

---

# How Earth Day Triggered Environmental Rent Seeking

— ◆ —

BRUCE YANDLE

America's first comprehensive federal statutes for protecting air and water quality became law in the early 1970s. When enacted, the Clean Air Act of 1970 and the Federal Water Pollution Control Act of 1972 were administered by the newly created Environmental Protection Agency (EPA). The EPA itself was formed in 1970. The statutes took a top-down, command-and-control approach that set technology-based standards for hundreds of thousands of air and water pollution discharge points nationwide. The laws required stricter and more costly controls for new plants than for existing plants. Deliberately selected by Congress and President Richard Nixon, the new-source/old-source bias signals in a few words how this one-suits-all approach provided an ideal hothouse for raising rivals' cost through inspired rent seeking.

As regulatory concrete was subsequently poured across the landscape, common-law environmental protection on which forty-nine of the fifty states had relied, along with state and local laws and ordinances, was pushed aside. (Because of its French heritage, Louisiana law rested on the Napoleonic Code.) With the new laws in place, environmentalists, industrialists, and assorted other bootleggers and Baptists celebrated as their revenues and profits headed north (Buchanan and Tullock 1975;

---

**Bruce Yandle** is professor of economics emeritus at Clemson University; distinguished adjunct professor of economics at Mercatus Center, George Mason University; and senior fellow emeritus at the Property and Environment Research Center. This essay is based on (Yandle 2012).

*The Independent Review*, v. 18, n. 1, Summer 2013, ISSN 1086-1653, Copyright © 2013, pp. 35-47.

Maloney and McCormick 1982; Yandle 1999). Now, more than forty years later, the EPA reports that major indicators of environmental quality are headed south. It has been a costly journey.<sup>1</sup>

A command-and-control system was not the only regulatory template Congress considered when the new statutes were constructed. Indeed, before striking the final deal, legislators reviewed the relative merits of a variety of regulatory approaches. These approaches included the use of economic incentives, where fees are charged for the right to discharge; performance standards that set desired outcomes to be enforced without specifying precise ways of getting there; as well as technology-based command and control. On its face, the latter approach has long been recognized a priori as the more costly and, on that basis, the least desirable option. For that reason, Senator Edmund Muskie of Maine, the chairman of the Senate committee that designed the 1970 Clean Air Act, pushed forward a draft law that rested on performance standards. But as the statute was making its way to final form, Earth Day intervened. In conjunction with that momentous event, actions were taken that caused Muskie to revise sharply the nation's first major environmental law—and the template for future laws—and to replace performance standards with the more costly and troublesome technology-based standards. As a result, the nation stumbled coming out of the gate in the uncertain search for cleaner air and water.

How did all this happen? And what did Earth Day have to do with delivering an ideal rent-seeking result?

This essay tells the story of how Earth Day brought dramatic change to the nation's first major environmental statutes and triggered the rise of regulatory rent seeking. To provide the institutional stage on which the federal environmental saga began, the article begins with a discussion of common law and how that legal system worked to protect environmental assets but did not work at all as a rent-seeking vehicle. The story then focuses on actions inspired by Earth Day 1970. It ends with a discussion of lost ground and the possible rediscovery of common-law principles.

---

1. I hasten to point out that basically the same thing was said in 1997 when Clarence Davies and Jan Mazurek of Resources for the Future, following their three-year review of EPA regulation, offered their assessment of the nation's efforts to regulate the environment: "For all its accomplishments, we conclude that the pollution control regulatory system is deeply and fundamentally flawed. While there is no consensus about how to remedy these flaws, some agreement exists on the principles that should guide changes in pollution control and about the characteristics of a pollution control system for the next century. The United States does not need to wait for a consensus to act: to do so would be to wait forever. Failure to make changes will be costly to the economy, to the environment, and to every citizen." They point out that "[t]he current system is focused on how to control pollution rather than on whether pollution is actually being controlled. . . . The system of the future needs constantly to ask whether human health and the natural environment are being adequately protected. Regulators need to set the standards, ensure that adequate data are available to know that they are being met, and take compliance measures if they are not being met. The means used to achieved the goals are secondary and should be left in the hands of the regulated parties" (1997, 2, 49).

## Common-Law Environmentalism

For centuries before 1776, the English-speaking world relied on common-law protection of environmental assets. What might be called common-law environmentalism then became embodied in the U.S. legal environment as states were formed out of the English colonial experience (Yandle 1997; Meiners and Yandle 1999). Common law, or judge-made law, evolved on the basis of court actions that involved specific controversies between individual parties where rights-based remedies were sought when one party imposed unwanted cost on another right holder. In the U.S. experience, common-law court rulings formed bodies of state jurisprudence. These legal principles and precedents could then be called on in dealing with intrastate as well as interstate pollution disputes. Such disputes could be appealed through the federal court system and ultimately to the Supreme Court. Although a judge's decision in a state court applied only to the parties before the court and did not instantly constrain any others, common-law court decisions formed precedents to be considered, followed, or overturned in future cases that might emerge in any state common-law court. Common-law environmentalism did not work perfectly, but it, along with state statutes and ordinances, worked effectively in providing a rule of law for protecting environmental assets. The nation somehow survived and experienced healthy prosperity for two centuries before the start of the federal environmental saga.

### *How Common Law Worked*

The environmental component of common law falls into a category called “nuisance law.” At common law, a private nuisance action involves private parties where one party demonstrating damages linked to actions taken by another party can obtain a court-recognized cause of action against the offending party. If successful in the suit, the plaintiff's court-ordered remedy involves payment of damages and/or an injunction banning the producer from imposing future harm. Put simply, a common-law judge can shut down polluters, which happened in the past but is an action as scarce as hen's teeth in the post-EPA world.<sup>2</sup> In a large number of settings, public-nuisance actions involve a group of similarly situated damaged parties who, with evidence of damages in hand, can seek action against an offending party by way of a public defender. Judges in these cases can also impose injunctions and require payment of damages.

Unlike statute law and regulations that came to dominate U.S. environmental law, common-law actions were based on real harms, not on technical violations of a regulation, and provided real remedies to damaged parties. Experience with

---

2. On the success of common law in dealing with pollution, see the series of common-law cases summarized in Yandle 1997, esp. 96–107.

common-law cases, coupled with wisdom of the ages, enabled the formation of default rules with respect to pollution. At common law, parties downstream have the right to undefiled water or air that passes their way from upstream users. Although the rule does not immediately settle cases, it does provide certainty with regard to having a common-law cause of action and may provide a basis for contracting around the rule.

Unlike the case with statute law, where violators generally pay a fine to the U.S. Treasury but pay no damages to harmed parties and then simply go back to work, common-law decisions were not necessarily the last word with respect to shutting down a polluter's harmful actions. Parties to the controversy could contract around the common-law rule. Put another way, once rights were assigned by the court, trade could take place. A party who might want to avoid the cost of eliminating discharge or shutting down could bargain with downstream parties and purchase the use of the downstream parties' environmental rights.<sup>3</sup> Alternately, the discharger might purchase the property rights to all affected land and in this way internalize any cost associated with discharge. We can gain insight into how common law worked by reading Ronald Coase's essay "The Problem of Social Cost" (1960). Indeed, the essence of the Coase theorem itself derives from the common-law practice of contracting in the presence of a property rule.

### *Why Was Common Law Pushed to One Side?*

So if common law is so great, why was it pushed aside in the rush to regulate? First off, common-law courts could be tough on polluters. Plant shutdowns and payment of large damages were burdensome. But, then, common-law judges did not always rule in identical ways. At common law, there was no way to obtain a uniform national standard. Consider the situation from the perspective of budding rent seekers who hope to gain appropriable rents by way of environmentally based output restrictions. Federal regulation that imposes one set of constraints nationwide provides untold cartelization prospects that can line the pockets of both industrialists and environmentalists. One can gain rents in the form of extra profits; the other can gain rents in the form of membership revenues that support a national organization. The same result could not obtain at common law. First off, there were just too many common-law courts across the nation to deal with; it was impossible for rent seekers to somehow buy off enough judges or win enough suits to obtain a set of regulations that might limit output nationwide. Put another way, common-law rent seeking was extraordinarily costly. It was impossible for a firm or industry to raise rivals' costs by way of common-law courts, and it was impossible for environmental organizations to gain one set of standards to be enforced

---

3. For a fascinating description of how such trading was done in practice, see Robert Higgs's (2005) discussion of the process by which operators of Idaho silver mines contracted around the rule to minimize cost in using environmental assets.

nationwide. Lifting environmental protection to a national level accommodated the rise of Washington-based environmental and industry lobbyists.

In other words, common-law environmentalism worked pretty well by providing a rule of law for protecting environmental rights, but it wasn't worth a toot as a rent-seeking vehicle. Command-and-control regulation was another story.

### *Command-and-Control Regulation: A Rent Seeker's Dream Come True*

Students of regulation and those who live with it know that three types of instruments may be used when regulations are built: performance standards that set limits or goals without mandating how the outcomes must be achieved; output limiting engineering standards—command and control—that specify how a goal will be achieved; and economic incentives—fees, prices, and taxes—that put a price on the activity to be limited, thereby reducing it (Morris, Dorchak, and Yandle 2005). Any one of the three can generate a desired output restriction, but it is generally agreed that engineering standards are the most costly and therefore least effective regulatory choice, as seen in the light of economic efficiency.

Performance standards and the use of economic incentives inspire a never-ending search for lower-cost ways to achieve regulatory goals. Indeed, this particular instrument generates the same incentives as common-law rules. When facing environmental constraints, lower control cost can translate into higher profits for regulated firms. But there is more to the story than simply finding lower-cost ways to control pollution. There is also the search for less environmentally intensive ways and locations for producing products.<sup>4</sup> When payoffs are relatively certain, human creativity simply explodes in the heat of fixing things. And the spur of market-based competition adds wonders to what the human mind will invent when seeking to build stronger, more viable enterprises that face new constraints. In contrast, technology-based standards may be the superior way to produce at the time the standards are developed, but from that point forward technology stands still, and firms have little incentive to redesign production processes or find lower-cost production sites. Whatever producers do and wherever they operate in the United States, they must meet the same technology-based standards.

Relative to command-and-control regulation, performance standards offer another critically important advantage: they focus on outcomes, not on inputs.

---

4. Of course, the search for less constrained locations can give rise to pollution havens, which are the bane of all who prize the environment above everything else. But the occurrence of pollution havens reflects a set of public and private choices made by communities of people who by their actions indicate a willingness to make environmental trade-offs. Generally speaking, rising income at some point becomes associated with stronger demand for environmental quality, which leads to environmental improvement. There are, of course, exceptions to this statement. The essence of this process is captured in a large literature associated with Environmental Kuznets Curves (see Yandle 2011).

Performance standards, like common-law rules, require the enforcing authority to determine if environmental costs are being imposed, at least as measured by environmental quality, rather than to determine if the correct plumbing system is installed and operating. With performance standards, the EPA would focus on the environment and caring for it. With command-and-control regulation and the related focus on whether the correct technology is applied, it is possible for multiple dischargers located on the same river basin to be satisfying all the regulation-based requirements, but for the river nevertheless to be on its way to a biological death.

Back in 1970 when our basic statutes were being considered, Congress had the opportunity to move toward developing support for federal common law for protecting air and water quality. If goals had been set and downstream populations had been assigned environmental rights, then those damaged by pollution beyond the limits of the law would have had a cause of action against polluters in addition to the protection provided by state and local statutes. Damaged parties would have been paid; court injunctions shutting down polluters could have been issued; and those living in a federal common-law regime would have gotten very creative in finding ways to avoid imposing costs on environmental right holders.<sup>5</sup>

But, of course, this kind of system is just what polluters and environmentalists wanted to escape. Both interest groups wanted uniform national standards with stricter engineering standards for new sources of pollution. When the statutes were written, polluters got a cartel enforced by EPA, and environmentalists obtained federal laws that promised dramatic improvements in environmental quality. To a meaningful extent, both groups' dreams were realized, at least for a while, but at very high cost.

## **Earth Day: How the Basic Environmental Statutes Were Hijacked**

Didn't key members of Congress know about the relative merits of different regulatory approaches when they wrote the basic environmental statutes in the 1970s? Of course they did. But it is doubtful that there was an appreciation of the meaning and effects of rampart rent seeking—that is, assuming such understanding would have mattered. Countless hearings were held in conjunction with writing the new

---

5. Outcomes generated by the U.K.-based organization Fish Legal, previously called the Anglers Conservation Association, are a case on point here. Using common-law protection of in-stream fisheries, Fish Legal, whose roots go back to 1948, is funded with dues paid by anglers. By the year 2000, the latest year for which data are available, the organization had since its founding brought three thousand suits against polluters who adversely affected the water quality of trout streams, rivers, and other waters that bordered land owned or leased by Fish Legal members. It had lost only three suits. Vast amounts of rivers, streams, and coastal waters have been improved. The organization, which had five employees in 2000, thrives on the results-based common-law environmentalism. See Bate 2001, 110–11, and the Fish Legal website at [http://www.fishlegal.net/page.asp?section=165&sectionTitle=Fish Legal %2D,](http://www.fishlegal.net/page.asp?section=165&sectionTitle=Fish%20Legal%20) in particular the page “Using the Law to Protect Fisheries and Angling” (visited December 20, 2012).

laws, where every imaginable regulatory approach was explored.<sup>6</sup> Indeed, up until almost the last minute before passage, drafts of the pending Clean Air Act of 1970 were based on performance standards. Engineering standards had been considered and dismissed as being too costly. Of course, what happened with the air legislation deeply influenced what came later for water pollution control.

So why did Senator Edmund Muskie, chairman of the Senate Air and Water Pollution Subcommittee, which was writing the Clean Air Act, make a U-turn and go with high-cost technology-based standards that would sharply preclude the use of property rights and markets for cleaning the nation's air?

### *Enter Earth Day 1970*

In a very real way, the problem began on April 22, 1970, the date of the first Earth Day. The location: Philadelphia's Fairmont Park. The event was organized on the ground by students, with a team of University of Pennsylvania planning students leading the way. Philadelphia became the epicenter for Senator Gaylord Nelson's (D-Wisc.) call for a national environmental teach-in. None could have predicted the massive response seen that day when some twenty thousand people stood shoulder to shoulder to celebrate the earth and protest against the perceived absence of efforts to protect it. And if none could predict Philadelphia's event, less than none would have forecast that more than an estimated 20 million people nationwide would join the celebration during the next week.

When crowds gather, canny politicians cannot be far behind, especially those who aspire to become president. Such was the case in April 1970. Senator Muskie, who would run for the White House in 1972, was a keynote speaker that day. And for good reason. Known as "Mr. Clean" because of his environmental dedication, Muskie, a member of the Senate Public Works Committee, was also chairman of the Air and Water Pollution Subcommittee. His subcommittee was just then completing a draft of what would become the first Clean Air Act. The draft legislation called for setting national air quality standards that would be met by all major stationary pollution sources by way of performance standards. The subcommittee had considered and rejected the use of command-and-control engineering standards.<sup>7</sup>

There was yet another aspiring political figure on the stage that day in Philadelphia. A young and energetic Ralph Nader stoked the passions of the crowd when he spoke about evil polluters who were defiling the earth and unresponsive

---

6. Roger Meiners and Bruce Yandle report that there were 646 witnesses in hearings during the 1964–68 ramp up to early clean air legislation; 1,604 witnesses in clean air hearings held between 1964 and 1977; and more than 3,000 witnesses who testified on clean water legislation between 1955 and 1982 (1999, 957).

7. I point out that automobile and mobile source emission control was an important separate issue addressed by the proposed legislation; this issue, too, focused on the use of performance standards that survived in the final legislation.

politicians who, locked in captured embrace with their special-interest supporters, refused to protect our precious environmental heritage. And far away in Washington, President Richard Nixon, who also wanted to keep his job, was ever increasingly becoming America's environmental president. Nader, Nixon, and Muskie would soon become engaged in a political contest that resulted in a flawed statute (Whitaker 1976, 96).

With passions running high, Ralph Nader directed the energies of one of his student teams to focus on the pending Clean Air Act. And with the nation becoming ever more Earth Day sensitive, Nader figuratively nailed his thesis on Senator Muskie's office door. As Cass Sunstein tells the story, Nader charged Muskie with being "soft on industry" and as supporting "a 'business as usual' license to pollute for countless companies across the country." Sunstein further indicates that, "[e]vidently stung by Nader's criticism, Muskie's subcommittee came to support a dramatically revised bill going well beyond Muskie's original proposal" (2002, 15). Performance standards were thrown out and quickly replaced by command-and-control engineering standards.

The dramatic change was preceded by an exchange between Muskie's staff in reply to the Nader task force report. Nader's report challenged that "[l]egislation must be founded on the principle of reducing atmospheric contamination to the greatest extent technologically possible." Muskie's staff responded with words that embraced common-law logic:

This is the basic philosophical difference between the Nader Task Force and Senator Muskie. Senator Muskie believes that public health, not what is technological feasibility, should determine what people must breathe. Even if a maximum application of technology is achieved, not all sources will be controlled to a point where the public health and welfare is adequately protected. The Air Quality Act is based on the conviction that the important goals are the preservation and enhancement of the quality of the air and a guarantee that the ambient air quality will protect the public. This will mean more than emission controls that are technologically feasible. It will mean plant shutdowns, fuel substitution, land-use planning and careful site location in addition to emission controls. But it will mean that the quality of the air is safe.<sup>8</sup>

Put another way, Senator Muskie saw a new role for the emerging EPA. The agency was to protect the environment and thereby protect public health, not become engaged in the design of plumbing and engineered controls.

---

8. The exchange, including quotes from Nader's report, is given in *Congressional Record*, May 14, 1970, Muskie Archives and Special Collections Library, available at <http://abacus.bates.edu/Library/aboutladd/departments/special/ajcr/1970/Nader%20Task%20Force.shtml#15607-70-T>; the quotes here are from page 15607.



Even so, as Sunstein points out, presidential politics prevailed. Muskie made an about-face. On the other end of Pennsylvania Avenue, Richard Nixon upped the ante and pushed for even more costly regulations, while Nader hectored both ends of the street (Whitaker 1976, 96). Higher-cost command-and-control regulation won the day. Brighter possibilities for market solutions were pushed to rear of the policy process.

### *The Record for Water and Air: Some Final Thoughts*

What is the evidence that suggests that the next Earth Day will face an entirely different situation from the one seen in 1970, that we no longer face a major industrial cleanup challenge, and that we have lost ground?

Consider the most current EPA data. The 2007 data assessing the nation's lakes rated 56 percent of them as healthy (U.S. EPA, Water Office 2012b). Some 49 percent have unsafe levels of mercury. The agency's assessment of coastal waters gives about the same picture: 55 percent good, 36 percent fair and 6 percent poor (U.S. EPA 2012a). For the nation's rivers and streams, the 2010 data indicate that 55.9 percent are fishable, down from 62 percent in 2000 (U.S. EPA 2002, 2012c). 57.2 percent are swimmable, down from 71 percent in 2000 (U.S. EPA 2002, 2012b). The numbers cited in all cases are based on state reports for all bodies of water surveyed, which never form a complete sample. Nevertheless, they are the best indicators available to us.

But even these data tell us we are losing ground. And we know the source of the problems. EPA reports that pathogens are the number one water pollution contaminant. We may read this as a result of raw sewage discharge. Number two? Nutrients, which can be read as phosphorous and nitrogen, often from nonpoint sources such as farmers' fields. The two major sources of the problem are municipal waste treatment and runoff from agricultural operation and other nonpoint sources.

What about waters receiving industrial discharge? How are they faring? According to the EPA, they are now 93 percent safe (U.S. EPA 2012c).

The data on air quality are better than the water data for many regions. For the nation, as of 2011 there are 242 nonattainment counties for ozone, 121 for PM2.5 (U.S. EPA 2011). But get this, there are just 9 nonattainment counties, which are those that have not achieved EPA National Ambient Air Quality Standards, for sulfur dioxide, the only criteria pollutant managed by markets. Indeed, since 1990, sulfur dioxide emissions have been reduced 65 percent at an EPA estimated cost of from \$1.17 to \$2 billion. If command-and-control had been used instead of markets, the estimated cost would have ranged from \$7.5 to \$11.5 billion (Siikamäki et al., 2012, 3-4).

These data strongly suggest we have hit the cleanup limits of a top-down, command-and-control, technology-based pollution-control system. We know we can do better, and so do EPA managers.

As efforts to reduce pollution using engineering standards for every major pollution source became unbearably costly, EPA managers pushed to reinterpret the statutes. In 1976, in the breach of the law, the agency introduced the offset

policy, which established markets for emission reductions in the most severely constrained regions of the country (Yandle 1978). In 1981, the EPA embraced its bubble policy, which allowed operators of facilities with multiple sources of the same air emission to minimize cost across all sources while achieving the same outcome (Maloney and Yandle 1980). This allowed trade to emerge inside industrial plants. Nevertheless, the ability to engage in trade was constrained by technology-based standards that had to be considered and in some cases met before trade could occur.

In 1991, the EPA began to push hard to develop watershed-based nutrient-trading communities where publicly owned treatment works and other dischargers are allowed to exchange discharge offsets. In some cases, farmers and land developers are included in the larger trading communities. When trades take place, the incremental cost of reducing pollution falls dramatically. According to EPA data, there are now watershed trading communities in seventeen states where trades have actually occurred (U.S. EPA 2012b). The EPA is now embracing performance standards, at least on a watershed basis. Here is how the agency describes the new approach that breaks with the old point-source control model: “Water quality trading is an innovative approach to achieve water quality goals more efficiently. Trading is based on the fact that sources in a watershed can face very different costs to control the same pollutant. Trading programs allow facilities facing higher pollution control costs to meet their regulatory obligations by purchasing environmentally equivalent (or superior) pollution reductions from another source at lower cost, thus achieving the same water quality improvement at lower overall cost” (U.S. EPA 2012d). Senator Muskie’s vision lives again.

But the scope of the market for nutrient trading was initially limited by constraints that echoed back from Earth Day 1970. In a sense, the EPA’s new watershed approach was management by exception.

In 1997, some twenty-five years after passage of the Federal Water Pollution Act of 1972, the EPA’s Water Office announced a major break with the old input approach for managing environmental quality. EPA assistant administrator Robert Perciasepe described the change this way: “Almost 25 years after the passage of the [Clean Water Act], the national water program is at a defining moment. We—meaning each of you, each of our State, local, and Tribal partners, and all of us in the Office of Water—are making the transition from a clean water program based primarily on technology-based controls to water quality-based controls implemented on a watershed basis” (1997, 1). Perciasepe was announcing a policy based on Total Maximum Daily Loads (TMDLs) of specified pollution. The day had arrived when the EPA could issue one permit for a watershed that allowed flexibility and trade for achieving a TMDL goal instead of requiring individual permits for each major discharger based on engineering standards.

Yet another distorted market had emerged through the statute’s cracks and crevices.

### *Examples beyond the Current Scope of the EPA Network*

Pollution-control markets are showing up in other regulatory settings. The EPA is currently drafting regulations for controlling carbon dioxide (CO<sub>2</sub>) emissions. Studies of control costs reported recently by Raymond Kopp of Resources for the Future show that if firms seeking to offset their CO<sub>2</sub> emission can do so by shopping for the lowest-cost source of emission reductions—using international markets—then the cost can be reduced to \$10 per ton in 2020 from \$52 when the firms must shop only in the United States (2012, 37). One low-cost option, if enabled, is associated with paying rain forest owners not to harvest trees. Allowing this would conserve rain forests and reduce CO<sub>2</sub> emissions. The scope of the artificial market is global. In 2004, the global banking firm HSBC decided to offset its carbon footprint, an example of rapidly expanding Voluntary Emission Reduction (Business for Social Responsibility 2008, 2). The firm published a tender offer for 170,000 tons of carbon offsets and received one hundred responses from around the world. The firm spent \$750,000 on reductions in Germany, India, Australia, and New Zealand. Imagine what might have happened if the offset seller had to meet technology-based standards prior to making an offer to HSBC.

### **Final Thoughts**

Earth Day celebrations occur every year. When the next one arrives, we should take the opportunity to propose and celebrate a higher standard for protecting the earth and improving the environment. It should be a standard based on common-law logic. At the outset, we should push for a system of waivers that allows regions, states, and communities to vacate the rigid requirements of the 1970s statutes in exchange for other approaches that demonstrate the ability to recover lost ground and achieve new levels of property-rights protection. Barring this push, we should insist on outcome-based statutes and regulations. We should do our best to remove the flawed statutes passed for a smokestack economy and replace them with statutes that respect property rights and leave room for environment-enhancing markets to emerge.

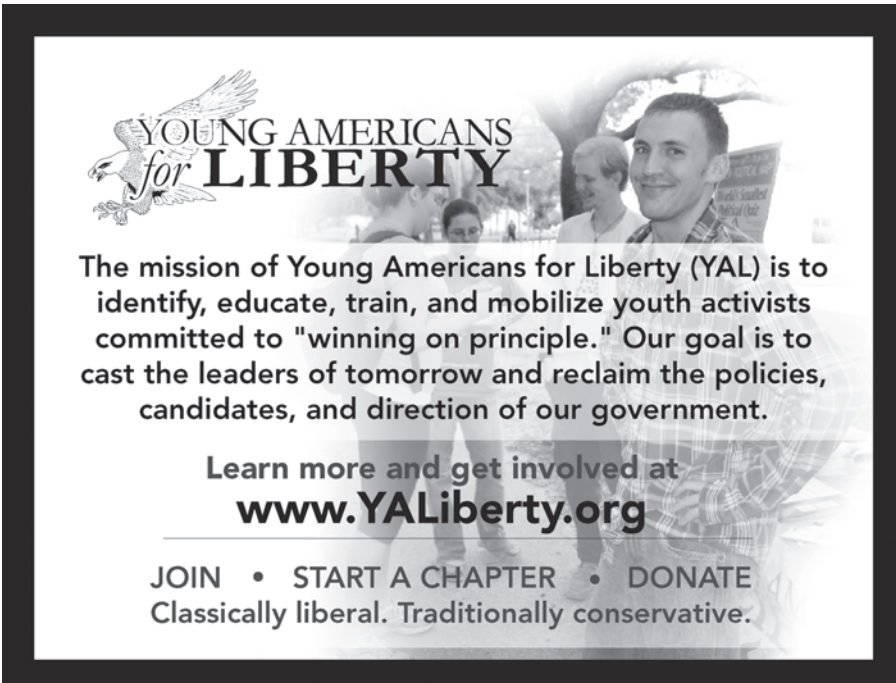
But why would heavily invested rent seekers stand aside and allow efficiency-enhancing environmental rules to emerge? What about the bootleggers and Baptists who supported the regulatory paving project? Think about this. At some point, the environmental Baptists will see that they are losing ground. The system they have supported no longer delivers the goods they desire. As we have seen, major elements of environmental progress are dead in the water. And the bootleggers? At some point, global competition becomes so severe that regulatory rent seeking no longer pays. For durable regulation to survive, bootleggers and Baptists must be singing off the same page. For now, the music has stopped.

## References

- Bate, Roger. 2001. *Saving Our Streams: The Role of the Anglers' Conservation Association in Protecting English and Welsh Rivers*. London: Institute of Economic Affairs.
- Buchanan, James M., and Gordon Tullock. 1975. Polluters' "Profit" and Political Response. *American Economic Review* 65: 139–47.
- Business for Social Responsibility. 2008. *Offsetting Emissions: A Business Brief on the Voluntary Carbon Market*. 2nd ed. New York: Ecosystem Marketplace and Business for Social Responsibility, February. Available at [http://www.bsr.org/reports/BSR\\_Voluntary-Carbon-Offsets-2.pdf](http://www.bsr.org/reports/BSR_Voluntary-Carbon-Offsets-2.pdf).
- Coase, R. H. 1960. The Problem of Social Cost. *Journal of Law & Economics* 3 (October): 1–44.
- Davies, Clarence J., and Jan Mazurek. 1997. *Regulating Pollution: Does the U.S. System Work?* Washington, D.C.: Resources for the Future.
- Higgs, Robert. 2005. Coasian Contracts in the Coeur D'Alene Mining District. *Cato Journal* 25: 407–22.
- Kopp, Raymond. 2012. If Walmart Were in Charge. In *Resources*, no. 179, 35–38. Washington, D.C.: Resources for the Future.
- Maloney, M. T., and Robert E. McCormick. 1982. A Positive Theory of Environmental Quality Regulation. *Journal of Law and Economics* 25: 99–114.
- Maloney, M. T., and Bruce Yandle. 1980. Bubbles and Efficiency. *Regulation* (May–June): 49–52.
- Meiners, Roger E., and Bruce Yandle. 1999. The Conceit of Modern Environmental Policy. *George Mason University Law Review* 7 (Summer): 923–63.
- Morriss, Andrew P., Andrew Dorchak, and Bruce Yandle. 2005. Choosing How to Regulate. *Harvard Environmental Law Review* 1: 179–250.
- Perciasepe, Robert. 1997. *New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)*. Memorandum, Water Office. Washington, D.C.: U.S. Environmental Protection Agency, August 8.
- Siikamäki, Juha, Dallas Burtraw, Joseph Maher, and Clayton Munnings. 2012. *The U.S. Environmental Protection Agency's Acid Rain Program*. Washington: Resources for the Future, November.
- Sunstein, Cass R. 2002. *Risk and Reason: Safety, Law, and the Environment*. Cambridge, U.K.: Cambridge University Press.
- U.S. Environmental Protection Agency (EPA). 2002. 2000 National Water Quality Inventory. Washington, D.C.: U.S. EPA. Available at [http://water.epa.gov/lawsregs/guidance/cwa/305b/upload/2002\\_09\\_10\\_305b\\_2000report.ch2.pdf](http://water.epa.gov/lawsregs/guidance/cwa/305b/upload/2002_09_10_305b_2000report.ch2.pdf).
- . 2011. *The Green Book Nonattainment Areas*. Washington, D.C.: U.S. EPA. Available at <http://www.epa.gov/oaqps001/greenbk/>.
- , Water Office. 2012a. *National Coastal Condition Report*. Washington, D.C.: U.S. EPA. Available at [http://water.epa.gov/type/oceb/assessmonitor/nccr3\\_factsheet.cfm](http://water.epa.gov/type/oceb/assessmonitor/nccr3_factsheet.cfm).

- , Water Office. 2012b. *National Lakes Assessment 2012: A Fact Sheet for Communities*. Washington, D.C.: U.S. EPA. Available at <http://water.epa.gov/type/lakes/assessmonitor/lakesurvey/upload/NLA-2012-Fact-Sheet-for-Communities.pdf>.
- , Water Office. 2012c. *National Summary of State Information*. Washington, D.C.: U.S. EPA. Available at [http://iaspub.epa.gov/waters10/attains\\_nation\\_cy.control#STREAM/CREEK/RIVER](http://iaspub.epa.gov/waters10/attains_nation_cy.control#STREAM/CREEK/RIVER).
- , Water Office. 2012d. *Watershed Trading*. Washington, D.C.: U.S. EPA. Available at <http://water.epa.gov/type/watersheds/trading.cfm>.
- Whitaker, John C. 1976. *Striking a Balance: Environment and Natural Resources Policy in the Nixon–Ford Years*. Washington, D.C.: American Enterprise Institute, 1976.
- Yandle, Bruce. 1978. The Emerging Market in Air Emissions. *Regulation* (July–August ): 21–29.
- . 1997. *Common Sense and Common Law for the Environment*. Lanham, Md.: Rowman & Littlefield.
- . 1999. Bootleggers and Baptists in Retrospect. *Regulation* 22: 5–7.
- . 2011. Environmental Kuznets Curves. In *Green Politics: An A to Z Guide*, edited by Paul Robbins, Dustin Mulvaney, and J. Geoffrey Golson, 255–58. Thousand Oaks, Calif.: Sage.
- . 2012. *Earth Day 1970 Revisited*. Bozeman, Mont.: Property and Environment Research Center. Available at <http://perc.org/articles/earth-day-1970-revisited>.

**Acknowledgments:** This article draws on Yandle 2012. The author is grateful for related support from the Property and Environment Research Center.



**YOUNG AMERICANS  
for LIBERTY**

The mission of Young Americans for Liberty (YAL) is to identify, educate, train, and mobilize youth activists committed to "winning on principle." Our goal is to cast the leaders of tomorrow and reclaim the policies, candidates, and direction of our government.

Learn more and get involved at  
**[www.YALiberty.org](http://www.YALiberty.org)**

JOIN • START A CHAPTER • DONATE  
Classically liberal. Traditionally conservative.

# SUBSCRIBE NOW AND RECEIVE A FREE BOOK!



“*The Independent Review* does not accept pronouncements of government officials nor the conventional wisdom at face value.”

—**JOHN R. MACARTHUR**, Publisher, *Harper’s*

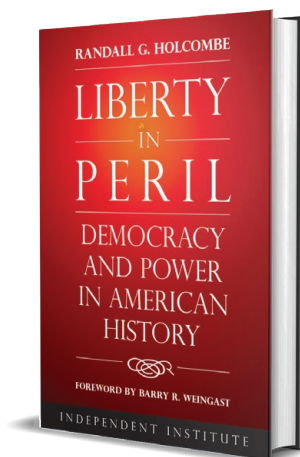
“*The Independent Review* is excellent.”

—**GARY BECKER**, Nobel Laureate in Economic Sciences

Subscribe to [The Independent Review](#) and receive a free book of your choice such as *Liberty in Peril: Democracy and Power in American History*, by Randall G. Holcombe.

Thought-provoking and educational, [The Independent Review](#) is blazing the way toward informed debate. This quarterly journal offers leading-edge insights on today’s most critical issues in economics, healthcare, education, the environment, energy, defense, law, history, political science, philosophy, and sociology.

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!



Order today for more **FREE** book options

**SUBSCRIBE**

*The Independent Review* is now available digitally on mobile devices and tablets via the Apple/Android App Stores and Magzter. Subscriptions and single issues start at \$2.99. [Learn More.](#)

