

# From Compelling to Catalyzing: The Federal Government's Changing Role in Environmental Protection

Gerald A. Emison

---

## Repository Citation

Gerald A. Emison, *From Compelling to Catalyzing: The Federal Government's Changing Role in Environmental Protection*, 20 Wm. & Mary Env'tl. L. & Pol'y Rev. 233 (1996), <http://scholarship.law.wm.edu/wmelpr/vol20/iss2/4>

# FROM COMPELLING TO CATALYZING: THE FEDERAL GOVERNMENT'S CHANGING ROLE IN ENVIRONMENTAL PROTECTION

GERALD A. EMISON\*

Relations among federal, state, and local environmental protection programs have been described as a "partnership" at least since the 1970s. The symbolism of a partnership, however, has not always been accompanied by a clear operational definition of the respective roles of the various levels of government. As environmental control programs move toward the fourth decade since the landmark legislation of the 1970s and face new challenges, the issue of relative roles and responsibilities is the subject of an expanding debate. Beneath the discussions of the adequacy and the shortfalls of today's environmental management lie views and values of governmental responsibilities which frame such discussions. These views and values are under scrutiny as the nation seeks to find new roles for effective public enterprise that protects the environment by using the unique capabilities of all levels of government. The concept of catalyzing may offer one unique role for the federal government to play as it seeks to change the way environmental management takes place in the U.S. Environmental Protection Agency ("EPA" or "Agency"). This paper examines that new role for the EPA.

## I. CHANGES IN CONDITIONS ARE DRIVING ROLE CHANGES

The setting, circumstances, and objectives of environmental protection in the nation have changed over the past twenty-five years. While these changes have proceeded more or less steadily, they have become obvious only recently. These changes, in the context in which the federal government has pursued environmental protection, are fostering wide-spread reconsideration of the role of the federal government in this critical public endeavor.

Two parallel developments concerning the public's attitude toward environmental protection have had a powerful effect on environmental policymaking. Public opinion polls consistently show a deep and persistent support for environmental protection. A Roper poll conducted in 1992 showed that almost seventy-five percent of the public see themselves as environmentalists.<sup>1</sup> Further, over fifty percent say the government should increase its efforts to insure polluters are made to comply with environmental statutes.<sup>2</sup> These attitudes show a public that values environmental protection and expects government to address their

---

\* Gerald Emison is a Professor at the Terry Sanford Institute of Public Policy, Duke University. This paper represents the views of the author and does not necessarily reflect the policy of the EPA.

<sup>1</sup> The Roper Organization, Green Gauge Reports—A Presentation to the U.S. Environmental Protection Agency (Sept. 1992).

<sup>2</sup> *Id.*

concerns.

At the same time that they are expressing support for environmental protection, the public objects to governmental regulation. The national election of 1994 was viewed by many as a ratification of concerns expressed in election campaigns that the federal government has stepped over the line of permissible regulation and has intruded into Americans' lives. Numerous efforts to limit regulation by expanding the traditional definition of a "taking" of private property through government action further reflect dissatisfaction with environmental regulation.<sup>3</sup>

These two trends may seem contradictory. In the United States we have translated government action to protect the environment into meaning that the government must use the command-and-control system to affect firms', governments', and individuals' behaviors to hold pollution to acceptable limits.<sup>4</sup> There are other ways, however, to advance environmental objectives. Perhaps the public's message to the government is to examine those other ways—the public may be saying: Pursue environmental protection, but do it through some means other than regulation.

At the institutional capacity level, the past twenty years have seen major changes in all levels of government. While all levels have strengthened both capacities and capabilities since the 1970s, state and local governments have seen the most dramatic changes. In the early 1970s, the federal government represented the overwhelming majority of the nation's investment in environmental protection capacity, capability and legislation. State and local governments have made extensive gains over the past twenty years.<sup>5</sup> In 1990, federal government expenditures on natural resources and the environment were less than one-third those of state and local governments.<sup>6</sup> State and local governments, however, have added staff with significant professional capabilities. Today the success or failure of environmental protection hinges on the effectiveness of the employees of state and local governments far more than the EPA. This does not mean that the EPA is unimportant; it means that the EPA is no longer dominant.

Effective environmental protection depends on information. Corrective programs cannot be designed, implemented, and improved without solid information on the quality of the environment and the efficacy of intervention efforts. The application of science and engineering, upon which environmental

---

<sup>3</sup> The federal government's "takings" clause provides: "nor shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

<sup>4</sup> NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, SETTING PRIORITIES, GETTING RESULTS: A NEW DIRECTION FOR EPA 90 (1995) [hereinafter NAPA] (stating that "command-and-control" policies occur when "the agency issues directives to industry or states and expects them to obey").

<sup>5</sup> See U.S. ENVIRONMENTAL PROTECTION AGENCY, REPORT OF THE TASK FORCE TO ENHANCE STATE CAPACITY: STRENGTHENING ENVIRONMENTAL MANAGEMENT IN THE UNITED STATES 4-7 (July 1993) [hereinafter U.S. EPA].

<sup>6</sup> U.S. COUNCIL ON ENVIRONMENTAL QUALITY, ENVIRONMENTAL QUALITY: THE 23RD ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 291-94 (1992) [hereinafter U.S. CEQ].

efforts rest, depends on information and data. The information age has had a profound effect upon environmental management, making information available far more widely than ever before. No longer are large bureaucracies required to manage and analyze data in a single place. The advent of high-speed personal computing now enables tasks that once could be done only in a central office to be done on an employee's desktop. This information revolution is gaining speed—not abating—so the management of information in a decentralized fashion is likely to continue to affect environmental protection efforts.

At least for the past ten years, governments at all levels have been struggling with declining resources. Beginning with California and continuing to today's debates over national debt reduction, declining fiscal resources have become a way of life for environmental managers at all levels of government.<sup>7</sup> "The gap between the cost of environmental protection and resources available to meet those costs is widening at an alarming rate."<sup>8</sup> Future problems cannot be solved by attacking them with ever-increasing levels of resources because the money is simply not there. Innovation, flexibility, and adaptiveness constitute the traits of tomorrow's successful environmental management, rather than simple budgetary and resource increases.

A less specific, but no less important, trend is emerging among environmental professionals. At local, state, and federal levels these environmental stewards are speaking of the need to enlarge the types of tools used to attack environmental degradation. When Carol Browner, the current Administrator of the EPA, created an Office of Enforcement and Compliance Assurance, she specifically endorsed the addition of compliance assistance as a legitimate equal of enforcement in advancing environmental quality.<sup>9</sup> Clearly, Browner envisioned efforts beyond simple enforcement of regulations by enlarging the office's set of responsibilities. Market-based incentives have been an emerging tool in environmental management.<sup>10</sup> For example, the trading of sulfur dioxide emission credits forms a central portion of the nation's acid rain control program.<sup>11</sup> The Los Angeles' South Coast Air Quality Management District has used emission trading to attack emissions of smog precursors.<sup>12</sup> Increasingly, there is a recognition of the need for more tools to manage environmental protection. The promulgation of command-and-control regulation and its enforcement do not hold the promise of pollution abatement that they once did. The expanding richness of tools is especially important given the challenges discussed earlier to the traditional command-and-

---

<sup>7</sup> U.S. EPA, *supra* note 6, at 5 & n.3.

<sup>8</sup> *Id.* at 5.

<sup>9</sup> NAPA, *supra* note 5, at 133-37.

<sup>10</sup> ZYGMUNT J.B. PLATER ET AL., ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY 859-81 (1992).

<sup>11</sup> *Id.* at 876-81.

<sup>12</sup> See J.H. KUNSTER, THE GEOGRAPHY OF NOWHERE: THE RISE AND DECLINE OF AMERICA'S MAN-MADE LANDSCAPE 213-16 (1993).

control regulatory approach for environmental management.

The nature and scope of the pollution problems in the United States have changed considerably in the past twenty years. No longer are we primarily concerned with large point sources which, one could argue, are best controlled with a predominantly federal program. Through the combined efforts of federal, state, and local programs, much of this control has been achieved. Now we are faced with complex problems such as regional ozone nonattainment and nonpoint source water pollution, both of which are caused mainly by many small sources of emissions.<sup>13</sup> These problems require tough choices that can have important local impacts, potentially affecting basic lifestyles of the general public. Consequently, decisions made at the local level by state and local environmental professionals will become critical.

The environmental community has recognized these new conditions. The National Academy of Public Administration, acting at Congress's request, examined the EPA recently and called for extensive changes in both how the EPA operates and what it directs its energies to accomplish.<sup>14</sup> The EPA and the states, acting in concert, issued a call in 1993 to radically transform how the EPA and the states work together to advance environmental matters.<sup>15</sup> There is an emerging recognition that the federal government must change how it acts to protect the nation's environmental quality. The changes in the context of environmental management have stimulated these role changes. The major issues then become: how the federal government will change, and what will be the outcome; if today's activities of reliance on command-and-control are not enough, what are appropriate new roles; and what should the EPA's new real work become?

## II. THE FEDERAL GOVERNMENT CAN CATALYZE AS WELL AS COMPEL SUCCESS

The current situation is a bleak one for the sole application of federal level command-and-control regulations to protect the environment. Short of money, the EPA's traditional use of regulations is under challenge politically, while the public demands even more protection for their health and the environment. The institutional landscape has changed so that state and local governments are increasingly independent of the EPA's regulations due to their increased capacity, capability, and the democratization of information. This is especially problematic considering that important pollution sources requiring substantial emission reductions do not respond well to national-level command-and-control regulations.

The concept of catalyzing augments sole reliance on command-and-control regulations. Catalyzing calls for a major component of the EPA's work to be the enhancement of state and local governments' abilities to protect the environment.

---

<sup>13</sup> See PLATER ET AL., *supra* note 10, at 831-35.

<sup>14</sup> NAPA, *supra* note 4, at 1-12.

<sup>15</sup> U.S. EPA, *supra* note 5, at 2-3.

It is not an alternative to command-and-control regulations; it is an expansion of the EPA's portfolio of tools to enhance environmental protection.

Catalyzing starts with the premise that tangible improvement and maintenance of environmental quality results from activities which are primarily the responsibility of "field" or "front line" units, most of which are found at state or local levels. If these field units can be made more effective, then the environment will benefit. These units are more likely to succeed in their endeavors if "central" units, such as the EPA, carry out activities which truly support the field. The natural resting point of this approach is for the central unit, in part, to define its own success in terms of the success of the front line organizations. This idea was a central theme of the recent EPA-State Task Force that examined the future of state-EPA relations. That report found that "[t]he bottom-line lesson is that if the states fail, then EPA fails."<sup>16</sup>

Catalyzing's most basic concept is a *systems* view of environmental management. Environmental protection activities take place through a system with a number of component parts all of which seek to improve environmental quality. If the component parts' performances are improved based on their potential to improve the entire system's program quality, the expectation is that improved environmental protection will result. We can view these activities in sequence.

Standard-setting establishes the environmental criteria by which to measure success. Standards may be source-oriented, technology-oriented, or ambient-oriented.<sup>17</sup> Sound science, engineering, and legal determinations are essential to valid standard-setting. This may require extensive data management and specialized technical knowledge.

Training establishes the capacity to undertake the implementation of standards. Training may be general in that it focuses on providing knowledge basic to much environmental management, or it may be oriented to a specific standard or situation. It may cover monitoring techniques, data management skills, engineering design, or many other components of environmental protection activities. But in all cases, training is oriented toward expanding the abilities of those charged with implementing environmental laws and regulations.

Technical support involves providing skilled assistance in cases where the responsible persons lack the requisite capabilities or simply need a little extra capacity to get past a peak in work assignments. One vital aspect of technical support that relates to training is the opportunity to provide coaching to the client so that the need for further technical assistance diminishes.

A specialized topic of training and technical support is the field of information management. Developing the data requirements, the means of collecting the data, and how they are to be handled can demand both technical assistance and training. Also, this consideration of information needs may affect

---

<sup>16</sup> *Id.* at 2.

<sup>17</sup> NAPA, *supra* note 4, at 90-92.

directly the execution of the program. Discussion of information needs easily leads to consideration of what the data is to be used for and why. The consideration of these questions is basic to improving program conduct; in that way, information management provides a vital area for improving program performance.

Enforcement of environmental regulations is a crucial and highly visible area of work in environmental protection. Identifying violators, collecting information on noncompliance, and bringing legal actions, administrative or judicial, constitute a major part of any environmental affairs program. Enforcement seeks a just application of regulations and serves as a deterrent to others who might violate the law.

Public education and outreach can improve individuals' behaviors and improve deterrence of polluting behavior. Communicating broadly and effectively can heighten compliance efforts by environmental regulators. For people to change polluting behavior, they must be aware of the consequences of their behavior and what they can do to change. For deterrence to work, people in similar circumstances as those enforced against must know of the enforcement action and recognize the parallels to their circumstances.

Oversight and progress assessment have the same goal as public education and outreach. They aim to ensure that environmental protection activities achieve the desired results. Progress assessment can take the form of bench marking against ambient conditions, or it can be more activity based. Oversight conveys the concept of an authority ensuring that the desired work is done by carefully inspecting the work product. It is fundamentally an after-the-fact effort whose main means of improvement is in the area of error correction.

Catalyzing takes as its area of interest all of these factors. Catalyzing seeks to improve performance in key activities by establishing up-front the conditions by which field units can be successful. It emphasizes doing whatever is necessary to strengthen the state or local government employees' effectiveness.

### III. IMPEDIMENTS ABOUND FOR CATALYZING

Catalyzing will not be easy. It requires, at its core, a redefinition of "success" for federal environmental programs. Rather than simply compelling actions to abate or avoid pollution, the EPA must broaden consideration of the tools it has to advance environmental quality. One of those tools is improving the efforts of the state and local governments in their implementation of federal statutes as well as their own environmental statutes. By focusing on the capacity and capabilities of these state and local field units, the EPA substantially enlarges its tasks during a time of diminishing resources.

Even after a change in the definition of success, there are a number of pitfalls and barriers to catalyzing that can reduce or eliminate its effectiveness. This paper explicitly addresses these problems to avoid any misunderstanding about what catalyzing is and what it can accomplish.

Catalyzing misapplied could be used as a vehicle either for abdicating responsibilities assigned by statute to the federal government or for abandoning federal activities in such areas as standard-setting or enforcement. All parties must understand that enabling focuses on ways to do better work; it uses the unique strengths of different levels of government. Catalyzing recognizes and builds on the interdependence of the different levels of government. It seeks to improve government performance, not eliminate it.

Success in this type of enabling is hard to measure. It is much easier to count the number of published standards or enforcement actions than it is to measure the effectiveness of state and local control programs. Although there are specific and concrete actions that can be taken to foster enabling—progressive approaches to technology transfer and reassessment of oversight policies, for example—broad success in enabling is more likely to evolve than to be achieved by a few discrete events. We have seen in the private sector that when businesses have paid consistent and effective attention to field activities, overall performance improved over time; when it was ignored, performance tended to decline.<sup>18</sup>

Resource shortfalls can be another barrier to enabling. Many of the activities needed to carry out catalyzing are expensive, such as expanded information collection/analysis and technical support. As discussed earlier, the direct connection to results is limited, therefore, competition for scarce resources may be difficult.

#### IV. IMPLEMENTING CATALYZING: EFFORTS IN THREE AREAS

Successful implementation of catalyzing within the EPA will require concerted efforts in three separate, but related, areas. The Agency must redouble its efforts in investing in information systems. The Agency must redirect its program staff to work more in technical assistance, training, and program effectiveness evaluation. Lastly, the Agency must reaffirm the importance of standard-setting, research and development, and back-up enforcement efforts. This three-pronged approach can move the EPA to fulfilling a new role for the federal government in the 1990s and beyond.

Information is a cornerstone of any type of enabling activity. People and institutions can change their behavior to advance environmental protection if they are given appropriate information. Results since the 1970s illustrate this phenomenon.<sup>19</sup> This necessitates continued and expanding work on the national environmental information infrastructure. The EPA must accept the responsibility of making the necessary investments in software that speed the operational processes of daily environmental protection. It makes little sense to have fifty-plus

---

<sup>18</sup> THOMAS J. PETERS & ROBERT H. WATERMAN, JR., *IN SEARCH OF EXCELLENCE* 6 (1982).

<sup>19</sup> *See, e.g.*, U.S. CEQ, *supra* note 6, at 312-24 (reporting data indicating declining water pollution levels in the U.S. since the 1970s).



states and territories each develop permit tracking software, nonpoint source models, or data storage programs; the EPA can do that efficiently at the national level and franchise it to the states. Of course, this means that the customers must be deeply involved in developing these programs, but the EPA could take responsibility to lead this development work. Likewise, the federal government could take responsibility to provide to the field operators the latest hardware for processing this information. Whether dealing with global positioning systems, geographical information systems, or laptop computers in the hands of inspectors, the federal government can marshal the procurement resources to help provide that assistance.

Another crucial information component is a clear specification of the goals of U.S. environmental programs. More than twenty years after the enactment of the landmark Clean Water Act of 1972,<sup>20</sup> a succinct statement still eludes us as to the goals toward which program managers and the public can look to routinely gauge our success. The EPA has an on-going effort to identify national goals for environmental quality, and Congress periodically considers whether to establish a Bureau of Environmental Statistics; neither of these efforts has advanced to the operational stage. Without a cohesive and coherent set of environmental goals against which we can measure our progress, the nation will continue to fall back on measures of activities (i.e., number of permits issued, number of enforcement cases brought) as the principal measure of environmental success for government environmental activity. "As the score is kept, so shall the game be played." Unless we change how we measure success, we will never change how we act to achieve environmental success.

The EPA needs to redirect its program office efforts to catalyzing success. The program offices are the heart of the EPA's operations, and unless it changes its line of work, it will be business as usual. These program office changes could greatly increase the time and money that the EPA headquarters and regional offices spend on technical assistance. Whether it is responding to a specific request for support or identifying and developing tools that help the states become more effective, a concerted effort to improve technical assistance can advance enabling substantially.

A parallel effort is also required to increase the EPA's efforts in training. At one time, the federal government made substantial investments in increasing the intellectual capital applied to environmental problems in the states. That investment has diminished, but the EPA today has the opportunity to upgrade substantially state and local technical capabilities with a concerted training program which covers all the basic environmental programs. The EPA's program offices also need to expand the use of program effectiveness evaluations of state programs but aim them differently than in the past. These evaluations need to be directed at identifying and assisting the states in building on their best strengths. The

---

<sup>20</sup> 33 U.S.C. §§ 1251-1376 (1988).

evaluations should find “best practices” and communicate them to others through the new technical support and training programs. All of these efforts add up to the EPA making a substantial effort to upgrade the productivity of state environmental programs by the use of improved knowledge.

The final and most fundamental part of establishing catalyzing is for the EPA to reaffirm some old friends when it comes to program activities. There is no substitute for national standard-setting. The federal government can best marshal the technical skills to work through the science and the economics of standard-setting. For much the same reasons, the EPA should devote substantially increased efforts to research and development. The problems of today and tomorrow will require innovative solutions. The federal government should sponsor substantial efforts to expand the national scientific and technical intellectual capital that develop these innovative solutions. Because these efforts to establish enabling are so new, it is essential that they not be misread. The EPA must maintain an enforcement capability that is prepared to assist the states in enforcing environmental laws. Enforcement can often stimulate not only the defendant, but similarly-situated institutions or individuals to take the necessary action to reduce pollution. Often states find themselves unable to do this alone. Whether due to resource constraints or political realities, having the EPA available to assist in an enforcement action can enhance the states’ enforcement efforts.

## V. CONCLUSION

The federal government faces new conditions concerning how it provides environmental protection. These changed conditions alter what the EPA can do to be most effective. One new means of improving environmental management is for the EPA to seek to enable state and local governments to succeed rather than compel success through prescriptive regulations. While there are many barriers to enabling, the EPA can improve its long-term effectiveness by enhancing information services, orienting its program offices to improved assistance, and reaffirming standard-setting, enforcement, and research and development as core federal activities.