many, one commenter argued for, "Less emphasis on punishment, more on fixing compliance issues."

Historically, enforcement was a core federalism issue, and the fact that it remains a friction point is not surprising. After all, it was states' and cities' inability or unwillingness to enforce standards that led to the Agency's aggressive enforcement actions within weeks of EPA's creation. And it led to the dramatic rise of EPA's dominance in enforcing environmental laws in the decades thereafter. It also is not surprising that, as state programs have matured, they are demanding greater enforcement discretion. But Trump Administration efforts to dramatically scale back enforcement, with EPA penalties dropping precipitously, have sparked deep concerns among a number of observers that some states may share a permissive agenda with the sitting Administration.

In a 2011 report on EPA's oversight of state enforcement, the Agency's OIG faulted the OECA for not administering "a consistent national enforcement program." The report also found that OECA and EPA regions had made efforts to improve state enforcement programs, but despite such efforts, state enforcement programs were underperforming, with high noncompliance and low enforcement levels.[24]

Whatever the case today, enforcement has long been and will likely remain a contentious area. Voices on one side urge greater state enforcement discretion, together with less focus on punishment and more on compliance assistance. Voices on the other urge against that approach, or call for very careful migration toward less EPA involvement. Some regard EPA's enforcement policy as already too lax.

The Macbeth Dialogues survey surfaced four notable areas of enforcement-related conflicts:

- Because in most noncompliance circumstances there will always be an institutional advocate for forbearance, enforcement commonly produces conflicts within government. NGO advocates, for example, see the Trump Administration as favoring forbearance, with one 2017 study finding that within the Administration's first six months there was a 60 percent drop in civil penalties against polluters compared with earlier administrations.[25] Mistrust runs high, with NGO advocacy groups and others concerned that some states are placing people with industry ties in positions to make forgiving enforcement decisions. But there are also clearly proponents of allowing states more leeway to work with businesses on compliance with less insistence on punitive enforcement measures.
- The root of the enforcement conflicts may be a lack of consensus about compliance theory, the appropriate role of deterrence, how to deliver deterrence, or all of the above. The carrot of compliance and the stick of enforcement stand like crossed swords, with opinions about their appropriate use differing significantly.
- Courts generally regard enforcement as a function of nonreviewable prosecutorial discretion. In the context of particular government enforcement decisions, the courts are therefore not in a position to play the same corrective role that they play with other administrative decisions (e.g., permit decisions). As a result, during federal review of state enforcement decisions, the pressure can be particularly intense to ensure that the decisions are correctly made, as there is no other bite at the apple.
- Claims about the over-criminalization of environmental violations have persisted over time because many environmental statutes do not draw sharp distinctions between criminal, civil, or administrative violations. At the same time, some commenters argue that environmental violations are under-criminalized.
- Enforcement reporting further complicates matters. *Compliance*—the true goal—is difficult to report on accurately at the state or national level, especially given the number and complexity of environmental requirements. Federal enforcement reporting currently focuses primarily on federal actions and outcomes rather than on the aggregate of state and federal accomplishments. A look at EPA's enforcement results for fiscal years 2017, 2016, 2015, and earlier confirms that the Agency's annual reporting has generally touted EPA actions, rather than enforcement by all relevant authorities.[26] Continuing to focus on federal actions will tend to reinforce the need for independent federal action because, as the adage goes, that which gets measured (or reported), gets done.
- For some, the practice of EPA initiating a federal enforcement action against an entity for the same environmental violation for which state authorities have already begun enforcement proceedings (a.k.a., overfiling) is a source of tension. But others note that if EPA lacked the threat of backstop filing, the Agency could end up acquiescing in a state's inadequate response to violations, potentially fostering "pollution havens" in states with lax enforcement postures or undercutting assertive states that use the threat of a federal backup for enforcement leverage.
- Some states lack adequate environmental criminal authority, making federal deference in this area particularly difficult.

4. EPA's Political Accountability for Local Failures

Regardless of differing views in the abstract regarding federal/state divisions of authority, the public and elected officials clearly at times expect EPA should be actively involved in some very local issues. Generally, CF2.0 calls for states to have greater discretion in making environmental decisions because they understand their own problems and priorities. But the Flint, Michigan, drinking water crisis—which emerged in 2015 after local citizens brought dirty water samples to Flint officials—strikingly illustrates the impracticability of EPA completely withdrawing even in situations where a state has primacy over an inherently local problem. Underscoring this point, after both the state and federal governments declared a public health emergency in the city, the Regional Administrator for EPA Region 5, accused of not doing enough to prevent the crisis,[27] was among the four government officials who resigned over its handling.

The Flint crisis and other local regulatory failures serve as an important reminder that in crisis situations involving fundamental environmental health protections, EPA cannot simply beg off, but rather will share accountability despite devolution pressures. Proponents of a continued strong EPA role vis-à-vis states, and perhaps even some devolution advocates, regard the Flint crisis as a cautionary tale whose moral is that, at least in some circumstances, a federal gorilla in the local closet is not only needed, but demanded. Building a regulatory architecture that anticipates and is prepared for these dynamics, but is also appropriately deferential, is no simple matter.

5. Permitting Reviews

In general, preconstruction permit reviews—whether to limit air, water, or other environmental impacts—are a challenge for a number of reasons. According to some observers, whereas state statutes generally impose time constraints on regulatory processes, EPA is not always similarly constrained, and development projects can be considerably delayed awaiting federal review. Misaligned federal and state process time lines naturally produce friction. Added to the mix, state environmental officials typically operate under enormous pro-development political and business time pressures. A number of survey respondents highlighted as problematic EPA's role in permit-dependent commercial activities. Federal oversight that makes both the permit process and the outcome unpredictable creates uncertainty that is always anathema to business managers, which informs the pressures they put on state and local officials.

As an example, Macbeth participants flagged EPA's review of state-issued operating permits pursuant to Title V of the Clean Air Act as a major source of tension and difficulty. Although most stakeholders recognize at least some benefits of the Title V permitting program, which had integrating air permit requirements as its primary objective, widespread dissatisfaction has also been expressed with the program's complexity, costs, and confusing requirements, with many critics pointing to timeliness issues and a lack of consistency across EPA regions as major contributors to implementation problems.[28]

Both state and federal resource and staffing shortages are generally seen as major contributors to slow permitting processes. States are struggling, for example, to reissue expired Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits, and EPA is being faulted for providing insufficient financial and technical support for that endeavor.

State and local development imperatives notwithstanding, consistency in environmental permitting is important because, to promote economic development, states can engage in interstate competition for industry through the permitting process. Some critics fault states for revising permits at the behest of industry applicants in ways that increase rather than optimally control emissions. Ensuring consistency in emissions-sensitive permit terms is, in the view of most commenters, an appropriate role for EPA, but there is substantial disagreement over how best to achieve this objective.

6. Resource Discontinuity

Uncertainty about resources for permitting reviews and other core programmatic functions is a salient flash point for states, especially today as the Trump Administration advocates drastic cuts in EPA's budget and reductions in the federal workforce. Fewer federal resources mean fewer federal reviewers and slower reviews. At the same time, states have been dealing with state-level budget cuts as well as significant Administration-proposed cuts to federal State and Tribal Assistance Grants (STAG). According to ECOS, STAG Categorical Grants provide on average 27 percent of state environmental agency budgets.[29] Cuts to EPA's budget and EPA programmatic grants to states have combined to make government broadly less responsive and effective. It further stresses state-EPA coordination, a fact recognized by many survey respondents who cited funding as a key source of federal-state conflict. As noted by one respondent, without sufficient federal funding, states will be unable to fulfill adequately their obligations under delegated and other environmental programs.

7. Blaming Upstream Regulators

Quite naturally, state officials faced with regulatory decisions that are locally unpopular or difficult to execute will tend to blame federal policy enforcers, even in states that generally support a strong federal presence or agree with the regulatory decisions. Such blaming contributes to anti-federal sentiments and unduly negative perceptions of EPA inflexibility and jurisdictional overreach. Political ramifications of such negativity can be far-reaching. At the same time, some observers fault EPA for not doing enough to dispel public perceptions that states are unreliable in implementing environmental programs. In ECOS' view, adopting CF2.0 would over time reduce conflicts between state and federal regulators over credit for successes and blame for decisions resulting in setbacks.

8. Lack of Trust

A primary obstacle that federal and state implementation authorities must overcome is a lack of trust, a difficult challenge at a time of widespread mistrust and polarization that can at times create ineluctable barriers to communication.

Conflicts already noted over discontinuity in funding, or insufficient funding, can exacerbate mistrust. EPA loses trust in state programs that are understaffed and lack resources, observers commented. Hide-the-ball behaviors on both sides are seen as common and can breed suspicion. So, too, can frictions over political partisanship, differing priorities and interpretations of laws and regulations, science and data quality, and other issues.

Despite the vital importance of trust, agencies often underinvest in relationship building. Survey respondents noted that better relationships can be fostered by open communication; honest collaboration, whether in rulemaking, enforcement, or other areas of environmental decisions, will go a long way toward lowering tensions and improving cooperative federalism.

9. Perception Problems

A number of key negative perceptions about both states and EPA, depending on where an observer's sympathies lie, need to be overcome—whether through changed views or changed behavior, or both—to reduce conflicts over implementing a new cooperative federalism. The following are important biases for and against reliance on state versus federal regulators.

- Those who sympathize with states perceive EPA as inflexible, slow to act, inconsistent across regions, and often indifferent to the practical challenges that states face. Critics charge that EPA assumes the role of judge over states' individual decisions without the benefit of context or the burden of execution. Many states view such behaviors, in which EPA's preferred results always prevail, as overbearing and intrusive. Critics also fault EPA for what they regard as inconsistent, untimely, and poorly communicated guidance on the application of certain federal statutes and regulations.
- States and businesses perceive that EPA sometimes uses enforcement, in lieu of notice-and-comment rulemaking, as a vehicle for regulatory policy change. Federal legislation's immutability in response to changing needs may contribute to an EPA tendency to innovate through enforcement. Statutory immutability constrains EPA's exercise of regulatory flexibility, while enforcement discretion provides the Agency with an avenue for greater latitude. Understandable or not, incremental policy development through case-specific enforcement interventions does not enjoy the testing that accompanies notice-and-comment-based policy development.
- Those who sympathize with EPA perceive that states are too easily subject to compromise and political expediency and lack the resource consistency to take over EPA's responsibilities. Critics who believe that some states share the Trump Administration's objective of rolling back federal standards perceive a real threat of a "race-to-the-bottom" absent a strong EPA presence.
- A broadly shared perception is that regulators operating in close proximity to regulated entities will be more susceptible than distant regulators to requests for permit flexibility or enforcement lenience. At its best, local decisionmaking can allow for useful local context. At its worst, close proximity can lead to regulatory capture, rendering the regulator unable to resist the demands of locally dominant industries.

Future reforms need to be designed in a way that is both appreciative of and responsive to these perceptions.

Costs of Conflict

Although disagreements can always be expected, and can be constructive when communicated effectively, the conflicts described above should be regarded as costly and unacceptable features of the status quo. It is worth keeping in mind that the current system was built at a time of low confidence in government function and was designed to include redundancy, or backup elements that were included in anticipation of the primary element failing. This layered approach to environmental protection, while needed at the inception of these programs, is expensive to operate, serves as a significant source of uncertainty and conflict, and is not fully aligned with current circumstances

and capacities. But an important caveat is in order: When considering the removal of redundancies, the risk or consequence of failure of the primary element should still factor prominently in the calculation. For circumstances that could lead to irreparable or costly consequences, redundancies may be more merited than for those that do not present such risks.

Under CF2.0, ECOS envisions a path forward that fundamentally reframes state and federal roles with the expectation that the new audit-based system would achieve equal or greater environmental and public health protection. But, as envisioned, it would do so at lower cost through streamlined operating systems, the elimination of redundancies across states and EPA divisions, and other advances. Obviously, layered or redundant systems are necessarily inefficient, costly, and limit the reach of existing resources. As discussions of cooperative federalism continue, any realignment of roles must be viewed against the backdrop of diminishing public resources for environmental protection and the increasing cost of labor-intensive regulatory engagement—trends that seem unlikely to reverse. Now more than ever, EPA's erstwhile watchwords of "cleaner, cheaper, smarter" resonate as a useful mantra.

Not only the states and EPA lose under the current conditions of conflict and uncertainty. As already noted, permitting disputes between federal and state regulators can hamstring businesses and delay or derail local economic development opportunities. Currently, many businesses see their biggest regulatory challenge as the delay and inefficiency resulting from layered or unpredictable decisionmaking processes. Issues include:

a) Inconsistent approaches produce uncertainty and disequilibrium.
b) Inconsistencies occur not just between different government levels, but also at the same level of government as a result of changes in administration that lead to policy adjustments.
c) For the broader business community, durable policy and long-term certainty are usually more valuable than reversible short-term policy gains.

Cognizant that certainty is indispensable to private industry, survey respondents noted various sources of uncertainty that bedevil companies under the current system. Companies often challenge the substance of regulations, but other regulatory frustrations can also kill projects and development plans. These include differing state and federal rule interpretations, undefined permitting time lines, and litigation that puts baseline expectations and operational assumptions in limbo.

Bearing in mind these and other conflicts and costs, both the ECOS CF2.0 principles and The Macbeth Dialogues aim to delineate the dimensions of a fundamentally more collaborative environmental system that advances public health and ecosystem protections while minimizing or eliminating unnecessary disputes.

SOME AREAS FOR POTENTIAL CONSENSUS

The Macbeth Dialogues suggest that it may be possible to arrive at consensus on at least the following points:

- The state-federal relationship is not a zero-sum game. It is not true that to have strong states, you need a weak federal government, or vice versa. Both need to be strong and

thoughtful, avoiding duplication but serving to reinforce the strengths of the other.

- As important as the federal/state relationship is in this area, cities and tribes need to be an increasingly vital part of the governance solution going forward.
- When interstate issues come into play, the federal government's interest in such matters, and need to play a role, is heightened. In general, state policymakers are less tolerant of the federal presence when matters involve pollution contained within their borders and localized problems, but they are more tolerant of federal authority in interstate pollution scenarios and where rational and efficient interstate commerce elevates the need for national uniformity.
- When downstream and downwind states' interests are harmed, the demand for federal intervention is perhaps the greatest. An expression of this notion is the Clean Air Act's "good neighbor" provision, which requires EPA and states to address interstate transport of air pollution that affects downwind states' ability to attain and maintain NAAQS.
- As a general matter, when it comes to interstate issues, more needs to be done to organize federal attention around airsheds and watersheds that cross state borders.
- The intersection of different national priorities—for example, the intersection between environment and civil rights or border relations or trade-sensitive matters—also provide a heightened basis for a federal presence.
- A greater federal role may also be warranted in circumstances where state authorities do not align with federal authorities—for example, as noted, many states lack criminal sanctions for environmental violations.
- Because states cannot easily replicate EPA's scientific and technical expertise, this should remain a core strength and role for EPA, and greater access to the Agency's technical support could help states fulfill their responsibilities. As stated in Principle 8 of the ECOS CF2.0 paper: "The federal government has well-developed capacity to keep abreast of emerging challenges and to research potentially successful technologies or remedies for current challenges that no single state has the capacity to replicate or replace."
- Businesses are not monolithic, and cooperative federalism should reflect varying market considerations and needs. Companies dependent upon, or tied to, the interstate movement of goods generally function better with national standards and consistency, whereas companies less sensitive to interstate requirements tend to function better with more state autonomy. Business affinity for federal uniformity or state autonomy may hinge in part on whether an environmental issue is place-based (e.g., an emitting factory in a fixed location) versus product-based (e.g., a chemical in a product) or transitory (e.g., aviation and railroad regulation).
- The states' request for a greater voice in the federal rulemaking and policy development process is reasonable and should be amenable to accommodation.
- If enforcement is used to advance policy, this should be done transparently, with the implications understood by both the regulated community and the public at large.
- Modern internal compliance management systems that apply best efforts to monitor and correct noncompliance should be encouraged and recognized by enforcement response policies.

DURABLE CHANGE: SOME ELI SUGGESTIONS

From the outset, the objective of CF2.0 and The Macbeth Dialogues has been to define environmental system reforms that can win broad support and will endure beyond the ups and downs of political administrations. Any such durable changes would have to help, not hinder, further progress toward the lasting goals of a clean and healthy environment. Bearing these purposes in mind, and drawing on the many excellent insights from diverse experts, ELI offers the suggestions in seven key areas. In so doing, we are not intimating that all Macbeth participants will readily align with these suggestions. We offer them in the spirit of shining a light on the path ahead.

1. Address the Whipsaw Effect

Implementation disputes between federal and state regulators not only create rifts between different government levels, but have other consequences, including forum-shopping by members of the regulated community looking for the most advantageous regulatory response. Forum-shopping can in turn serve to deepen the divide between federal and state regulators. But implementation disputes can also burden regulated entities caught in the crosswinds of government policy dissonance, called by some "the whipsaw effect." In the permitting context, this can create uncertainty about whether companies will receive permit approvals for projects that can be undertaken in an environmentally responsible way and generate important economic development and employment benefits. In the enforcement context, the whipsaw effect of government disagreements can negatively impact regulated entities by leading them into successive and expensive litigation processes that create unresolved liabilities with implications for reputational risk and financial reporting.

- A partial way to help remedy the adverse impacts of the whipsaw effect might be to create an ombudsperson role that companies caught in the middle of government disputes could invoke to broker disagreements. Another potentially helpful measure would be to direct the Inspector General community's attention toward poor implementation decisions to progressively shift the focus toward accountable government decisionmakers rather than putting the primary onus on private businesses pulled between government regulators. Some other countries, such as China, increasingly are taking an approach that treats enforcement lapses as a public integrity issue, such that an official who inappropriately fails to take enforcement action is seen as committing a dereliction of duty. Increasing focus on the legitimacy of the government official's decision—whether to laud or criticize the decision—may serve to diminish the dissonance for regulated entities as they navigate between the expectations of different levels of government.
- Another helpful addition would be the establishment of transparent deadlines for action or review, where such deadlines do not currently exist. It is difficult to create a pressurized setting for timely decisionmaking and/or dispute resolution in the absence of established time frames and clarity regarding what happens if those time frames are not met.

2. Pilot the Audit Concept First

While the CF2.0-proposed audit system may ultimately offer advantages over the current case-by-case oversight model, there would be value in testing the concept incrementally. To succeed

as a meaningful alternative to the current system, an audit system would need to enjoy public confidence, which is currently weak and needs to be nurtured and improved. Moving broadly to sole reliance on audits in the enforcement context, where judicial review is less present as a check on prosecutorial errors, would be especially challenging. For these reasons, oversight-by-audit might best be instituted by initially piloting the system in a few states to assess, gather hard facts, test, and adapt—and to win the public confidence. Once a proof of concept can be demonstrated through a transparent review of the pilot programs and their environmental implications, there may be a foundation for expanding the auditing system more broadly.

In reviewing pilot program results, the public, surrounding states, and the regulated community should be included to obtain the most diverse perspectives in evaluating the concept's success and illuminating ideas for improvement. Again, gaining public confidence needs to be seen as a key challenge and goal of such a pilot program.

Other matters to consider include:

- States should be required to show they have the appropriate resources and policies in place before they can qualify to run an audit pilot program.
- Given the significance of interstate impacts in evaluating the sufficiency of individual state programs, the involvement, in particular of downstream/downwind states in the audit of upstream/upwind states, could be serve as an important validator and builder of public confidence for the audit approach. As challenging as it might be to envision one state welcoming other states into such reviews, perhaps lessons can be taken from other cross-state evaluation models (*see following bullet regarding the dam safety audit program*). In any case, given the persistence of downwind/upwind and downstream/upstream state conflicts, interstate issues may require special handling and deeper deliberation. Will CF2.0 and an airshed/watershed approach necessarily entwine states more fully in each other's business, with EPA playing a stronger referee role?
- For some, the idea of an audit carries the negative connotation of a resource-intensive, formalistic process. This is, of course, one possible outcome, but a number of Macbeth participants argued strongly for a system that does not elevate process over substance and that efficiently deploys available expertise and taps validating perspectives. For example, one Macbeth participant suggested that the proposed audit system draw from the Association of State Dam Safety Officials' (ASDSO) "Peer Review Program for Dam Safety" model. The ASDSO peer review system—used by states, federal agencies, and dam-owning companies—evaluates an organization's dam safety program's mission, objectives, policies, and procedures and includes representatives from states other than the state under review as an important part of the review mechanism.[30] New Hampshire's dam safety program, for example, was reviewed through the ASDSO program, and New Hampshire Department of Environmental Services personnel have served as peer reviewers for other states.
- As the design of an audit system proceeds, careful and serious thought will be required to resolve major issues that could be lurking in the details. While some commenters believe that implementing an audit system will be uncomplicated, others believe that issues could prove so vexing as to impede meaningful advance. Important potential complications include:
    a) Retraining EPA staff to perform programmatic audits instead of pursuing their current

case-by-case approach to oversight. While commenters offered differing views on the significance of this skill shift, this is clearly not precisely the same function that relevant EPA staff are performing now.

b) Ensuring EPA retains residual capacity to take back state programs that fail under an audit system. While this may appear self-evident, it promises to be extremely challenging to accomplish. Even in EPA's most robust years, resource worries have made EPA reluctant to take back primary implementation duties from struggling states. Diminishing federal resources seem certain to intensify this reticence.

c) Defining "failure" of an audit by a state, reexamining the meaning and scope of delegation, and other definitional issues.

d) Existing delegation agreements should be supplemented, reformed, or supplanted, in the direction of work-sharing arrangements. Most program delegation agreements were written in a different era, are not reflective of current data and methods, and are not readily amenable to an audit approach.

3. Refine Enforcement

Enforcement is not in itself an environmental protection goal, but rather is a tool—and important one—for reaching the goal of compliance. There are, of course, other tools in the compliance toolkit that also enable compliance, including compliance assistance through education and information dissemination, private-sector environmental management and audit systems, transparency of and public access to compliance information, and the like. While governmental compliance assurance programs should be holistic in their focus, we are focused here principally on the tool of enforcement because of its significance to federal/state conflict. As discussed above, immediately adopting an audit approach as the primary oversight vehicle for enforcement presents special challenges, but current enforcement practices nevertheless could benefit from near-term reforms in several areas, including:

- Demarcating more clearly those matters in which unique federal interests warrant federal engagement or heightened oversight, such as:
    a) Matters that fall outside programs delegated to states that require direct federal implementation;
    b) Matters with clear interstate implications, such as (1) when one or more states' environmental impacts, such as air or water pollution, cross borders and affect downwind or downstream states, and (2) when states' unequal environmental standards create unfair competition for economic development with other states.
    c) Matters involving misconduct that qualifies as a federal crime.
    d) Matters involving federal civil rights.
- Modifying the federal engagement model to allow states the first option, for a limited time, to proceed with an enforcement action even in matters involving the kinds of unique federal interests outlined above, provided (1) the state has adequate baseline authority to substitute for EPA, and (2) the relevant state agency is not itself implicated as, for example, in the case of some civil rights violations.
- The flip side of delineating the areas where the federal government should stay actively involved is delineating areas where it should intervene less. Prime candidates for federal disengagement are matters that are inherently local or interstate in character and that

fall within the scope of states' delegated programs. EPA and other federal actors would, however, have to retain some residual capacity to intervene in environmental public health emergencies, such as the Flint, Michigan, drinking water crisis.

- To overcome the perception that enforcement has been used as a means to advance progressive policies, all enforcement settlements could, whether statutorily required or not, follow a transparent notice-and-comment procedure in which notices would be used to articulate the basis under existing law for all elements of relief and to indicate whether the relief has policy significance (e.g., advancing a collateral policy goal, like GHG emissions reductions, or demonstrating a new technology that may become a baseline expectation in future permits).
- The understanding of what constitutes "compliance" should be reexamined and perhaps recalibrated under a concept of "actionable noncompliance." Actionable noncompliance could serve to shift the threshold for enforcement intervention from an absolute compliance expectation to one that would allow certain types of exceedances to be timely self-corrected without enforcement implications. Absolute compliance, while a useful ideal, is often not achievable even with best efforts; accordingly, federal oversight systems should not be preoccupied with the assumption that it is possible. It is simply unrealistic to expect perfection at every regulated point in large integrated facilities and in multifaceted state programs. The actionable noncompliance concept could be constructed to give regulated entities credit for actions they take to prevent violations as well as actions they take to quickly correct violations that do occur, and compliance rates could be reported accordingly (i.e., according to rates of actionable noncompliance). This approach would acknowledge the prevalence of both new and sophisticated technologies to monitor compliance and the private sector's increasing use of proactive private governance mechanisms, often to go beyond baseline compliance measures.

4. Deploy Elevation Protocols

Because conflict between state and federal environmental regulators is pervasive and, in some cases, may be unavoidable given differing interests and priorities, any mechanism that would help to resolve conflicts before they escalate should be welcomed. Elevation or dispute resolution protocols are simple mechanisms that have been used beneficially in a variety of contexts, from elementary school classrooms to workplaces and even military conflict zones. In the EPA context, an elevation protocol has been in place for years in the federal facilities context, pursuant to which a federal agency in receipt of a RCRA compliance order can elevate the matter for a principal-to-principal meeting with the EPA Administrator.[31] A similar kind of mechanism allows for elevation of interagency disagreements that emerge in fashioning federal facilities cleanup agreements under CERCLA.[32] Because rigidity softens and flexibility increases en route to such encounters, an accommodation is usually worked out at lower levels, such that elevation all the way to a principals meeting with the Administrator has rarely happened. Perhaps, a protocol of this kind could be used in a more routine and structured way to resolve state and federal disagreements over permitting and enforcement decisions, also diminishing the whipsaw effect for the regulated community. For example, before EPA takes an adverse action or intervenes in a state action, an aggrieved state could be given the opportunity to discuss the matter at a high-level state/federal meeting, with appropriate exceptions for public health emergencies. Such protocols will work best if clear time lines are established for the elevation of disputes.

5. Provide Adequate Resources

Cooperative federalism envisions a realignment of the relationship between states and EPA in which states take on a greater responsibility for enforcement, permitting, and other functions. It does not envision diminishing the importance of clean air, land, and water but, rather, realigning responsibilities for achieving those goals. Financial and other resources should track such a realignment, providing states with more resources, not fewer, if their responsibilities are increasing. Likewise, EPA will continue to need adequate resources to provide national scientific research and standard-setting leadership and to address problems that remain within the federal government's purview and, as noted, there are concerns regarding whether EPA, in its already diminished state, is up to the task. In any case, the Trump Administration's repeated efforts to significantly cut both EPA's overall budget and state categorical grants are simply unworkable for cooperative federalism and must be reconsidered.

6. Engage Downwind/Downstream States

The impacts of pollution emitted by sources in upwind/upstream states on their downwind/downstream neighbors has long been a source of friction between EPA and states, some of whom have sued or threatened to sue the federal Agency for failing to require upwind/upstream state controls. This has also been an active area for citizen suits. Apart from federal/state conflicts, cross-border impacts are also a source of direct conflict between states, such as the friction between Maryland and Pennsylvania over responsibility for debris and pollutants that flow down the Susquehanna River into the Chesapeake Bay. With the aim of effectively taking on these and other similar issues, a formal structure could be created that would give downwind and downstream states a direct voice in upwind/upstream states' implementation decisions that may affect their neighbors. Positioning downwind/downstream states for more meaningful prior notice and comment on both permitting decisions and noncompliance problems could help reset the trigger for federal intervention in terms of prioritizing EPA involvement where interstate concerns have become manifest. Interstate concerns would in some circumstances no doubt reverse direction, with "upstream" states at times wanting a voice when their economic development is impacted by "downstream" states, as in the current dispute between Washington and the Rocky Mountain states over pipeline access to ports on the Columbia River. This concept would align with recognition by many participants in The Macbeth Dialogues that interstate conflicts would be an appropriate area in which EPA should play a continuing and even stronger role as broker.

7. Harness Private Environmental Governance and Technology Drivers

As described in previous sections of this report, many factors are motivating private businesses to enhance environmental performance, including the self-monitoring and self-correcting capabilities enabled by new technologies, globalized supply chain management pressures, and consumer and shareholder expectations. The emergence of effective private environmental governance as part of the overall environmental protection enterprise is a positive development that needs to be fostered and expanded. We may be failing to optimize the ingenuity and potential reach of private-sector initiatives because we lack safe harbors for good-faith efforts to innovate, which always carries some risk of errors that, through adaptive management, could be corrected. Also, we are likely not harnessing the full promise of new technologies in how we frame environmental requirements and approach compliance. This is partly because of where we are in the development curve for sensing

technologies and platforms for sharing the information they can generate. Currently, these technologies and platforms are largely ad hoc, and are insufficiently integrated, accessible, and systematic to provide a broadly accepted predicate for decisions. Leadership will be needed to overcome resistance to appropriate use of such data, and to address legal and policy barriers, if the potential contribution of emerging technology is to be fully realized.

Barriers to business innovation should likewise be removed, as in the case of sectors motivated to act because of reputational risk but held back because they fear making mistakes that could trigger enforcement actions. Among other benefits, fostering proactive private management could reduce the need for government responses, thereby freeing limited federal and state resources to focus on problematic issues and actors. Possibilities for promoting greater business environmental stewardship and advancing technology-based approaches include:

- Developing, as discussed above, an "actionable noncompliance" concept that would encourage and allow companies with modern environmental management systems to detect and correct violations without fearing an enforcement response. The concept could be limited to unintentional violations that do not present public health concerns or give a company significant economic advantage.
- Utilizing sophisticated new air monitoring networks capable of distinguishing between pass-through pollution from other sources and a facility's own emissions to allow the facility to be treated for compliance evaluation purposes as a whole based on emissions from that facility rather than on a point-by-point basis. This approach, which would give facilities much greater flexibility inside-the-fenceline, would likely require regulatory, if not statutory, change. But experimentation may be possible under the rubric of enforcement discretion. To win public support, the approach may also depend on enhanced transparency measures that can help assure downwind stakeholders that facility operations are indeed not contributing to any observed downwind phenomena. In limited fashion, determining compliance on a facilitywide basis has been used for years under the Clean Air Act via the concept of "bubbling." Technology may allow enlargement of this idea.

CONCLUSION

Many changes over recent years have brought the United States to a point where our environmental system may be ready for some fundamental realignments, including changes in states' capacity, technological capabilities, and business behavior and expectations. Amid such changes, the results of The Macbeth Dialogues underscore an overarching conclusion that may be obvious but is nevertheless worth stating: all parties will have to earn each other's trust if we are to adopt realignments that can move us beyond the continual conflicts that characterize today's system.

That sine qua non is made more difficult by recent attempts to dismantle and defund EPA programs, thereby fueling ever deeper mistrust of proposed reforms. State environmental commissioners have called for a new federal-state relationship, CF2.0. The Trump Administration has been receptive, but its efforts to cut EPA's budget in ways that would also inflict collateral damage on states has only created doubts. Reflective of this, one activist has warned that Americans "should be very worried that the basic human expectations of healthy air and safe water will quickly turn cloudy" if the Ad-

ministration's pledge to regulate through a truer form of cooperative federalism becomes a reality.[33]

Such worry is understandable—and was echoed by experts participating in The Macbeth Dialogues—but the discussion cannot end there. Rather, through the CF2.0 vision, state environmental commissioners have defined the problems as states see them, and have offered a framework of solutions for serious consideration. While states agree that national standards must be met, they believe they must have latitude in deciding how best to do the job, and in deciding priorities unique to their local conditions. The states acknowledge that trust cannot be assumed. That is why they have proposed an audit approach that they believe incorporates the principle of "trust but verify."

Demands for greater flexibility than EPA and even the laws have allowed until now are bolstered by the explosion of digital monitoring and other technologies that have empowered states, citizens, and regulated entities to gather data and communicate both acceptable and unacceptable environmental performance. Such technological empowerment is among the many factors that lend plausibility to claims that the United States is, indeed, ready for a more mature form of cooperative federalism for states and perhaps greater public-private parallelism, working more cooperatively with companies that are leading rather than following.

This report has detailed ELI's multi-pronged efforts to delve deeply into these questions, seeking to better understand the problems and prospects for implementing proposed solutions. As shown through the activities ELI and our partners have pursued under The Macbeth Dialogues, the ECOS CF2.0 paper raises issues that are necessary, if sometime difficult, to discuss. Gains in environmental protection realized over the past decades—often under highly contentious conditions—are a precious accomplishment that Americans citizens rightly cherish and other nations seek to match. But can we preserve our gains and find ways to even more effectively, and cost effectively, make progress in restoring damaged ecosystems and confronting both persistent and emerging complex environmental problems? As the suggestions ELI put forth in this report's final section convey, we think some changes are worth taking to the next stage through pilot programs and other steps—changes that we believe could help overcome the mistrust and political swings that for too long have shadowed the crucial work of protecting our environment.

We no longer have Angus Macbeth's wise and vibrant presence to inform the United States' environmental protection system as it searches for a new equilibrium. But inspired by Angus' caring, problem-solving spirit, we can have confidence that thoughtful dialogue about the implications of CF2.0, private environmental governance, the technology revolution, and other modern developments are already helping to define effective, durable change. No one is under the illusion that change will occur quickly or painlessly, but with sufficiently clear values and thinking, further progress is possible.

We thank all those who have contributed to this vital effort, and welcome continued discussion on this and other topics as ELI works to bring expertise, facts, and reasoned analysis to the shaping of the next generation of effective environmental protection.

Endnotes

1. Steve Ramsey is an environmental lawyer and was a colleague of Angus Macbeth for more than 35 years, first at the U.S. Department of Justice (DOJ) and then at Sidley & Austin. He was the first Chief of the Environmental Enforcement Section at DOJ, where he worked for Mr. Macbeth, was a partner at Sidley & Austin from 1985-90, and then Vice President of Corporate Environmental Programs for General Electric from 1900-2008.
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APPENDIX 1: Summary of Macbeth Chatham House Rules Gathering

Note: The summary below reflects some of key observations made during the Macbeth Dialogues Chatham House rules gathering on July 18, 2017. These points do not necessarily reflect consensus among all participants, but may be suggestive of areas where cross-sectoral consensus is possible. Nothing here represents official positions of the organizers' or participants' organizations.

- Increasingly, environmental protection should move from a top-down model to an "environmental protection enterprise," in which adaptive management is a driving consideration and all levels of government, the private sector, and the public have key roles to play, and sustainability that enhances and balances environmental, social, and economic factors is an animating objective.
- Federal agencies, including EPA, in partnership with the states, should continue to develop national standards. EPA and other federal agencies also have key roles to play in national science and technology leadership, implementation of non-delegated (or non-delegable) programs, and overseeing the delegation of programs to states.
- Generally, states should have implementation primacy for purposes of delegated programs, and as much flexibility as law, public acceptance, and the need for uniformity to support interstate commerce, will allow.
    - States should generally have the flexibility to establish standards that are more stringent than minimum national standards, except where uniformity is essential to support interstate commerce.
- Interstate dimensions still matter in the federal/state equation and warrant heightened federal attention.
    - Interstate pollution scenarios still often need a federal broker.
    - Efficiency and rationality in interstate commerce are often served by a uniform national approach.
- There continues to be a need for a federal presence to ensure national consistency as a means of providing fairness among states, a level competitive playing field for businesses, and a coherent platform for interstate projects.
    - Regulatory clarity and consistency tends to improve compliance.
- A system that allows for adaptive management should help in bridging national consistency and local flexibility.
- Since the 1970s, government and industry have evolved significantly, but the basic mechanics of the environmental accountability system have not fully adapted to these changes.
    - EPA was built on a law enforcement model, which has played an important role in creating the culture of environmental compliance that pervades most sectors today. The enforcement stick is still important, but its operation needs to adapt to current circumstances.
    - State environmental agencies generally have more expertise and capacity than several decades ago, although capacity remains limited in some states.
    - Most industries are far more sophisticated in environmental protection measures than they were several decades ago.
        - » Real-time diagnostics and other compliance-relevant technologies are increasingly common for equipment.
        - » Compliance is an internal imperative for most businesses, and large companies generally have sophisticated compliance management systems, such that noncompliance scenarios are now more commonly a function of incidental lapse rather than

conscious choices not to invest in pollution control.
        - » Smaller businesses without the bandwidth to maintain environmental staff continue to face a sophistication differential when it comes to complying with environmental regulation.
        - » Companies committed to sustainability ideals (for risk management, footprint reduction, increased efficiency, etc.) generally will also be compliance-oriented, since sustainability often involves beyond-compliance behaviors.
        - » Private environmental governance mechanisms are increasingly driving compliance and beyond-compliance behaviors without the intervening hand of government.
- We have arrived at a point when environmentally protective actions are occurring as a matter of course in much of the economy, but we still work within a regulatory framework based on anticipated failure. This stretches thin the resources available to do this work.
- The current system was built at a time of low confidence in government function and was designed to include redundancy, in other words backup elements included in anticipation of failure of the primary element. This layered approach to environmental protection is expensive to operate, serves as a significant source of uncertainty and conflict, and is not fully aligned with current circumstances and capacities.
- When considering removal of redundancies, the risk or consequence of failure of the primary element should factor prominently in the calculation. For circumstances that could lead to irreparable or costly consequences, redundancies may be more merited than for those that do not present such risks.
- There is tension between national consistency and local flexibility.
    - o To date, the system has on the whole been intolerant of state flexibility because of concerns about consistency; the question is whether tolerance can shift in the direction of greater implementation flexibility.
    - o It will be important to define and demonstrate what constitutes "flexibility." For example, does it include:
        - » The relative priority of compliance assistance versus enforcement?
        - » How a state addresses noncompliance problems when they emerge?
        - » Does it apply to formulation of permit terms, including pollution control technologies and compliance schedules?
        - » Is there flexibility to focus on performance-based outcomes rather than process controls?
    - o Can flexibility be expressed in a way that does not lead to 50 fundamentally different approaches?
    - o There is flexibility that has not been used, and in important areas.
    - o Technology, and the massive amounts of environmental quality data that it will bring into view, may define tolerance limits for flexibility (i.e., if data suggests a problem, expressing flexibility may become more difficult).
- Where states have delegated authority, the federal government should defer to the states, even where there is federal authority to act (consistent with the principle of subsidiarity).
- The current oversight construct may be replaceable with a well-designed audit approach.
    - o To get out of the business of routine case-by-case review and intervention, EPA would need a viable alternative for satisfying its oversight responsibilities; an audit approach based on programmatic outcomes could be the vehicle.
    - o A matter-by-matter oversight approach does not always lead to consistency.
    - o The current oversight process is impenetrable to the public. An organized, periodic, programmatic audit in which the public is involved can demystify the system for the public and put pressure on both federal and state agencies to get it right.

    - Involving the public in the design of the audit process will be important in building confidence in a model that steps away from more routine federal intervention.
    - An auditing approach should, besides reviewing state performance, also allow for evaluation of EPA performance, particularly with respect to undelegated programs.
    - An audit system should prove more amenable to adaptive management.
- Under an audit system, the circumstances under which direct federal intervention would remain appropriate must be clearly defined; otherwise, the exception could swallow the rule. Among the areas where clarification is needed:
    - What constitutes "failure" by a state?
    - Whether interstate or multi-jurisdictional dimensions should justify a greater federal presence.
    - Whether nondelegable authorities that overlap with delegable authorities (e.g., criminal prosecutions, civil rights claims) warrant federal intervention.
    - Whether resources of national interest (with respect to which a greater federal role is sought) could be designated upfront, perhaps following the ARNI (Aquatic Resource of National Importance) model.
- Existing delegation agreements should be supplemented, reformed, or supplanted, in the direction of work-sharing arrangements.
    - Most program delegation agreements were written in a different era and are not reflective of current data and methods. As such, they make the federal-state relationship more difficult, rather than less.
    - Trust issues and skepticism about the relevance of these agreements may complicate efforts to redo them.
- The meaning and scope of delegation should be reexamined. Under current delegation arrangements, states must demonstrate a base level of ability to act on each element of a program, and federal backup authority is retained, at least in theory, for each delegated element. Are all program elements equal for purposes of reserved federal authority, or are some elements more worthy of independence and deference than others?
- EPA has been the gorilla in the closet (i.e., the dynamic that drives accountability), but this may, and perhaps should, be changing.
    - The public and market forces may be the new "gorillas in the closet"; this should influence the shape of the government role going forward.
        - The public has an increasingly large role to play, particularly as environmental data proliferate, but to expect the public to be the primary gorilla would be unduly burdensome in terms of time and resources.
            - When the public is involved in an issue, it usually is because the impacts are palpable and have come to a head. It is difficult to get the public involved in the more routine matters, such as permit review.
        - Private environmental governance mechanisms are increasingly driving compliance and beyond-compliance behaviors without the intervening hand of government.
    - Key questions when considering whether or how to affect the gorilla in the closet include:
        - Who is the target of the gorilla? Industry? Government implementers? Both?
        - How is the gorilla activated?
        - What would it mean if the gorilla were no longer in the closet; would any states make different decisions?
- Absolute compliance, while a useful ideal, is usually not achievable even with best efforts; accordingly, federal oversight systems should not be preoccupied with the assumption that it is possible.
    - It is unrealistic to expect perfection at every regulated point in large integrated facilities and in multifaceted state programs.

  - Many instances of noncompliance in the modern era are relatively minor exceptions that are identified by state of the art compliance management systems and promptly corrected under these same systems.
  - Most friction in the state/federal enforcement relationship involves disagreements over penalties (as opposed to corrective action) and federal intervention based on such disagreements.
  - The primary focus should not be on the number of actions taken or penalties assessed, but on whether environmental problems are being corrected or prevented. Everyone—government, industry, and the public—cares or should care most about environmental and public health results.
  - The management of discretion—the judging what is important and what is not—is key in navigating enforcement decisionmaking.
- Government needs to prepare for, and be calibrated to, an era of involuntary data overload.
  - Educating the public as they use this information will be important to their meaningful involvement in the process and to solution formation; public education in this sphere can be expected to be a major governmental challenge going forward.
- Public trust and confidence will ultimately determine the workability of any changes to the system of federal oversight of state implementation.
  - Public involvement and transparency will affect the level of public trust.
  - Public trust in the decisions of federal and state agencies is also helpful to regulated entities who operate under authorizations granted by these agencies. When there is public trust, environmental permits and the so-called social license to operate become coextensive.
- If we are going to change this system, funding needs to be adequate to support both the transition to a new system and the new system itself.
  - The reform process should be genuinely inclusive of the public and regulated community.
  - Coverage of the indirect costs of a new system (training of staff, infrastructure, monitoring, public communication, etc.) will be critical, but are often the kinds of costs cut first in difficult budget times.
- While these Dialogues are focused principally on the federal/state relationship, cities and tribes need to be part of the governance solution going forward.
- Practically speaking, it might facilitate change better to pick a small number of reforms on which to focus, rather than trying to address all cooperative federalism challenges at once.
- This is a never-ending conversation, and every generation needs to look freshly at the question of how to optimize the governance formula so that elements align in common purpose, rather than fracture through conflict.

APPENDIX 2: Summarized Results of the Macbeth Survey

In the fall of 2017, the Environmental Law Institute distributed a digital survey to hundreds of individuals engaged in the field of environmental law and policy. Respondents, the vast majority of whom reported over 20 years of practice in the field, reflected experience from a wide range of perspectives, from the federal government, to state government, to consulting and the private practice of law, to nonprofits, to in-house counsel and representing trade groups. The responses were too voluminous to include in full, but we are providing below representative responses that reflect the range of views and cover most of the thoughts and opinions that were shared.

Question 1: What is the most significant point of friction in the state-federal environmental regulatory relationship as it exists today?

- The lack of funding and disputes over who should pay
- The politicization of environmental protection
- The lack of trust between EPA and state environmental agencies
- Disagreement on how to approach specific issues
- Differences in priorities and missions between different regions and between EPA and states
- Differences in interpretation of who has what responsibilities under various statutes
- Federal preemption and overreach
- The lack of federal understanding about the nuances of local contexts
- The lack of clarity from EPA in how to comply with and properly implement federal laws
- The inconsistency in interpretations and priorities among the EPA regions
- Partisan loyalties often getting in the way of healthy cooperation and causing actors to refuse to compromise
- Federal strictness and lack of leniency for companies who are making good-faith efforts to comply with regulations
- The influence of third parties on environmental protection activities
- Regulatory rollbacks
- Climate change and the regulation of carbon

Question 2: To what extent does EPA enforcement policy drive state-federal disagreement and conflict?

- It is the primary cause of disagreement and conflict
- To a very substantial extent; one of the biggest sources of friction is that states often lack the resources to adequately implement and enforce federal environmental laws, frequently resulting in widespread noncompliance, which understandably frustrates EPA
- It has always been a point of friction, though many states welcome some federal backup even though they cannot say so publicly
- It certainly is a factor as between some states and some EPA regions or Headquarters
- It plays a significant role in stifling the ability of states to deal fairly with the regulated community rather than being forced to conform to an overly rigid formulaic approach
- It is not much of a major driver
- It may be a contributing factor but has been less of a part of the conflict than in the past
- Overall, it has a minor effect because EPA does not frequently overfile or involve itself in enforcement actions, but in the cases where EPA does overfile, the friction usually is inherent since EPA is viewing the state to not be doing what it is required to do

- Conflict is driven more by antiregulatory sentiment than by particular policies
- It depends on the resource/program

What policies (if any) would reduce the tension if they were more flexible?

- The more EPA confers with states in the development of regulations and policies, the more likely it will be that the states will be committed to their enforcement
- Better clarifying who has which roles and responsibilities under which situations; vastly improving the candor, completeness, and timeliness of communications between and among states, EPA, and DOJ; and then ensuring that existing policies are revised, or new policies are drafted, to effectuate the desired cultural change would reduce the tension; one-off fixes of individual policies will not provide an effective, long-term solution
- A two-tiered enforcement policy: one is the same as today and the other precludes overfiling by the federal government, giving certainty to state decisions and removing the feeling that EPA is always looking over the states' shoulder, with EPA using more regular primary enforcement delegation reviews to determine if the state is up to such treatment
- Clear direction from EPA Headquarters to the regions with respect to consistent enforcement and priorities is needed
- More dialogue with all states in each region, including other key stakeholders would bring transparency to enforcement
- One thing that might help in some cases is for EPA to look for ways to support state requests for funding and human resources from their legislatures
- The federal government already defers to state action in many minor cases and could do so in more cases
- Better mechanisms for informal dispute resolution between the states and EPA would reduce conflict when there are disagreements
- Less emphasis on punishment and more on fixing compliance issues would help
- Co-locating EPA staff and state regulatory staff may improve relationships and make implementation more efficient
- Earlier coordination, cooperation would reduce tensions
- Recognition of local and regional differences would help

<u>Question 3</u>: What state practices (if any) create or reduce conflict?

Create conflict:

- Insufficient funding
- Uneven/lax enforcement
- Disagreements over priorities
- Setting unrealistic time frames/schedules
- State regulations or guidance that deviate from federal law or create ambiguities
- Neighboring states pursue differing policies for criteria, and when the impacts from actions in one state are felt in another state
- Antiregulatory sentiment, in particular, court challenges of regulation by state attorneys general
- "Red" states pursuing conservative environmental initiatives during the Obama era, and "blue" states pursuing progressive environmental initiatives during the Trump era

Reduce conflict:

- Open communication
- Honest and confidential communication
- Adequate staffing and resources at state agencies

- Investment in state staff to implement and take ownership of regulatory programs
- Being proactive and transparent
- Early and frequent inclusion of community input, beyond notice-and-comment requirements
- Adaptive planning and rigorous state regulation reduce the problem of regulatory uncertainty by getting ahead of federal regulators
- States' self-auditing and reporting rules that decrease enforcement exposure
- Enforcing based on patterns rather than a slip-up
- Working with federal agencies on large issues or projects

Question 4: What issues in the state-federal relationship present concerns with predictability and timeliness that may affect business activity?

- Delays in approval and appeals, both administrative and judicial
- A lack of time lines in reviews
- Understaffing at both the federal and state level
- Reduced funding at the state level and declining federal support for state programs results in long permit times as well as reduced and more inconsistent enforcement
- Lack of communication and coordination, both between the states and federal agencies and with the public
- Differing priorities, schedules, and interpretations of law
- Federal review and comment after the state process is nearly complete
- Variation from region to region and program to program in the EPA review of draft state permits under delegated programs
- Lack of clarity regarding who is in charge when responsibilities overlap or are duplicative
- Rapid shifts in the focus, mission, and roles of the state and federal agencies reduce predictability
- The potential for EPA to override a state permitting decision creates uncertainty
- Legal uncertainty, both in the sense of waiting for a decision or for a resolution to circuit splits
- Poor consideration of local concerns
- EPA's inability to standardize CERCLA remedies
- State challenges to federal environmental regulations creates uncertainty

Question 5: Below are some of the assumptions regarding state-federal relations on which federal environmental laws and the systems that implement them were predicated. Please mark which (if any) you believe are no longer valid.

Without federal oversight, states may relax environmental standards as a means of attracting or retaining industry.

40 percent of respondents said this statement is no longer valid

State consistency in implementation decisions is important to ensure fairness as between states and a level competitive playing field for businesses.

21 percent of respondents said this statement is no longer valid

The threat of federal intervention is needed as a rationale or justification for states to take tough action.

53 percent of respondents said this statement is no longer valid

Absolute compliance with regulatory requirements is possible with the requisite level of intention and investment by the regulated community.

58 percent of respondents said this statement is no longer valid

Please describe other assumptions that you think are important and still relevant.

- The majority of American people want clean air and water and a healthy and safe environment, and are willing to support efforts to accomplish these goals with their tax dollars
- A partnership between the federal and state governments and agencies is the most effective and politically acceptable way to implement environmental laws
- States are generally better able to develop regulatory processes that fit state conditions and resources than are federal agencies
- States have specific and unique environmental interests that are not adequately addressed by federal regulation
- State implementation of federal programs can save federal resources and result in experimentation by the states that can lead to more effective and efficient outcomes
- Without adequate federal funding, states will be unable to adequately fulfill their obligations under delegated and other federal environmental programs
- Consistency is an absolute in regulatory interpretation, but enforcement necessarily involves case-specific discretion
- Certain environmental issues are better addressed at the regional or watershed level, and multi-state entities should be encouraged and empowered in these cases
- Scientific research is best handled by centralized analysts and researchers
- Protection of the natural environment is critical for a healthy life for people, wildlife conservation, and a solid foundation for economic success

<u>Question 6</u>: A suggestion of the Environmental Council of the States' Cooperative Federalism 2.0 is for the EPA to assess state implementation performance through programmatic audits rather than through case-by-case review.

a. **Do you think that this structure would work in practice? Why or why not?**

Yes/Conditionally (56% of responses)

- Yes, a programmatic audit can be holistic, can evaluate many factors, and is far more likely to yield an evaluation that is complete and more accurate than case-by-case reviews
- Yes, if there is political will to execute it
- Yes, especially if the audits receive high-level managerial commitment of resources and follow-through on discovered issues
- Yes, so long as the audit is rigorous, results are public, and there is an opportunity for public comment on performance strengths and weaknesses
- Yes, provided that data indicative of overall performance (backlogs, compliance percentage, etc.) are provided for comparison with program policy and procedure on a broader scale
- Yes, as long as EPA can take an "adaptive management" approach to the program, making adjustments if environmental targets are not met, and states must satisfy prerequisites that ensure dedication to enforcement, such as strong conflict of interest/ethics requirements for staff and proven investment in the enforcement program, including sufficient staff
- Yes, audits can work to address deficiencies without destroying cooperation; case-by-case review need not be eliminated among honest participants, but the standard of review in those cases should allow EPA intervention or disruption of state prerogatives only in cases of clear violations of law, not differences in judgment on policy or the facts

- It probably would be more efficient and cost effective and provide an opportunity to correct systemic problems
- Audits are only as good as the targets are clear; to work in practice, clear performance targets and measurable results would be needed
- It could work if the expected outcomes are realistic and the motivation is improvement and not merely finding fault
- Effectiveness would depend on the diligence of the EPA staff assigned to the tasks
- It could work only if the auditors were free to choose which cases to audit rather than being tied to a random selection

No/Not Solely (44% of responses)
- No, because audits alone will not provide adequate information to accurately assess state performance
- No, since any programmatic audit requires a statistically significant number of case reviews
- No, because the federal government likely will not invest in the appropriate audit systems, training, and personnel resources to effectively implement programmatic audits
- It would not work as an absolute replacement for the ability of EPA to overfile or to otherwise engage in cases where it believes a state is taking an approach that is inconsistent with the law; an audit process cannot reverse a really bad decision by a state
- No, because auditors would become tainted to go light on deficient states, as has been the case with the mine safety program, unless brought in from outside the region
- Case-by-case review is the only way to ensure compliance and, in particular, avoid favoritism for certain powerful parties
- Implementation is at the project level, so if the goal is to assess actual compliance, one must look at individual cases

b. **Should the public be involved in such an audit process? If so, how?**

Yes (83% of responses)
- Yes, a member of the public should be on any audit team
- Yes, through multisector advisory groups
- Yes, the public should have an opportunity to comment on a draft audit report
- Yes, the public ideally would have an opportunity to comment on/propose issues to address
- Yes, through active outreach at a local level, not just publication in the *Federal Register*
- Yes, the public should be given open online access to relevant, site-specific, and timely information as well as an opportunity to weigh in
- The public should have a role in the creation and maintenance of the audit framework
- Of equal or greater value would be the inclusion of others states in each review team, so that this develops as a form of peer review in which there is far greater transparency among states as to what is being done in each state
- The audit should constitute final agency action, with a right to challenge by the public
- If the audits result in regulatory reform, then the public should be given an opportunity to comment on options

No (17% of responses)
- No, external involvement would unduly politicize the process, so audits should be entirely internal and involve only the state and federal players
- No, since the public generally lacks the expertise to engage on these questions in a meaningful way, so public involvement would more likely hinder than help the process

- No, because the interested members of the public that might participate will only be those who have an issue with how the state handled a situation
- The public should be advised of the nature and purpose of the audit, and audit protocols, checklists, and final reports should be made public, but any effort to involve members of the public in carrying out an audit is likely to complicate the process, become unmanageable where confidential business information is involved, and impair the effectiveness of the auditors; efforts to involve members of the public in the conduct of audits have occasionally been tried but have not been very productive or successful
- Public notice and comment after a decision is made is the right place for public review
- There are numerous opportunities for public input and even litigation where the effect (permits, etc.) and effectiveness of state programs or the results of those programs are concerned without requiring an audit program to involve public participation

c. **The resources (personnel and systems) needed to run an audit program like this may be different from the resources needed for investigating and prosecuting cases. Would this complicate movement to an audit system? If so, how might such complications be overcome?**

Yes (70% of responses):
- Shift limited resources
- Retrain staff; If there is less case-by-case involvement, there should be opportunity for some staff to move to an audit-based oversight process
- Move the audit out of an enforcement office and potentially invite trusted third parties as aides to the discussion
- Audits might be initially coordinated by consultants, establishing protocols that can be moved to agency personnel
- Use a cross-section of technical experts from various industries to help, and make it peer-reviewed to prevent bias
- Establish new and appropriate methods and norms for an audit unit early in its formation
- Provide a framework for what is to be audited ahead of time so states can prepare responses, and then meetings could be set up to go over red flags or do a deeper dive
- State pilot programs or regional EPA pilot program
- Use the expertise of experienced auditors
- Acquire new audit systems and train personnel with the requisite experience
- Legislation to fund the program could specify and the resources needed for the program
- Dedicate penalty money
- Potentially sell to permit holders the benefit of more timely service
- Some mechanism for excluding individual cases that are under investigation would be needed, as well as some sort of wall between the auditors and the investigators
- Much of this type of programmatic review is already happening, so while a shift to greater reliance on audits might require more resources, it likely will not require resources of a significantly different kind

No (30% of responses):
- It would require fewer resources in the long term
- It should not be more complicated than doing a thorough case-by-case review, but it will require more upfront preparation in terms of templates for good enforcement against which to measure agency performance
- If you are considering federal audits as a replacement for federal investigation and prosecution, then this would be very complicated, but these can be two separate efforts and do not need to complicate each other

- An audit program is the first step in a compliance process, and findings from the audit feed the investigation and ultimate prosecution, so there is no conflict
- Federal staffs already are divided between enforcement and compliance-monitoring

d. **Once delegated, the EPA has (for political and resource reasons) rarely withdrawn delegation. If program withdrawal remains impracticable as a response to a bad audit, what other responses would be appropriate to ensure accountability under an audit system?**

- Public accountability, peer pressure, and benchmarking for the poorer performers through publishing results of the audits conducted for all 50 states
- Reducing financial support from the federal government (which could be counterproductive where resource shortages are a significant cause of the adverse audit finding)
- Placing additional conditions on federal support
- Fines
- An adverse audit outcome could adjust the frequency of review or the standard of review by EPA for state actions
- A two-tier approach of: (1) good audit, EPA backs off; and (2) questionable audit, status quo
- Providing technical assistance
- Embedding an EPA employee within the state agency could provide constructive guidance until compliance approves
- Overfiling
- Consent decrees that put the state on a corrective path
- Citizen and NGO action in the courts and in the media
- A delegated program could be put on probation and subjected to remedial oversight
- Delegation could be withdrawn for just select portions of a program
- Federalization of particular permits
- Additional, federally implemented and enforced restrictions on regulated entities in the state so that they will pressure the state government to do the right thing

e. **Cooperative Federalism 2.0 posits that federal enforcement intervention in delegated states should occur only when "particular circumstances compel federal action". What in your view would constitute "particular circumstances [that] compel federal action"?**

- Complete incompetence or corruption at the highest level
- Chronic and systemic abuse of enforcement discretion
- Consistent and ongoing missing of programmatic targets and benchmarks
- Consistently failing to act
- Actions inconsistent with the terms of a delegated program
- Consistently bad performance metrics resulting in real environmental damage
- Woefully understaffed and underfunded programs
- Failure to communicate compliance information
- Failure to follow audit corrective actions
- Flagrant noncompliance
- Gross negligence or disregard for public safety and no action taken by state
- Failure to act in response to a violation resulting in significant harm to person or property
- A blatant example of favoritism or a general practice of light or nonenforcement
- Noncompliance with permit conditions or any other standard
- When significant federal interests are implicated
- When the impact of the violation crosses state lines and impacts multiple states

Which level of government should determine whether those circumstances are present?

- The federal government
- EPA
- The EPA Administrator
- At the Assistant Administrator level
- Independent Inspectors General
- Either the federal or state agencies could invoke enforcement
- A federal-state cooperative decision
- The judiciary
- A neutral body—a bipartisan, congressional body or a quasi-judicial body
- Trained, non-political personnel
- Local, state, and federal entities should all be able to petition for review

Question 7: Should government place more reliance on emerging drivers of environmental performance like private environmental governance (e.g., cutting-edge compliance and supply chain management systems), allowing government resources to be redirected to where business is not taking care of business? If so, how?

No (42% of responses):

- No, the government is the appropriate actor to direct environmental compliance and overall governance
- Private governance without the realistic prospect of audits, adverse publicity, citizen and NGO action, and judicial review will not be adequate
- It is not particularly feasible
- No, business is not allowed to be altruistic, unless the shareholders allow it, or it will assist in increasing the bottom line in the future; "business will not 'take care of [their environmental obligations] business'" unless driven by outside forces, mostly enforcement
- No, because "emerging drivers of environmental performance" can be transitory
- Not yet; the playing field is too uneven for consistent treatment between businesses along the coasts and large cities and those in the heartland and lower population density areas

Yes (34% of responses):

- Yes; today sustainability is an expected business practice norm, with increasing transparency, social media, and companies being rated all the time, market forces should ensure most businesses take care of business
- Yes, through the programmatic audit concept and through model certification processes; this process should be focused on industries with characteristics amenable to private governance (i.e., industries where tremendous value is placed on brand rather than extractive industries with little public interface)
- Yes; compliance with, or certification of compliance with, privately developed standards, should serve as the basis for limited inspections
- Yes, but some type of third-party neutral entity will need to oversee private environmental governance, data quality, etc.
- Yes; such private-sector drivers should be weighed in developing risk analyses, which, in turn, should be used to guide the allocation of resources
- Yes, but not as a substitute for traditional systems of environmental governance, which will have to be robust to be effective
- Yes, but many of the private environmental governance systems are a response to not wanting to deal with government systems, so they might not occur without governmental oversight

Maybe/to some extent (24% of responses):

- Not as a substitute, but it can supplement via resuscitation of self-disclosure programs, third-party certification, and compliance history measures tied to lessened inspection and disclosure obligations
- Maybe; evolving systems are needed to keep pace with changes in the regulated community (technology, globalization, environmental impacts), and command-and-control programs are needed to ensure no backsliding
- It could work in some cases
- Where the emerging drivers are dealing with emerging issues, they may justify government prioritizing other issues; where emerging drivers improve performance in established areas of environmental compliance, the priorities of government enforcers will change by the effect of supply and demand, so no discreet change in focus or direction would be needed
- Theoretically, yes, but the government is not very up-to-date on EHS management systems, so it would take a major effort for them to have an effective role in evaluating those systems
- There would have to be standards and a legislative exemption process
- Many "conformance" audits have failed to improve or enhance compliance; as pedestrian as it sounds, task tracking is likely to be more effective for the majority of facilities/companies

Question 8: Should federal intervention be limited to circumstances that are "high risk" in terms of environmental or public health considerations?

No (66% of responses):

- High-risk situations may be prioritized, but federal intervention should not be limited to those circumstances
- "High risk" is too high a standard; lower levels of risk may be important especially when cumulative impacts are considered
- No; there are a lot of low-risk, long-term problems that are given insufficient attention
- No; the federal government should be able to operate on the national or interstate level on lower risk, but very sweeping problems
- No; problems are more easily and less expensively resolved before they become "high risk"
- In addition to "high-risk" situations, cases where there is a major violation of legal requirements should also be eligible for federal intervention
- No; consistent patterns of failing to meet federal standards should trigger intervention
- No; the allocation of resources needs to be driven toward risk levels (in terms of prevalence, consequence, and probability) and effectiveness of risk management strategies (both known strategies and those that are under development or even in the exploratory stage)
- No, because in many instances states lack the resources to address even the lower risk situations, but it would make sense for EPA to first ask a state if it plans to address a particular situation before EPA steps in to do the task
- Not necessarily, precedent-setting actions are also important

Yes (20% of responses):

- Yes; prioritization is needed to contain, reduce costs
- Certainly, when that risk is real and not speculative and the impacted resources will not be isolated but create a cascading effect across a region, particularly across states
- States are often the better option, even for "high-risk" matters—the better question is whether the states are able to adequately enforce a particular matter or set of matters

Maybe/to some extent (14% of responses):
- It depends on the definition of "high risk"
- Not necessarily, if there are circumstances affecting international boundaries, federal territorial waters or multiple states
- Usually, but not always; in some cases, regulated entities are performing badly in multiple states and should be required to upgrade performance across the board even if some facilities have less significant impacts

Question 9: If the federal government takes a step back,

a. **Can or should citizen enforcement become a more important check on the adequacy of individual state enforcement actions?**

Yes (59% of responses):
- If the federal government continues to step back, citizen enforcement will have to increase
- Definitely, although, the mechanism for citizens to become involved in a state proceeding is arcane and costly
- Yes, given adequate training for citizen monitoring and good QA/QC oversight
- Citizen suits are a vital part of the compliance assurance process, and they should be strengthened rather than weakened
- There could be greater citizen involvement in the criminal context, as complainants, witnesses, and victims seeking to impose criminal penalties on perpetrators
- Yes; and this likely would lead industry to plead for more state enforcement cases, to deal with a single, and likely more consistent, enforcement perspective, philosophy, and approach

No (27% of responses):
- No; the idea is not to replace oversight with oversight, particularly by an entity not associated with agents of the elected, but the existing avenues for citizen enforcement should still be fully available
- Citizen suits are not driven by policy concerns in the way government suits are
- No; citizen enforcement is haphazard at best
- No; citizen plaintiffs have not shown interest in the more basic work of compliance and enforcement
- No; citizens can bring state action concerns to the media, state government leadership, and environmental NGOs to investigate and press for action, but most citizens do not have the expertise to make these decisions
- No; citizen groups are poorly equipped to fill the enforcement gap left behind by the federal government—they often do a poor job of protecting the interests of low-income and minority communities and tend to target high-value, prominent targets

Maybe/to some extent (14% of responses):
- It would depend on the knowledge, experience, and intentions of the citizen
- Possibly, but the recovery of fees in citizen suits must require litigation to judgment
- Citizen suits would become more important, but they cannot adequately replace the authority and funding of federal enforcement
- It is unlikely that adequate NGO funding is available for this role

b. **Can or should citizen challenges be seen as a more important check on the adequacy of individual state permit actions?**

Yes (48% of responses):
- Yes, if the individual has standing in the case; one needs to guard against nuisance challenges not related to the permit or the pending action
- Yes, particularly if state law allows for the recovery of costs by the winning side
- Yes, the public notice periods should be a prime time for calling out state agencies on issues that have been left unaddressed by the permits; the response to the public should be a key consideration in EPA oversight of those permits

No (31% of responses):
- No; the state should be the primary enforcement agency
- Citizen suits are a backstop, not a part of the main enforcement scheme
- Current citizen suit empowerment is adequate
- Citizen groups are not a viable replacement for states that fail to enforce their environmental laws, as they do not have the resources or authority to inspect facilities or obtain documents; they also have absolutely no power to criminally prosecute, and courts do not afford citizens the same respect as state and federal sovereigns
- Citizen enforcement leads to a less democratic method of enforcement
- An organized system of scientific cross-checks would be better and less random

Maybe/to some extent (21% of responses):
- It is not more important than other remedies, just another tool in the toolbox for ensuring appropriate levels of decisionmaking oversight
- The participation of citizen groups can keep agencies "honest" but they should not be allowed to supplant the agencies, or to become a second bite at the apple
- Yes, but only if the quality of citizen data can be demonstrated and the level of uncertainty found acceptable for decisionmaking

c. **Are existing mechanisms adequate to contend with good neighbor requirements (downstream and down-wind states dealing with pollution from upstream/upwind states), particularly in the absence of federal intervention?**

No (73% of responses):
- No; federal oversight often ensures that such considerations are at least taken into account
- Not at all; it depends on the political nature of the upstream state, and without the threat federal intervention, there will be limited cooperation
- Absolutely not; the failure of upwind states to use the necessary good-neighbor measures to address ozone transport issues is a case in point
- More informal remedies would be ideal in these downstream or downwind scenarios; while states can pursue litigation in the U.S. Supreme Court, a neutral arbitrator is probably a better long-term solution

Maybe/to some extent (15% of responses):
- They are perhaps adequate but seldom used
- Yes and no; the legal framework is sound, but the practical application of them is frustrated by costs, lengthy rule development, hotly contested litigation, and prolonged uncertainty

- In some instances, yes, in others, no
- The threat of federal intervention is probably necessary in some instances
- It depends on the state

Yes (12% of responses):
- The mechanisms are generally adequate; only the will is lacking
- Yes; the best check on this process is independent review by several review panels, e.g., a science review panel, a cost-benefit assessment panel, and a statutory consistency review panel

<u>Question 10</u>. Cooperative Federalism 2.0 posits that "EPA should continue to lead in setting and adopting national minimum standards to protect human health and the environment" and that "States should be engaged, as key partners with the federal government," in those efforts. Do you agree?

Yes (96% of responses):
- Yes, the federal government houses the primary scientific resources to establish adequate levels of standards and risk; but it needs to engage the states on implementation policy; too often, the science demands a rule that sociology cannot support; the balance between the two is the crux of discussion between the federal and state governments
- The federal government has certain non-delegable duties with respect to rulemaking, which should be based on science and not political pressures from states; importantly, the EPA rules development process largely cuts out the states' knowledge and experience with respect to what works and does not work in the realm of day-to-day implementation, but this is precisely where the states could contribute most effectively to rule development
- Research and development should be EPA's main focus, and states should have a chance to comment and rebut the process, or to show alternatives that still meet the EPA standards
- Yes, but the standard-setter should pay attention to feedback from the standard implementers, particularly where those implementers have been encouraged to find different ways to accomplish the end goals; further, states often have good information on even the "high-brow" scientific aspects of the standard-setting duty
- Yes, but resources will be necessary, such as for joint task forces looking at the science
- Yes, to the extent that EPA functions in a rational, scientifically defensible, non-political way

No (4% of responses):
- Not always; there should be ample opportunity for states, like California, to take the lead on standards development

If so, what do you envision as the process for this state-federal engagement?
- It is the system already in existence
- There already is the notice-and-comment process under the Administrative Procedures Act
- The current approaches to cooperation are adequate; they break down for political reasons, not because they are inadequate
- States should be formally consulted and listened to early in the formulation of standards
- Preceding the formal regulatory development process, states and EPA should work together to define the problem(s) to be solved and identify solutions that could actually be implemented successfully; in some instances, this may result in EPA determining that adding another rule is not the best solution, and in others it will lead to the adoption of rules that are more broadly supported and more effectively and successfully implemented

- EPA staff should meet periodically with states in their regions, and there should be ongoing state review in developing standards
- It would be useful to convene advisory committees that could inform state recommendations; at a minimum, these would include representatives of local government, NGOs (environmental and social justice), business interests, and public institution scientists
- Governors should appoint representatives to a standards-setting council
- Panels based on area, industry, vector, or other parameters would be helpful
- A consensus decision on the standards would be ideal, but a mechanism to ensure progress must be included

Question 11. To what extent do you agree or disagree with the following statements?

EPA still has a critical role to play in environmental science and technology leadership.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
68.12%	24.64%	2.90%	4.35%	0.00%

In delegated programs, each state should have flexibility to determine how best to meet minimum national standards, and to establish more stringent requirements, as appropriate.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
32.35%	52.94%	4.41%	5.88%	4.41%

A state should have the flexibility to deviate from technology standards when alternatives are available that the state determines will produce equivalent ambient protection.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
8.96%	46.27%	23.88%	16.42%	4.48%

States should be the primary enforcement authority for programs delegated to the states.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
26.09%	52.17%	7.25%	4.35%	10.14%

States should have the discretion to set their own compliance strategies, even if that means investing more in compliance assistance than in enforcement.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
22.06%	32.35%	19.12%	22.06%	4.41%

EPA should retain primacy for criminal enforcement cases.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
20.59%	33.82%	19.12%	22.06%	4.41%

EPA should retain primacy for civil rights cases.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
21.74%	30.43%	20.29%	23.19%	4.35%

Most friction in the state-federal enforcement relationship involves disagreements over penalties.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
0.00%	11.76%	30.88%	48.53%	8.82%

Where states can do a better, or as good, job, the federal government should stand down.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
20.29%	50.72%	15.94%	11.59%	1.45%

EPA intervention in delegated states should be limited to circumstances where states have inadequately resourced their programs, or have a documented history of failure to make progress on minimum national standards.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
8.70%	42.03%	10.14%	31.88%	7.25%

Many instances of noncompliance in the modern era are anomalies that are found and corrected through internal compliance management systems.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.45%	21.74%	23.19%	36.23%	17.39%

Interstate issues warrant a greater federal role.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
33.33%	57.97%	4.35%	2.90%	1.45%

<u>Question 12</u>: Please provide any additional ideas or comments that you may have stemming from the questions above or the state-federal relationship in general.

- Trust needs to be integral to the relationship; a foundation for trust can only be built upon sound science and data that meet agreed upon quality assurance targets for decisionmaking
- National standards are important to continue a level playing field throughout the country
- States "should have the flexibility to deviate from technology standards when alternatives are available," but EPA, not the state, should decide if it will produce equivalent ambient protection
- States should have authority to go beyond federal standards; if they do so, they should also have the responsibility to enforce those standards
- EPA regions vary significantly across the country and should be reorganized into 50 state-EPA liaison offices
- Federal programs have a poor record of acknowledging and addressing state concerns and the diversity of state circumstances, and almost no record of acknowledging local concerns and the diversity of cities and towns
- Conflicts need to be reduced; the inefficiency is causing lots of harm
- The greater the efforts to identify "standard work" and bring greater consistency to how routine work is done so that more effort can be focused on non-routine matters, the more successful the overall national environmental enterprise will be
- A study of the effectiveness of interstate compacts is a good starting point in determining effectiveness
- The state-federal relationship includes the judiciaries as well; this project should also examine how federalism concerns are shaping the development of an environmental enforcement split between the federal and state courts
- The above need to be based on data; to have data requires investigations; to have investigations requires people to look; therefore, unless the federal or state government or citizen groups are acting as watchdogs, no data is collected, and problems persist until there are human health and/or ecological effects
- It should be easier to get state experts to testify in citizen enforcement proceedings
- States and municipalities should not be allowed to inform polluters of when citizen enforcers are given access to a company's federally required submissions showing emissions levels
- Convene a forum away from Washington lobbyists that would facilitate intelligent and constructive means of federal and state cooperation and enforcement, citizen and NGO involvement, and the use of civil and criminal law to upgrade environmental protection and enforcement
- Many who argue for greater discretion and flexibility for state implementation agencies point to the growing professional competence of state staff and regulators; their competence is generally not the issue in weak implementation, rather, it is the periodic loss of political support from governors as administrations change and the agencies' resources severely diminish over time, even in the more progressive states
- The primary justification for federal oversight and intervention is to help strengthen state environmental agency partners against loss of support and resources by insisting that minimum national standards be maintained; this could be accomplished less by oversight of multitudinous minor regulatory actions and more by a thorough assessment, e.g., every other year, of on-the-ground progress and areas needing improvement, with one or more public presentations jointly made by federal and state officials of strengths and weaknesses and an agenda of options for action

APPENDIX 3: Cooperative Federalism 2.0 (ECOS)

COOPERATIVE FEDERALISM 2.0:

Achieving and *Maintaining* a Clean Environment and *Protecting* Public Health

JUNE 2017

ECOS

Introduction

The Environmental Council of the States (ECOS) is the national nonprofit, nonpartisan association of state and territorial environmental agency leaders. Its purpose is to improve the capability of state environmental agencies and their leaders to protect and improve human health and the environment of our nation.

The following document was produced through a consensus-based process among the members of ECOS. It is respectfully shared by ECOS with all who desire to participate in a conversation related to these matters. Please feel free to direct questions or comments to ECOS Executive Director and General Counsel Alexandra Dunn at adunn@ecos.org or 202.266.4929, or to any of the undersigned officers.

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ECOS

COOPERATIVE FEDERALISM 2.0:

Achieving and *Maintaining* a **Clean Environment** and *Protecting* **Public Health**

A national conversation is underway as to the best and highest purpose for state and federal environmental regulators from 2017 forward. We are convinced a recalibration of state and federal roles can lead to more effective environmental management at lower cost — that this is a call for a Cooperative Federalism 2.0. The purpose of this paper is to stimulate and advance this important national conversation. We have an opportunity to engage the Administration, Congress, and all other parties and interests in how states and the U.S. Environmental Protection Agency (U.S. EPA) can put the "meat on the bone" and more fully define what we mean by Cooperative Federalism 2.0 from a policy, operational, and fiscal standpoint that ensures effective public health and environmental protections. We believe that through this concept we can build on the foundations of national statutes, learn from the innovations and successes of state programs, and confidently meet the challenge of providing 21st century environmental protection with the best of 21st century methods and relationships.

As states evaluate the future of environmental protection, we believe each of the key roles and functions laid out in this document is crucial for high quality, nimble, reliable, and transparent environmental and public health protection across the nation. We look forward to engaging others on how they see this important relationship.

Background

When the foundation of environmental protection was established in the United States in the late 1960s and early 1970s, a key, constitutionally based tenet was cooperative federalism. Under this tenet, the U.S. Congress establishes the law, the federal government implements the law through national minimum standards for the media/pollutant in question, and states can seek authorization or delegation to implement the programs needed to achieve these standards. Generally, states may develop programs to go beyond these standards if a state chooses to do so.

Initially, when states first began to implement programs delegated to them in the 1970s and 1980s, many state programs benefitted not only from federal funding, but also from significant U.S. EPA oversight. Over the last 45 years, states have become the primary implementers of these environmental statutes, such that today, states have assumed more than 96 percent of the delegable authorities under federal law. These state programs have now matured, and states have undertaken many continuous improvement efforts to address new environmental challenges and to modernize and streamline decision-making processes. Indeed, from the first fledgling state programs to those we implement today, we have always sought out ways to be better and inspire public confidence in our efforts. States are a critical part of achieving our nation's environmental and public health goals and mandated responsibilities in an effective and efficient way.

Document Structure

This document contains two parts. Part I enumerates, as principles, the roles and functions of states and U.S. EPA in cooperative federalism. The state and U.S. EPA principles we lay out here must be taken together; the principles reflect corollary responsibilities. These principles, which are laid out in the following table, are derived from a deep reflection on the current tenor and functioning of state/EPA relationships. Part II then documents 2.0 an initial list of important policy-neutral issues where the application of Cooperative Federalism could be focused.

Part I: Principles of the Roles and Functions of States and U.S. EPA in Cooperative Federalism

	Principles of the States' Role and Function in Cooperative Federalism	Principles of the Federal Role and Function in Cooperative Federalism
1	States should be engaged, as key partners with the federal government, in the development of national minimum standards to protect human health and the environment, and in any federal requirements regarding implementation of those standards. States bring experience in identifying and understanding evolving science and emerging environmental challenges, and in developing effective programmatic options and alternatives. In particular, states have first-hand knowledge of how to ensure successful implementation of programs designed to meet these standards including experience communicating with the regulated community and the public.	U.S. EPA should continue to lead in setting and adopting national minimum standards to protect public health and the environment.
2	States are the preferred implementing entities for national environmental regulatory programs for which federal statutes authorize their delegation. Only where states elect not to pursue delegated federal authority, do not provide the resources necessary to meet national regulatory minimum standards, or have a documented history of failure to make progress toward meeting national standards, should U.S. EPA implement these environmental programs.	U.S. EPA should be the lead implementer of national environmental regulatory programs in those instances where states decline to assume this role, where the states fail to appropriately implement such programs, or where federal statutes establish that role for the federal government.
3	States should have flexibility to determine the best way for their programs to achieve national minimum standards that enables them to incorporate and integrate their unique geophysical, ecological, social, and economic conditions.	U.S. EPA should involve states as partners early and often in developing federal environmental and public health policy, and should specifically seek state and other stakeholder input on the efficacy of new or changed standards or program requirements.
4	States should engage local governments, regulated entities, tribes, and the public, as well as recognize community and equity concerns, in implementation of national environmental regulatory programs, policies, and standards.	U.S. EPA should ensure appropriate federal consultation with Native American tribes in the implementation of federal environmental and public health policies, programs, and standards.
5	States should be the primary enforcement authority for programs delegated to the states and have the ability access federal enforcement authorities when federal enforcement is needed or appropriate.	U.S. EPA should respect the states' role as the primary implementer of national environmental regulatory programs and not review individual state implementation decisions, including enforcement, on a routine or recurring basis unless programmatic audits identify this need or particular circumstances compel federal action.

	Principles of the States' Role and Function in Cooperative Federalism	Principles of the Federal Role and Function in Cooperative Federalism
6	States should gather, maintain, and share information transparently with U.S. EPA and the public on how human health and the environment are protected, based on nationally agreed upon measures and metrics, through the activities states conduct and the environmental outcomes states achieve for federally delegated programs.	U.S. EPA should periodically and routinely audit state implementation programs authorized or delegated to achieve national minimum standards (including adequacy of state implementing authorities and resources). These audits should be based on criteria mutually developed by states and U.S. EPA in light of federal regulations and grant requirements. When a state is not adequately achieving standards, U.S. EPA should be able to take appropriate action to ensure that a state will make consistent progress. Ultimately, if a state is not making sufficient progress, U.S. EPA should be able to reassume a lead implementation role.
7	Consistent with Constitutional principles, states should be encouraged through flexible federal requirements to develop, pursue, and implement state innovations to effectively and efficiently achieve desired environmental outcomes. States should generally have the ability to set standards that are more stringent or that are broader in scope than federal standards.	U.S. EPA has a role as a convener and facilitator in important pollutant-related interstate issues to efficiently support multi-state solutions and in some cases, to ensure final decision-making. States' willingness to work on these types of issues collectively and collaboratively with each other is also critical for success. Regional collaborations of national significance often require additional assistance (i.e., technical or scientific support, funding, regulatory accountability, and dispute resolution) that U.S. EPA should have the capacity to provide.
8	States should work cooperatively with U.S. EPA in the development of shared services, implementation toolkits, and other key resources to facilitate permitting and reporting functions and to efficiently use resources to accomplish these tasks as well as shared functions.	U.S. EPA should maintain a robust scientific research and data gathering capacity to effectively inform and establish national regulatory minimum standards based on sound science, to understand how best to respond to complex environmental pollution challenges, to respond to emerging pollutants, to incorporate modern technologies, and to efficiently determine protective alternative remediation strategies and other solutions to facilitate protection of human health and the environment. The federal government has well-developed capacity to keep abreast of emerging challenges and to research potentially successful technologies or remedies for current challenges that no single state has the capacity to replicate or replace.
9	States that choose to implement federal programs should be both adequately funded by the federal government to do so as Congress directed in authorizing statutes and should also invest state resources (either directly or through fees or other methods) sufficient to implement a successful program.	U.S. EPA should have sufficient resources to meet these responsibilities and to financially support states in the implementation of federal statutes and programs. U.S. EPA should have sufficient resources to meet all obligations to states and to ensure timely review and decisions on program submittals by the states. The level of federal support to states implementing federal programs, policies, and standards should be calibrated to the scope and complexity of federal requirements that states must achieve in order to assume or continue implementation responsibility.

Part II: Changes Implied by Cooperative Federalism 2.0

Our state environmental programs exist to provide the level of environmental and human health protection promised to the American people through our national and state statutes. The key principles articulated above spark the following observations and entreaties for consideration by all parties with an interest in these critical matters. Many of them are buttressed by work underway between U.S. EPA and the states. However, the full embodiment of the principles clearly means a change from business as usual for most states and U.S. EPA and requires a willingness for U.S. EPA and the Congress to align the state/federal relationship with the current realities and responsibilities of state implementation of national regulatory programs. States are willing and eager to engage in this important dialogue.

A. Ensuring adequate capital and operating resources to fully implement federal environmental laws has been and must remain a priority focus. Robust cooperative federalism cannot be achieved if one party or the other is not capable of performing its critical functions. Inadequate implementation by states benefits no one; insufficient or non-timely performance by U.S. EPA hurts everyone. Both states and U.S. EPA need to perform as required and expected under a truly effective cooperative federalism. Neither party can, nor should be expected to, perform the important functions needed by the other for each to be successful. For example, adequate capital requirements for clean water (including drinking water) are a crucial public health necessity and a shared responsibility between the federal government, the states, and local governments. The federal government should financially support state implementation efforts commensurate with the complexity and breadth of federal requirements. Furthermore, when states implement federally delegated authorities, they must continue to provide a level of resources commensurate with their responsibilities. In the event there are decreases in the level of support for the operation of federally delegated programs by either federal or state governments, it is critical that there be a shared understanding, and transparency around, what work may no longer be performed by either party.

B. With robust engagement of all interests, including states, U.S. EPA should identify key outcomes for implementing federal environmental and public health laws that each federal program, standard, or policy is intended to accomplish. U.S. EPA should seek to demonstrate this through environmental and service delivery (i.e., time) "outcome" metrics rather than "output" metrics. These metrics should be understandable to the regulated community and the public. States should report at regular and consistent intervals to U.S. EPA and the public, through these agreed-upon and, to the extent possible, nationally consistent metrics, what environmental, public health, and service delivery outcomes the state-implemented federal programs, policies, and standards have achieved.

C. U.S. EPA and states' working relationships should be continually reviewed, improved, and reformed to conform with the key principles. EPA's oversight of state's performance should emphasize developing, aligning, and mutually supporting efforts that successfully address environmental challenges instead of routinely reviewing state's individual implementation actions. Such cooperative efforts should include development of new regulations and guidance consistent with the key principles, review of past practices and regulations that may be outdated and inefficient (and hence should be modified or eliminated), and determination of how regional and national consistency on implementation can be harmonized with state flexibility and innovation in implementation. There are significant ongoing efforts ready for scale to accomplish this, including E-Enterprise, in which U.S. EPA, states, and tribes jointly identify, manage, and implement projects designed to improve agency performance, implement efficiencies, and reduce burdens on the public and the regulated community. The widespread adoption of business process improvement techniques by states and U.S. EPA shows the benefit of continuing and expanding this effort through adoption of the principles.

D. Healthy and vibrant communities and economies rely upon both effective environmental protection and resilient economic growth. Achieving national minimum standards contributes greatly to the former; implementing efficient and effective programs contributes greatly to the latter. State flexibility to determine the best way for its programs to achieve national minimum standards that accounts for unique geophysical, ecological, social, and economic conditions is a particularly important aspect of ensuring that environmental protection and economic prosperity go hand-in-hand with healthy and vibrant communities.

E. As the scope and breadth of environmental programs has grown to address the issues upon which they are focused, assuring regulatory compliance has become increasingly complex. Robust and appropriate enforcement of regulations is a key aspect of compliance assurance, both by stopping and remedying non-compliance and by creating a climate of deterrence for other potential deliberate violators. States see significant benefit in providing focused compliance assistance and assurance programs that assist the regulated community to come into compliance by increasing its understanding of regulatory requirements and by developing effective ways to achieve compliance. Providing assistance is critical to support the vast number of entities that want to be in compliance. Creating a connection to those entities who may need compliance support can prevent them from becoming cases for formal enforcement action. States are implementing a wide range of such programs and developing methods to measure overall compliance, as well as the effectiveness of these programs.

F. Support for small communities to help improve community health and build necessary resilience to sustain it is needed across the nation. National minimum standards often represent significant financial burdens on these communities, which can be considerably exacerbated when investments are considered one program or one pollutant at a time. States and U.S. EPA have begun to address this pressing challenge, but ensuring that all communities in need of this support — and capable of implementing it responsibly — receive it, remains elusive.

G. As our environmental challenges become more complex and diffuse, novel approaches are needed that will depend upon comprehensive cooperative federalism to be successful. Pollutants are often found to have cumulative and synergistic relationships that are difficult to address under our single pollutant-by-pollutant statutory approach. Pollutants also do not respect political boundaries, highlighting the need for multi-state and multi-national approaches and cooperation.

Conclusion and Next Steps

We strongly believe that positive reforms and improvements to the bedrock of cooperative federalism are needed and warranted at this time to create and implement environmental protection programs worthy of 21st century challenges. States are eager to engage our federal partners, and others who have a keen interest in how the states and federal governments perform their roles, on how we can move forward consistent with these principles, in order to protect the environment and public health of our great nation.

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